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THE JOURNAL OF INDIAN MEDICINE

(QUARTERLY PUBLICATION.)

PUBLISHER'S NOTE.

The Journal of INDIAN MEDICINE, issued as an official organ of the L. I. M. association has within its objects the advancement of the cause of Indian Medicine, and the betterment of the lot of Indian medical Practitioners. It is the only journal of its kind published in English in Southern India. It contains articles of Ayurveda, Siddha and Unani and speaks fully for the three system.

It is requested of all the Indian Medical practitioners, who have not yet become subscribers to become subscribers and to contribute to the journal original articles, tried and valuable prescriptions and clicinal notes on interesting cases they have treated.

The District L. I. M. associations are requested to send in their yearly reports in brief, which shall be published from time to time.

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PROCEEDINGS OF THE FIFTH L. I. M. CONFERENCE

WELCOME ADDRESS

BY

DR. C. S. UTHAMAROYAN.

The subjects which imperatively call our attention for consideration this evening are:—

(1) The attitude of the Government towards the cause of Indian Medicine.

(2) The Registration of the L.I.Ms. and non-L.I.Ms.

(3) The pay of L.I.Ms. and non-L.I.Ms. as opposed to that of L.M.Ps.

(4) The Medico-Legal work.

(5) The Central Medical Stores at Madras.

(6) Research work.

(7) The formation of District Medical Associations.

I. The attitude of the Government towards the Indian Medicine.

From the start of the Institution to date, the Government have been rendering all possible help though not to the extent required for its further development. The question of retrenchment scheme has stood mostly in the way of the Institution not getting its share of finance, necessarily required to meet the growing expense of the infant institution. If the finance become steady, we are sure the Government would not stand at an untouchable distance to starve and kill a child, which they have brought forth with a difficult labour and which the public are cherishing so dearly.

II. The Registration of L.I.Ms. and Non-L.I.Ms.

The position of the students of the School of Indian Medicine, came out successful in the Board Examinations and earned L.I.M. Diplomas

after an arduous study of five years both in theory and practice was in no way a recognised one at the beginning. The attempts of the passed L.I.Ms. to get themselves recognised by the Government proved an uphill task, in spite of their working in and out of season. In the end, however, success crowned their efforts; both L.I.Ms and non-L.I.Ms. came to be recognised, registering the former under A and the latter under B class. Some of the non-L.I.Ms., instead of extending their hands of comradeship and marching shoulder to shoulder to the elevation of the time honoured system which has fallen miserably low for want of public help and patronage and above all by sheer neglect of close co-operation and co-ordination amongst themselves, began to feel uneasy about this classification imagining an inferiority complex. Here, my non-L. I. M. brethren! I wish to draw your kind attention to certain facts to prove to the hilt that the feeling so entertained is nothing but an illusion. The only fact which we are to look for is recognition by registration. This privilege we have now secured; the distinction between A and B class is nothing beyond certain consideration of the medical knowledge obtained by L.I.Ms., viz., those who are able to deal with minor surgery, obstetrics and epidemic work according to the western system are classified under A. Whereas the others under B. Wherein lies the inferiority complex in this sort of classification A question may arise from the non-L.I.Ms if those B class people were able to conduct the cases referred to above, would they be granted A class certificate? Certainly; they are entitled to it, if they are able to prove that they have necessary training in western medicine. Now, my dear non-L. I. M. brethren! I hope, why, I believe, your imaginary discontent has now been dispelled. You should all now make a pleasant march with us in the struggle to build up our position, on a solid unshakable foundation.

III. The pay of L.I.M., Non-L.I.M. Versus L.M.Ps.

Our profession as a whole has been looked down, by our brethren practicing western medicine. They have forgotten the percentage of people to whom the western system caters medical help. It may be just about 10% whereas the 90% look upon the indigenous systems for their help. The public and the Government know this fact very well. Yet the people in certain quarters who could afford to pay the costly western system attribute that men practicing Indian system are nothing short of quacks. It is therefore our task to do a teem work in carrying out a strenuous research for unearthing those hidden gems of medicines that would surely remove the word, "Incurability" from the Dictionary of the Medicine and to establish the undying fame of our system. It is with this object that the curriculam of the Indian Medical School has been planned by the Government. In spite of this the qualified men, holders of A class Registration are not considered equal to even L.M.Ps. If the Government look up to their own curriculam, they would certainly find that L. I. Ms. not only study the same subjects and undergo a similar training as L. M. Ps. but also undergo a further course of study in the Indian Medicine in particular, which is really an additional qualification over L. M. Ps. If this side of the shield were looked into and the consideration shown to L. I. Ms. by the Government (1) that they could be appointed in the institutions maintained by the Government and Local bodies not to speak of rural appointments, (2) the privilege granted to them to issue valid Medical certificates and (3) the permission given to take part in Epidemic duties, the inviduous distinction drawn between the L.M.Ps. and L.I.Ms. with regard to scale of pay could not have arisen. Let us look at the scale of pay!

L. M. Ps. Rs. 60—5/2—120.
L. I. Ms. Rs. 40—3/2—70.

what is worse still non-L. I. Ms. Rs. 40 for all time.

I need not dilate here again upon the qualifications of L. M. Ps. and L. I. Ms. when I have shown that the qualification of the latter is in no way behind, if not better than L. M. Ps. Both of these people have the privilege to be employed in the institutions maintained by the Government and the Local bodies, besides holding other privileges just pointed out. One could not see the reason for such a differential scale of pay being fixed. We have all along been agitating to remove the unkindly distinction and place us on a par with the L. M. Ps. I do not know whether our cries have gone to wilderness or are still under consideration. Let us not lose hearts but on the other hand let us be bold in our task and continue our fight till we win.

IV. Medico-Legal work.

Yet there is another disadvantage under which we are made to suffer, viz., the non-eligibility to undertake medico-legal work and give evidence in courts. Let us pray the Government for extending that concession to all the L. I, Ms. whether they happen to be under Government employ or not. It is rather comfortable to note that the Central Board of Indian Medicine have passed a resolution on the subject and have forwarded the same to the Government and let us expect from the Government that lack of justice

shown hitherto is wiped out and our rights restored.

V. The Central Medical Stores at Madras.

The list of our sufferings is not ended. We medical practitioners employed in Municipal and Local Board Institutions have one other disadvantage to narrate. We have no reliable pharmacies to look upon for the supply of genuine medical preparations for use in the Dispensaries in our charge. There are ever so many pharmacies flourishing all over the presidency. We are to get our supplies from these pharmacies under tender system of purchase. This procedure leads to many abuses. The policy of accepting the lowest tender rates has been most suicidal. The competitive aspect of the question has made the pharmacy people, perhaps much against their will, to reduce the genuineness of their preparations with a view to rate them absurdly low and to send out medicines which can only be called as medicines for mere courtesy. When we are made to get on with such medicines for treating cases, it is no wonder that much of our treatment turn out ineffective. This is probably one of the causes for others to view us as men of inferior qualification.

The establishment of a Central Stores of Indian Medicine on the same line as the Government Medical Stores Department, Madras, will remedy all these defects and romove all the disadvantages. The efficacy and genuineness of medicines could then be assured. It is sure and certain that a lot of savings will accrue in the long run for both the Local bodies and the Government. A more regular and systematic supply could also be ensured. The Government are just now considering the question of establishment of such a Store. We wish that it comes into existence before long, to meet the long cherished primary needs of the dispensaries.

VI. Research work.

All that we have to do outside the City of Madras is only the management of dispensaries for meeting the primary needs of the suffering population. Large hospitals with provisions for taking in-patients to treat cases of surgical, obstetrical, gynaecological, opthalmological and venereal nature are not in existence till now, in Indian system. Therefore, there is an urgent need to treat such cases under the Indian system. To achieve this end we should press and invite the early attention of the authorities for the establishment of head-quarters hospitals in large district centres. If such hospitals are opened they would afford us ample opportunity to exercise our skill in all these departments and resusciate the old practices and give an impetus to our system of medicine.

This leads me on to the question of enlarging the scope for research, provided in the Government Indian Medical School. It has been purely a teaching and examining institution with very little scope for research until lately an attempt to create a Research Department by the appointment of two Medical Registrars has been made. This is too meagre, though the move is in the right direction. Much should be done to supplement the facilities offered. L.I.Ms. also should be added for working the department. Post-graduate course should soon be opened and beds in various departments be also increased.

VII. Formation of District Medical Associations.

It is up to us to see that we cultivate public opinion in our favour for standing solid against all attacks, to bring round politicians and statesmen to our point of view. Unity is really a strength and we require unity more than anybody else. I therefore earnestly appeal to one and all of you to strive together. There is the Central L. I. M. Association at Madras. It can do much though not all. The programme of forming the District Associations has been launched and it is gratifying to note that some have already been opened and are working well. They have done every thing in their power to aid and consolidate the efforts of the Central Association. It is necessary that these Associations are affiliated to the Central Association and to take common grounds for agitation and discussion in all matters affecting us. We are to maintain some coherence and homogenity in our proceedings and I request the authorities of the District Associations to get into touch with the Central Association and widen their activities in all things concerning our future welfare.

MEMORIAL SUBMITTED BY THE

MEMBERS OF THE L.I.M. ASSOCIATION, KILPAUK, MADRAS

TO

M.R.Ry. THE HON'BLE DIWAN BAHADUR

S. KUMARASWAMY REDDIAR Avl., B.A., B.L.,

Minister for Education & Excise (in Charge of Public Health).

ON THE OCCASION OF THE FIFTH L.I.M. CONFERENCE.

Honoured Sir,

We, the members of the L.I.M. Association, Kilpauk, Madras, beg leave to approach you with this memorial and to request that it may receive your sympathetic consideration. Your very presence here in our midst to-day, inspires us with a hope that our grievances will be redressed at an early date.

2. It is only too well known that the Government have, in their order No. 2403 P. H., dated 15th October 1934, fixed the scale of pay for such of us as are employed in Local Fund and Municipal institutions at Rs. 40—3/2—70, where as medical officers with L.M.P. qualification are made to draw pay in the scale of Rs. 60—5/2—120. We humbly represent that our qualifications and achievements are just as good as those of L.M.Ps. In fact, we not only study the same subjects as L.M.Ps. and the duration of study is just the same as theirs, but we possess an additional qualification in that we specialise in one or the other of Indian systems of Medicine. The Government have been kind enough to recognise our claims for registration, appointment, etc., and we are considered to be on a par with the L.M.Ps. in most things. In the matter of Government subsidies disbursed under the Rural Medical Relief Scheme, no distinction has been made between us and the L.M.Ps. Such being the case, it is most uncharitable that the pay admissible to us in the Municipal and Local Board service should be in a lower scale. It makes us look small in the eyes of the public and we venture to suggest that it is not at all conducive to a healthy growth of the Indigenous Systems of Medicine. We pray that our salaries may also be fixed in the same scale as for the L.M.Ps.

B. The pay of non-L.I.M. medical officers in the service of Local Boards and Municipalities has been fixed at Rs. 40 for all time. This has affected many cases and though the difference in pay originally drawn

to that of the pay admissible under the Government Order is granted as personal pay, yet there are many hard cases which any amount of compensation may not alleviate. We request you, Sir, to place them also on a graded scale of pay.

3. The Government provided for the participation of rural medical practitioners in medico-legal work in their Order No. 1211 P. H., dated 4th May 1934, with a view to bring that much medical relief within easy reach of the rural population. But they have excluded rural medical practitioners with L.I.M. qualification from participating in such work and from giving evidence at courts when called for. This is, on the face of it, a distinction which is very unjust to the L.I.Ms. There seems to be no other ground for this distinction except that they happen to be L.I.Ms. The aim of the Government to make such an aid available to all people would be better served by allowing L.I.Ms. also to undertake that work. We therefore request you, Sir, to be kind enough to so amend the G.O. as to include L.I.Ms. also.

4. Another request of ours to you is, to make provisions for us, L.I.Ms. to work as Honorary Physicians and Surgeons in all the Government head-quarters hospitals just as practitioners registered under the Madras Medical Registration Act of 1914 are allowed.

5. One other matter which requires your kind consideration, Sir, is the lack of adequate provision in the Government Indian Medical School Hospital in the Maternity and Gynaecology Wards. We request that the number of beds may be increased and new departments like ophthalmic and venereal may be opened. Such improvement will give us every scope for extended study and post-graduate courses also. It will incidentally serve to increase the facilities for research offered to us.

6. Finally we request you, Sir, to expedite the opening of the Central Store of Indian Medicine on the same lines as the Government Medical Store Depot, Madras. Such a concern will not act as a drag on the Provincial Finances since it will be a thriving commercial proposition before long. It will be of the greatest benefit to us all, since we can have supplies of genuine medicines.

The present procedure of supplying medicines on the open tender system has led to many abuses and medicines which we get from some pharmacies are not worth the name even. It is therefore high time that such a procedure should be discontinued.

In fine, we conclude with a prayer that all our requests detailed heretofore may be considered in their best light and that our grievances may be remedied at an early date.

OPENING ADDRESS

The Hon'ble Mr. Kumaraswami Reddiar then opened the Conference.

After expressing his thanks to the organisers of the Conference for inviting him to participate in the function, the Hon. Mr. Kumaraswami Reddiar said that he was glad that the people who were practising the Indian systems of medicine were organising themselves on proper lines. It need scarcely be said that in modern times nothing could be achieved without organisation and agitation and by collective action. The catalogue of grievances which they had presented to him would receive the best possible consideration at his hands. Their Association was started only five years back and there were other Associations started much earlier whose grievances had not yet been redressed. He was mentioning this not as an excuse as to why their grievances had not yet been redressed, but only state that they need not be discouraged in not having met with success in their efforts to improve their conditions nor get disspirited because they had not achieved their object. He would ask them to keep up their agitation till they succeeded.

The Indian system of medicine has, of course, not many of the advantages that the foreign systems, of medicine have had. It has suffered long by neglect, both by the State and the public. The indigenous system has not been placed on a sound and scientific basis nor has standardisation made such progress in it as it ought to have. But wisdom lies not in condemning these systems themselves but in devising measures for removing the defects. One great act of the Raja of Panagal, which would make his name go down to posterity as one of the greatest of statesmen, was his realisation of this simple truth. The great work he has done, was in placing the Indian medical system on a substantial and sound basis. It was due to his efforts that this school and the hospital attached to it were started. One fact cannot be ignored and that is the Indian masses, in spite of all propaganda against the indigenous system of medicine, have much greater faith in those systems than in others. You cannot keep away medical relief from the Indian masses who still pin their faith to the Indian system. The Indian mind is essentially conservative, and you cannot force on them the foreign system at the point of the bayonet. You must take the opinion of the masses along with you.

IMPORTANCE OF RESEARCH

Proceeding, the Hon. Minister said "I am glad to find special mention being made in the welcome address of the need for research in the Indian system of medicine. The attempts that have been made are, though in the right direction, yet meagre. Research requires for its success not only men and money, but real men who have the mind and the enthusiasm to take to research. While you appeal to the Government to provide facilities for research, I appeal to those who are engaged in research to display enthusiasm and earnestness in the work so that the Indian system might be so improved as to take its rightful place amongst the modren systems of medicine. A great deal of research work is required and it cannot be accomplished in a short time. And I ask you not to be discouraged by early failures. The best answer to the criticism of Indian system of medicine is to be found in the revered doctor who presides over this Conference. I ask if there is any doctor in Madras, allopathic or otherwise, who does not know our president as a man of great reputation and having a very wide practice in and around Madras."

"If certain persons ventured to criticise the Indian system without knowing the work that is carried on in this school and without even having put their feet on the premises of the school, to understand the scope of its activities, we should only be sorry for such critics, and I do not think their criticisms need be taken into consideration. I have great pleasure in declaring this Conference open and wishing it every success."

PROCEEDINGS OF THE FIFTH L.I.M. CONFERENCE 1935.

PRESIDENTIAL ADDRESS

BY

SHIFA-UL-MULK T. ZYNULABIDEEN SAHIB, B.A.

This Conference represents a movement started some 20 years ago for the encouragement of indigenous medicine, the value of which at that time was much depreciated and its importance was sought to be altogether ignored.

As a result of the agitation then started by men like the late Pandit Gopalacharlu, aided by the refusal of western trained practitioners like Dr. Lakshmipathi and the late Dr. M. C. Nanjunda Rao to come on the newly created register, the first Ministry set up under the Montagu-

Chelmsford Reforms took up the matter and sought to remedy the injustice involved in ignoring the indigenous systems.

To them, and particularly to the Rajah of Panagal, is due the credit of starting an enquiry into the merits of the indigenous systems in vogue in this presidency and to report on the question of according recognition and encouragement to them. A Committee was appointed for this purpose in 1921 with Sir Mahomed Usman as Chairman and Dr. G. Srinivasamurthi as Secretary. This Committee after an exhaustive enquiry lasting for nearly eighteen months communicated their conclusions to the Government, which have borne fruit *so far* in the establishment of the Indian School of Medicine in Madras and in the creation of a body of Licentiates of Indian Medicine.

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The report on the indigenous systems of medicine is an important document, and may well be called the "Magna Charta" of Indigenous Medicine in Southern India. It contains a vast mass of valuable information and opinions gathered from representative persons in all parts of the Presidency, who can speak with the authority of experience and knowledge on the various systems with which they are personally connected. It points out the direction in which and the lines on which progress ought to be sought. It may be compared in importance to the report of the Education Commission appointed by Lord Ripon in 1882 whose recommendations recognised and secured for ever the claims of private schools and colleges for State-aid and encouragement. Similarly the report on Indian medicine is an epoch-making document securing for indigenous systems of medicine that State-aid and encouragement which is not only their due but their *birth-right*.

In order to realise how much has yet to be done for resusitating the different systems of Indian medicine and making them function with an efficiency and on a scale proportionate to the needs of the people, it is necessary for us to keep in mind the practical conclusions of the Usman Committee as a whole and measure what has been achieved in the light of those conclusions. The *pivotal* decision embodied in that report reads as follows:—

> The *sine qua non* for the ordered progress of our indigenous systems is the establishment of a new department of Indian medicine directed by a Commissioner of Indian Medicine working under the Minister holding the portfolio of Medicine and Public Health. It is desirable that the general policy of this new department is directed by a "General Council of Indian Medicine."

This implies that the Government should no longer look upon the western system of medicine as its favourite if not its only child, and should cease to accord a step-motherly treatment to the indigenous systems. The Minister holding the portfolio of medicine should take a comprehensive view of his responsiblity and should bestow upon the eastern and western systems of medicine equal attention and accord to each equal encouragement. We are now on the eve of new Reforms which will place more power in the hands of Ministers who will hereafter have to respond more courageously than ever before to the needs of a larger bulk of the population.

Their responsibility to the people will be immensely greater. They should remember that the encouragement of Indian medicine is a most important and vital form of Swadeshi; and they cannot truly carry out the intentions and the ideas underlying the new Reforms, if they do not undertake seriously the task of resuscitating on a large scale these indigenous systems of medical knowledge and practice. The starting of the School of Indian Medicine is, as I have already remarked, only a beginning; and its working during the past ten years has shown that the time has come for further advance along the line sketched by the Usman Report. Such an advance will never be achieved unless there is a separate department for the promotion of the various systems of Indian medicine. The present Medical department is solely concerned with the western allopathic system; and the spread of this system in this country is largely due to the existence of an efficiently organised and most liberally financed department of medical education, medical relief and medical research. It is only just and proper that the indigenous systems should have a *parallel* organization, including schools of medicine and colleges and dispensaries and hospitals and medical stores and research libraries and laboratories. As there is the Surgeon General to promote the spread of western medicine and to administer the whole department from Cape Comorin to Berhampore, even so there should be a Commissioner of Indian Medicine working under the Minister holding the portfolio of medicine. It is desirable, as this Committee's report says, that the general policy of this new department should be directed by a General Council of Indian Medicine.

Once a distinct department with a directing Commissioner co-operating with a General Council is constituted, the ordered progress of Indian medicine will be secured for ever. It would be a pity and a great loss to suffering humanity if for want of such an organization, the healing power

and experience embodied in the Ayurvedic, Siddha and the Unani systems is allowed to stagnate and eventually decline. We are after all living in a world of competition, and in such a world the struggle for existence does not proceed on moral laws; and the survival of the fittest is not due to the intrinsic merits and the finer qualities of the various rivals but is determined by the material strength which they are able to marshal. Considerations of equity and fairplay are easily forgotton, and those who have the power are tempted to brush aside and trample down those who cannot assert themselves effectively. In these circumstances special protection and encouragement are necessary. That is why we should make the creation of a new department of Indian medicine the objective of all our endeavours in the immediate future. It is no use indulging in impotent praise of the indigenous systems. It is too late in the day to sing their praises, or to indulge in a comparison of the merits and demerits of the western and eastern systems. Each has its own virtues and limitations. Our systems have a record of service to humanity which will bear comparison with that of any system in the world. In point of the number of generations they have served and their omnipenetrativeness into every nook and corner of human society and human life in India, it may be said in all humility and thankfulness to God that they have no rival, and their capacity for future service under adequate encouragement and fostering care is immense and unlimited.

Specially in India where the medical needs of millions of men, women and children in vast rural areas and countless villages are unattended to, the development of Indian systems of medicine is absolutely necessary, not only on account of their traditional efficacy but also on account of the homely simplicity of their treatment and the cheapness of the drugs used. No scheme of rural reconstruction can be said to be complete or adequate which does not aim at the encouragement of Indian medicine and the free employment of indigenous drugs.

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One of the fundamental ideas of the Report is that there should be a reapprochment between the western and eastern systems of medicine, that the professors and practitioners of each system should first of all understand what the others in their spheres are doing. It is with this view that the authors of the Report in their recommendations state not only that it is highly desirable that students of Indian medicine should come into actual touch with the practice of western methods especially on the surgical side, but

also that "in the best interests of Science and suffering humanity, it is best that the followers of each system should appreciate and learn the excellence of the other: and that to this end, it is highly desirable that the followers of either system should learn to ring out the existing feelings of mutual dislike and unhealthy isolation, and ring in the spirit of mutual helpfulness and fraternal cooperation" Another of their findings is: "One of the greatest needs of the hour is the willing and enthusiastic co-operation of western trained doctors sufficiently learned in Indian medicine so as to be capable of visualising its immense potentialities and therefore zealous in helping Indian medicine to rapidly regain the ground it has now lost, especially in the field of surgery."

These pronouncements contemplate and indicate the lines on which alone the progress of indigenous systems is possible. They show a statesman-like insight into the conditions on which ancient systems can be revived and revivified. Cognisance should be taken of the fact that circumstances have changed and the whole atmosphere is different from what it was in the days of old. No longer do we live in quiet nooks and sequestered corners. Our horizon has become enlarged. Mere authority is repudiated, and tradition is discredited. We live in an age of scientific method, of economic competition, of ever-changing views. The only way in which ancient systems like ours can survive is by relating themselves to these new conditions and methods. They cannot survive in mere isolation. Hence it is that in the curriculam of studies, not only is a course in the several branches of Ayurvedic, Siddha and Unani systems prescribed but also subjects of western medicine like Anatomy, Physiology, and Surgery require to be studied. My own idea is that the best way of understanding and recommending an indigenous system is for the practitioner thereof to have a background of western education. A knowledge of western science and western methods is an invaluable asset to an Ayurvedic, Siddha or Unani doctor. In the diagnosis of disease, and in the prescribing of medicine, a background of western knowledge helps to a rational practical interpretation of the wisdom contained in the Aryan, Dravidian and Unani systems of medicine practised in India. For there is no denying that there is a great deal of crude treatment and quackery among those who practise the indigenous systems, and a great deal of sifting is needed among the practitioners of these arts. Such a purging and renovation of our profession is possible only by allowing fresh air from the ocean to blow in

our faces and invigorate our thinking and our practice.

It is a matter for gratification that the Central Board of Indian Medicine organised in connection with the School of Indian Medicine is working vigorously under the leadership of Dr. G. Srinivasa Murthi, and has started a Register of competent practitioners of the Ayurvedic, Siddha and the Unani systems, and also a register of reliable indigenous pharmacies. This latter register is almost as necessary as the former. One of the reasons why our indigenous systems are discredited is that the medicine administered by private practitioners are not always carefully prepared, and those offered for sale are not always prepared according to the prescriptions given in our books which for one thing are difficult to understand and for another the drugs mentioned are not easily obtained or identified. And there is always the danger in mass production of Indian medicines prompted by the commercial motive, of unsatisfactory commodities being placed upon the market. I would suggest in this connection the starting of a Central Store of Indian Medicine to ensure a supply of genuine medicines to Local Board dispensaries.

* * *

In this connection I should like to say that there should be no rivalry whatsoever between the two systems but that on the other hand there should be actual good will and mutual respect and mutual understanding expressing itself in active co-operation between their respective practitioners. I plead for this for two reasons. One is that the suffering portion of humanity will greatly benefit by it. Another reason is that there will be an increase of medical knowledge resulting from such co-operation.

Even in the field of medicine, England and India have not been brought together in vain. I am sure that through such co-operation as I have indicated, a body of medical knowledge and practice combining the wisdom of the past with the love of verification and accuracy which is the characteristic of modern science will be evolved, which will be a blessing not only to the people of India but to suffering humanity throughout the world.

———:o:———

TREATMENT OF SANNIPATA JWARA.

BY

V. NARAYANASWAMI, L.I.M.

Asst. Medical Officer, I.M.S. Hospital, Madras.

In Ayurvedic Medicine, there are thirteen varieties of Sannipata jwara, classified according to the relative predominance of the provocative doshas.

For the purpose of treatment it is sufficient to divide Sannipata jwaras into two varieties. The first variety is that in which all the three doshas are equally vitiated, (Sama Sannipata) and the second in which the doshas are differently disturbed (Vishama Sannipata). Briefly the general line of treatment is to convert the latter group, (Vishama Sannipata) into the former one (Sama Sannipata) and then subduing Kapha, Pitta and Vata in order or to begin the treatment from the seat of Kapha.

'Vardhane neika doshasya
Kshapane nochrithasya va
Kaphas thànànu purvyava
Sannipata jwaram jayet
Cha. Sam. Chi. 3-282.

First let me deal with the treatment of that variety in which one of the three doshas is in a decreased condition and the other two in a predominant condition. In such a case the decreased dosha is to be raised to the level of the other two. Here there is an opinion that it is not proper to increase the decreased dosha to the level of the other two that are predominant. The reason is that by doing so the patient is subjected to that variety of Sannipata jwaram in which all the three doshas are in excess (Tama) and which is difficult to treat. But it is doubtful how far this opinion is correct, since it is not easy to bring down the two increased doshas to the level of the decreased one. If the decreased one is raised to the level of the increased two, the vitiated doshas can be subdued one by one.

The above statement is being illustrated. In a Sannipata jwara where Vata is decreased, by the use of seetha, rooksha and laghu drugs, it can be increased. The increase of Vata by the above things causes the decrease of Pitta and Kapha and consequently the fever becomes a little bit lessened and easily curable. Similarly in a fever where Pitta is in a decreased condition the use of theekshna, ushna and katu durgs will increase Pittam alleviating at the same time the other two doshas which are in a provoked state enabling further treatment easy. An excessive use

of snigdha, guru and seetha things will rise Kapha and in the same manner bring down the other two doshas. In the treatment of Sannipata jwara this is the method to bring the three doshas to the same state.

When the three doshas are brought to an equal state the treatment is easy. Treat first Kapha or its seat, then Pitta and finally Vata. Head, chest and throat are the seats of Kapha. If these places are filled with the dosha the patient will have loss of appetite and dislike towards medicine and diet. Such a condition is difficult to treat. So firstly Kapha should be treated which forms an obstruction. After Kapha is brought to its normal state treatment is to be directed towards Pitta. It is situated in the middle part of the body. It is asukari—one that does work quickly as it possesses the quality of agni. Later, Vata is to be treated. Starvation and various medications which bring down Kapha will generally provoke Vata and so it should be subdued.

In Sushruta we find a different opinion.

'Nirharet pittamevadou dosheshu samavayushu
Sush. Utta. 39—294 [1]

It is understood from the above quotations of Sushruta that in cases of Sannipata jwara and in Atheesara Pitta is to be treated first and then the other doshas. The interpretation, in my opinion, is wrong as the first quotation is found when dealing with daha jwaram and so in samsarga and sannipata type of daha jwara Pitta is to be treated first and then the other doshas. The second quotation is found in Atheesara chapter and so it should be inferred that in fever of Sannipata type if there is Atheesara as a complication Pitta is to be treated first.

'Samavaye thu doshanam purvam pittamupachareth
Jware chaivathisare cha sarvathranyathra marutham.
Sush. Utta. 40—161 [2]

But in practice usually the treatment is directed towards Ama and Kapha unless the symptoms of a particular dosha is aggressive; in that case the treatment is done to alleviate that particular dosha which is aggressive. In the case of Sama Sannipata the treatment is to be done from Amasaya because generally the doshas are vitiated in the Amasaya. So the dosha in the Amasaya is to be treated first and then that in Pachyamanasaya and finally the one in Pakwasaya. In the treatment of

1 Dalhana confuses the issue stating that only Samsarga and not Sannipata is meant by 'Samavayushu".

2 Dalhana passes off the point but Harana Chandra opines that Pittadikya Sannipata is meant by 'Samavayethu.'

Sannipata Jwara the question arises, why it is necessary to treat the doshas one by one, and why not the three doshas be treated at one and the same time when we have drugs that are antitridoshic. The reason is, that though there are a few antitridoshic drugs they are not antijwara as well. But the drugs which are antipyretics and which will subdue the doshas separately are many. So it is easier to treat the doshas one by one.

The above mentioned line of treatment is according to the predominance and the seat of doshas. And we have to observe certain rules according to the stages of fever. For the sake of convenience in treatment a fever is divided into three stages. The signs and symptoms are given for each stage.

Jwaropadrava theekshnatva—maglanirbahumutrata
Na pravarthir na vitjeerna na kshut sama jwarakrithihi
Ash. Hridayam Nidana 2—54.

"Aggravated signs of fever, no feeling of tiresomeness, increased urine, constipation, indigestion and loss of appetite are the signs of samajwara."

At this stage if the doshas are more, and predominatingly loose Kapha, an emetic is to be given if the patient is fit, otherwise langhanam is to be done. In doing langhana care should be taken to judge the patient's strength so that he may not be subjected to over fasting. Besides, there are few types of fevers in which fasting is prohibited. They are (1) Fever in which Vata only is the provocated dosha, (2) Fever in Kshaya (consumption), (3) All Agantu fevers (Traumatic, etc.), (4) Jeerna jwaram, (last stage of fever.) Only samana treatment is to be resorted to for the above.

After langhanam swedam should be done. The indications for this are, running of the nose, difficulty in breathing, which is due to the obstruction of the srothas, pain all over the body, etc., and when the predominating symptoms are those of vitiated Kapha and Vata.

In the first stage of fever the following are strictly prohibited. Sleep during day time, oil bath, taking food, sex indulgence, getting angry, exposure to wind, exercise and taking in of kashaya rasa things. By observing these rules and treatment and in the course of seven days the patient may be able to get rid of the Ama condition. But the general rule is that all the symptoms of good langhanam should be present. Then only the patient is in the second stage of fever.

The signs and symptoms in the second stage of fever are: high temperature, extreme thirst, incoherent speaking, hurried respiration, giddiness. free bowels and utklesam.

'Jwaravegodhikam trshna
pralapah swasanam bhramah
Malapravrithiruthkleshaha
pachyamanasya lakshanam'
Ibid Nid. 2—55.

Here we can give various kashayams, which are anti-pyretics and which will improve his digestive power and remove the debility. The kashayams are to be selected according to the provocative doshas. This treatment is to be adopted till all the aggravated symptoms subside. It is also recommended in this stage to give various peyas (liquid diet) medicating them suitably according to the symptoms.

Then we come to the third stage of the fever. In this stage the patient has no rise of temperature and he would present the following signs and symptoms.

'Swedo laghutvam sirasah
kanduh pako mukhasya cha
Kshavathuschanna lipsa cha
jwaramuktasya lakshanam
Madhava nidanam 2—75.

"Sweating, lightness of the body, scratching sensation in the head, stomatitis, sneezing and desire for food are the signs of jwaramukta."

In this stage the doshas are predominently Vata and Pitta. Here the best medicines which can be given are various preparations of ghee according to the condition of the patient and the predominating dosha. The object of giving ghritham at this stage is to strengthen the tissues which have become very weak due to continuous fever. Generally in the third stage a small quantity of the doshas may get themselves within the tissues and ghrithams are in a position to strengthen the tissues and weaken the doshas and so ultimately they may he eliminated.

In this stage milk too can be given as medicine and diet. It serves the same purpose as ghee. Cow's milk as it is, soon after it is milked, or milk medicated with drugs which are suitable for that particular condition may be given. The above are the general principles in treatment. But in certain cases, the fever does not subside even after so much of treatment. In those cases sodhana treatment is to be resorted to, provided the patient is fit for it. If the dosha is situated in Amasaya an emetic is to be given, if in Pakwasaya a purgative. But, however much the vitiation of the dosha may be, extreme debility of the patient is a contra indication for the above treatment. In that case the doshas are to be removed by Ksheera vasthi or Kashaya vasthi

Nasyam also forms one of the important treatments in Jeerna jwara. If the patient has got headache or heaviness of the head which is generally due to vitiated Kapha, virechana nasyam is to be given. If he suffers from lightness of the head, snigdha nasyam is to be preferred. In symptoms of Kapha vitiation, gandoosham and dhumapanam are to be adopted. In certain cases where the doshas lodge underneath the skin oil baths and external lepams are to be given with medicines chosen according to the condition of the patient.

LATE Dr. K. M. NADKARNI.

A Well-Known Medical Journalist and Author.

We regret to record the death of Dr. K. M. Nadkarni on 14th instant, at the age of 72 at his residence at Dongerkery, Mangalore (S. K.) South India. Dr. Nadkarni was ailing for a long time from hemiplegia, asthma, etc.

Dr. Nadkarni belonged to a respectable Saraswath well-to-do family, and was highly connected, being the nephew of the late Dewan Bahadur Naimpally Shiva Rao and first cousin of the late Diwan Bahadur N. Subba Rao of Mangalore. He was educated in the Government College, Mangalore; Presidency College, Madras, and Government Medical College, Madras. From boyhood he was of a religious bent of mind which developed into his taking practical interest during his youth even as a college student, in the teaching of Sanatana Dharma and activities of the Arya Samaj, and then in Theosophy about his middle age besides his professional duties. Being a God-fearing man his object in life was not money-making either by large private practice or by indiscriminate publicity work during the palmy days of his time. Even when he had good offers of fat jobs in the Medical and Sanitary Departments, he declined them with the higher objects of serving the Profession by his journalistic and publicity career. As he had his training in the Western System of Medicine (Allopathy) and as he was a man full of adventure and spirit, he dared single-handed, even when organisations like the Bombay Medical Union and the Grant Medical College Society of Bombay had not succeeded, to found and edit the pioneer Medical Journal in 1892 in Bombay, styled "The Doctors' Magazine," when there was not a single Medical Journal in the Western, Central and Southern Presidencies. In the year 1893 he again found independently another bulkier Medical Journal in Bombay on slightly different but improved lines, styled "The Indian Medico-Chirurgical Review" which he ably edited jointly with Dr. Sir N. H. Choksy of the Bombay Medical Union, with topics of medical politics and discussion of the grievances of non-official and subordinate medical officers, to fight the virulence of race-interests and vested rights of the I. M. S. and Warrant Medical Officers of the day. Both these journals had high encomiums from the British and Foreign Medical Press. In 1894 he established the "Medical Circulating Library" and the "Foreign Magazines Supplying Agency" in Bombay which also were well patronised by the Professions. Thus he was the pioneer Medical man to found the above journals and other activities for the benefit of the Medical Profession in the West-Coast of India.

Dr. K. M. Nadkarni.

He took extraordinary interest in the science of music, contributing several articles from Madras and Bombay to Indian and Foreign periodicals on the science of music besides Medical, and had even founded a Society in Bombay under the name and style of "Arya Gayana Rakshaka Mandali" whose members included servants of all Indian communities. He was the first West Coast Saraswath Brahmin to be elected a Fellow of the Incorporated Society of Science, Letters, and Arts, London; Member of the Chemical Society, Paris; Member of the British Pharmaceutical Conference, London, in recognition and appreciation of his contribution of Medical and Scientific articles to Foreign journals, and his independent pioneer medico-scientific journalism and publications in Western India.

In 1902 again he started in Madras and ably edited a monthly journal "Indian Health" treating of Medical, Sanitary and Hygienic subjects. This journal was also the premier medical monthly of the Madras Presidency.

Besides the above journalistic activities carried on against great financial and domestic odds, Dr. Nadkarni, was the author of notable works on Western and Eastern Systems of Medicine. Even when there was an overwhelming demand for the second editions of his works the "Essentials of Modern Treatment of Diseases," the "Practitioners, Clinical Referee," the "Wall-Chart of Health and Hygiene" dealing on the Allopathic System, the great patriotic upheaval in Bengal, during the Bengal Partition days and his innate patriotic spirit also being roused in him, he with a love to serve the Indian population better by publications on Indian Medicines, at great personal sacrifice of money, time and energy, determined to interest himself in the keen study of Indigenous Systems of Medicine under experienc-

ed Vaidyas of Bombay and Madras, and wrote in 1904 the "Indian Plants and Drugs, with their Medical Properties and Uses," (which later on earned the recognition of being prescribed a text-book in the Allahabad and Lucknow Universities for the M. B. course) and then in 1927 the "Indian Materia Medica, with Ayurvedic, Unani, Siddha, Allopathic and Home Remedies" which is still a book of authenticity and reference to the Medical and Scientific Professions of the East as well as the West.

Dr. Nadkarni leaves behind him his two sons S. K. Nadkarni and A. K. Nadkarni, and a daughter who is married to Mr. S. K. Naimpally, B. A., LL. B., Accountant-General, Baroda, and a large circle of relations and friends to whom he was a guide and philosopher. May his soul rest in peace!

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KARNANADA

(TINNITUS AURUM.)

P. NARAYANA BHAT, L.I.M.

My only excuse for writing the following lines on this comparitively rare disease (Karnanada) is the distressing nature of the complaint, especially when it is accompanied by pain, sleeplessness and deafness, and the meagre literature available on the subject. Sometimes the persistent pain, the severe noises of an 'oil-engine working inside the head' and the absolute sleeplessness--for months the patient not enjoing an hour of restful sleep,—make the picture so gloomy and life so disgusting to the patient. Some patients are lead even to commit suicide. Little importance is attached to this disease in the various text books beyond a passing mention of the disease.

The condition is known to have existed even before the time of Charaka and Sushrutha. Sushrutha mentions the disease as one among the twenty eight diseases of the ear. Charaka in his comprehensive classification of the ear diseases puts down this among the Ear diseases due to Vata. In all the later works too, we find references to Karnanada or Pranada as it is called by some.

From the etiological as well as the treatment point of view, Karnanada may be classified under two heads—(I) Paratantra or secondary, and (II) Swatantra or primary. The Swatantra may again be divided into (*a*) those with objective signs and (*b*) without objective signs.

Karnanada.

- I. Paratantra or secondary due to some constitutional condition.
- II. Swatantra or Primary.
  - (*a*) With objective signs in the Auditary apparatus.
  - (*b*) Without objective signs.

As a rule the Swatantra group is accompanied by deafness. Therefore, some authorities classify Karnanada (*a*) those without deafness and (*b*) those with deafness.

I. *Paratantra or secondary*—Noises in the ear not accompanied by deafness and traceable to some constitutional condition.

It is a good rule, in all diseases of the special organs, to carry out a thorough investigation into the general health of the patient. In cases of tinnitus the following diseases must be looked for and treated if found.

1. Pandu particularly Sannipata variety (Anaemias.)
2. Prameha particularly diabetes and albuminurea.
3. Diseases of the heart and blood vessels (including high B. P.)
4. Constipation.
5. Ativyayama, (over exertion Physical or mental.)
6. Excessive sexual indulgence.
7. Excessive use of certain drugs like tobacco, alcohol, quinine, etc.
8. Nervous diseases.
9. Referred-an un-erupted molar tooth or a suppurating accessory nasal sinus may produce noise in the ear.

II. *Swatantra or Primary conditions.*

Here the noise is always accompanied by deafness. Sometimes the statement of the patient as to his ability to hear may not be reliable. Having excluded the general conditions mentioned above one must proceed to examine the ear in the following order:—

(1) The External meatus. (2) The Tympanic membrane and (3) The Eustachian tube.

(*a*) Noise with deafness and traceable to some objective sign in the ear.

(1) External Auditory Meatus. The following must be looked for.

Wax.
Foreign bodies;
Polipi. (Four kinds of Karnarsas)
Osteomata and if found must be treated.

(2) Tympanic membrane (must be examined in a good light with the aid of a speculum). Look for signs Karnasrava, Karnapaka, Poothikarna of middle ear diseases.) The membrane may show signs of acute inflamation-redness or bulging, of recent perforation. In these conditions the patient generally describes the noise as pulsating or blowing. Subsidance of the acute condition will stop the noise.

The colour of the membrane may be slightly changed and there may be hairlike line on the membrane pointing to the presence of exudative middle ear catarrh. The hair like line is concave upwards and is made by the surface of the fluid within the tympanum and moves with the movement of the head. In this case the patient will describe the noise as 'something like water moving' or 'creaking' or sometimes of 'two pieces of leather being rubbed on one another' The treatment consists in Inflation of the Eustachian tube and instillation of Nirgundi Tailam or Deepaka Tailam or Glycerinc Acid carbolic. If this is not followed by the disappearance of the symptoms, the tympanic membrane may be incised under strict asepsis and antisepsis and the fluid blown out by means of the Eustachian catheters or sucked out with the siegle's speculum. Removal of the fluid leads to cessation of the noise.

(3) Eustachian tube. Any catarrhal condition of the upper respiratory tract may cause catarrh of the Eustachian tube resulting in retraction of the membrana tympani.

Treatment: Inflation of the tube by means of the Eustachian catheter in recent cases will be followed by cessation of the noise. The catheterisation may require to be repeated three or four times. But in chronic cases the local treatment may not be of much use and in such cases the treatment described under the next head must be tried.

(*b*) Noise accompanied by deafness and without any local objective signs.

This is the Pranada described in the Ayurvedic books. There is no constitutional or local sign to which the noise can be attributed. The membrane is normal and the Eustachian tube clear.

Severe noises are experienced by the patient and describes as 'noise of beating of drums' etc. There is intense and a vague type of pain in the head which the patient is not able to locate and the patient is not able to sleep.

"When the deranged vayu gets into the sound carrying channels, the man hears various kinds of noises and the disease is called Pranada."

For purposes of treatment the chronic inflamation of the Eustachian tube is also included under this group.

Treatment:—As our conception of the disease is a predominently a vata manifestation the indications are to administer Sneha (both internal and external) Sweda, Virechana and Samana. It is needless to dilate on the technique of these treatments, for they are well known. I have used the following method and drugs invariably with good results.

A preliminary Abhyanga (oil bath) with Ksheerabala Tailam, seven times medicated, is given, instilling a few drops of the same oil in to the ear and nose. Next morning an oily purgative like castor oil or Dhathree Tailam is administered.

From the next day, the following kashayam is given internally throughout the course of treatment.

Draksha Naga Kesara Yashtee Utpalam Sariba Mudgam Chandanam Ikshu Hreeberam Usheera	½ Tola each to be boiled in 24 ounces of water reduced to 6 ounces. 2 ounces thrice a day before food. This keeps the bowels acting normally and also brings about the desired Doshic equilibrium.

The diet must be non-stimulating easily digested and nourishing with good quantity of milk. Tobacco, Alcohol, and chillies must be strictly forbidden during the whole course of treatment. The diet is as important as the selection of the drug itself.

Externally Sirovasthi should be commenced. For this also I generally use Ksheerabala seven times medicated. The oil must be instilled in to the ear and also into nose every time. For the body Dhanvantara Tailam answers better. Shirovasthi is given to the maximum of seven days commencing with 45 minutes the first day and increasing by two minutes every day. The best time to give this treatment is in the evenings.

This is followed by Takra dhara

21 days all the time using Ksheerabala and Dhanvantara for Abhyanga and Karna Poorana.

This is followed by Takradhara all the time using ksheerabala and Dhan vantharam for abhyanga and Karna Poorana.

There is a great temptation to prescribe sedatives and hypnotics to subdue the noise and induce sleep drugs like bromides, Luminol, etc, are prescribed. The use of such drugs will only retard the progress must not be experimented along with the treatment prescribed above, though before commencing the treatment, in some cases where the pain and sleeplessness are very severe, there may be some justification to use the drugs temporarily. Generally sleeplessness is overcome by the application of Ksheerabala to the head and may be used even while going to bed if necessary.

JWARAS

BY

V. K. VENKATASWAMI, M.B. & B.S., F.I.M.

(Continued from page 58, Journal of Indian Medicine, Vol. I. No. 2.)

N. B.—In the following paragraphs, when making a comparative study of the Indian and Western medicine, no attempt has been made to correlate these systems. The western terms except where they come as literal translations, are used in an analogical sense, for expressing the Indian ideas clearly. The aim of these articles is to present the Indian medicine in the English language, without altering its individuality. The Western medicine is taken only as complementary to the Indian. The above sentences will help to clear some remarks entitled 'Scientific interpretation of Indian Medicine' published in the last issue of this journal. In the same paper an objection has been raised for making the difference between Vata and Vayu. The presence of this differentiation is one of the points where the Siddha system differs from Ayurveda. It is based on the science of Yoga. While in Ayurveda, yoga is not at all taken into consideration, it is in close relation to medicine in the Siddha works. As the articles written here are based both upon Siddha and Ayurveda, the above objection do not arise at all.

Fevers due to extrinsic causes are called *aganthuka jwaras.* They are as follows: (1) *Visha jwaram* (Fever due to poisons). Blackish discolouration of the face and mouth; diarrhoea; disgust for food; pain all over the body especially in the chest; fainting; burning sensation; high

fever; vitiation of vata and pitta (2) *Oushada gandha jwaram* (Fever due to the inhalation of either vapours from minerals such as mercury, arsenic and sulphur or strong odours from vegetable drugs such as marking nut). Giddiness; headache; vomiting; sneezing; swelling of the body; high fever; vitiation of all the three doshas. (3) *Kama jwaram* (Fever due to lust). Confusion of mind; laziness; lethargy; bashfulness; excessive or disturbed sleep; loss of courage and wisdom; excessive passion; inclination to dance; affectations: feeling strong in the body; subdued smile; lack of desire for food or desire for frequent eating; distaste in the mouth; excessive thirst; emaciation; redness of the eyes; discomfort in the region of the heart; burning sensation especially in the eyebrows, forehead, regions below the umbillicus, external genital organs and breasts; high fever. (4) *Bhaya jwaram* (Fever due to fear). Incoherent speech; crying; sense of fear coming frequently; excessive talking especially of a foul type; disturbed sleep; giddiness; grinding of teeth; fever; rigor; perspiration; excessive burning sensation; pain and redness in the eyes; pain in the head; colic; body feeling as of cut and crushed; chaithyam (pain in the pharyngeal, parotid and mastoid regions); sense of rigidity in the chest and hip due to vayu; dyspnoea; weakness; standing up of hairs on their ends; desire for food; excess of vata. (5) *Soka Jwaram.* Fever due to sorrow). Incoherent speech; crying; rigor; high fever; excess of vata. (6) *Kopa jwaram.* (Fever due to anger). Incoherent speech; headache; trembling of the body; rigor; high fever; excess of pitta. (7) *Abhichara jwaram.* (Fever due to black magic.) Fainting; mental agony; thirst; several types of vesicular eruptions. (8) *Sapa jwaram.* (Fever due to curses.) Fainting; mental agony; confusion of mind; high and severe fever; burning sensation; vesicles all over the body; vitiation of all the three doshas. All the features are here very acute and intolerable. They get increased day by day. (9) *Bhutabhishanga jwaram.* (Fevers due to supernatural agents.) Mental agony and worry; sudden and causeless laughter; crying; talking to himself; desire for all kinds of things; dancing; singing; excessive sleep; low voice; convulsions of an epileptic type; rigor; high fever; rolling of the eyes; staring look; redness of the eyes; blackish discolouration of the body; burning sensation; standing up of hairs on their ends; headache; weakness; excess of eating; vomiting; hiccough; diarrhoea; eructations; dyspnoea; yawning; fatigue; perspiration in the thighs, knees and feet; sometimes coldness of the whole body; vitiation

of all the three doshas. (10) *Abhigata jwaram.* (Fever due to injuries, ulcers, excess of physical labour, exposure to heat, light and similar causes). Dryness of the mouth; change of body complexion; pain all over the body; vitiation of the blood by vayu which fills up the whole body.

Vishama jwaras comprise a large number of fevers. Their pathology is as follows:—Either by taking incompatible foods when the body is in a state of ill health due to some slight vitiation of the doshas or by errors in diet just after the sudden subsidence of a fever, doshas get greatly aggravated and affecting one of the saptadhatus, give rise to a vishama jwaram. Some consider vishama jwaras as being caused by bhutas-supernatural agents. Vishama jwaras are of five varieties according to the dhatus involved. They are santhatham, sathatham, anyathyushkam, trithiyakam and chaturtakam corresponding to the affected dhatu being rasam, raktam, mamsam, medhas and asthi-majja respectively. Of these the chaturtaka jwaram is very complicated and has a bad prognosis. (1) *Santhatha Jwaram* is a continuous fever lasting for 7, 10, or 12 days. Rasam is affected. (2) *Sathatha Jwaram* is a fever having a double rise of temperature during the course of 24 hours. Rakta dhatu is involved. Incoherent speech; loud noise; rolling of the head; excessive eating. (3) *Anyathyushka Jwaram* is an intermittant fever coming daily. Mamsa dhatu is affected. Coldness of the palms and soles and sometimes of the whole body; burning sensation of the extremities or of the whole body; eructation; discomfort of the eyebrows; insomnia; weakness; frothy stools. (4) *Tritiyaka Jwaram* comes every third day. It affects the medas. There are three varieties in this group. (a) Pitta and Kapha are in excess; great pain in the hip. (b) Excess of Vata and Kapha; pain in the back. (c) Vata and Pitta are in excess; severe pain in the head; excessive cold; trembling of the body especially of the face; rigidity of the joints; discomfort; emaciation; watering of the eyes; nausea; indigestion; disgust for food; hard dry stools. (5) *Chaturtaka Jwaram* comes every fourth day. Asthi and majja are affected. Its general features are—excessive heat; cold especially of the palms and soles; dryness of the body; pricking pain in the head; emaciation; nausea; indigestion; disgust for food; hypochlorhydria. This is curable with difficulty. There are two main varieties in this group. They are (a) *Vatikam* excess of vata; pain in the head. (b) *Sleshmikam* excess of Kapha; sets in with pain in the lower extremities. Besides these, following are some of the irregular forms of chaturtika jwaram. These are called *Chaturtaka Viparyayam.* (a) Fever comes on the second and third day, but not on the first and fourth days. (b) Fever lasts for three days at a time (c) Fever ceases completely after a day's attack. (d) In the variety called *panchakika jwaram,* fever comes every fifth day. Vata and Kapha are vitiated, the latter being more affected, than the former. Excessive cold; fatigue; insomnia; emaciation; low voice; tremor; redness of the eyes; discomfort; pricking pain; burning sensation; rolling of the head; disgust for food; indigestion; hypochloryhdria; thirst; swelling; colic.

Following are special varieties of Vishama Jwaras (1) *Vata Balasaka Jwaram.* Low continuous fever; dryness of the body; swellings; excessive fatigue; great suffering; immobility of the various parts of the body; excess of Kapha. (2) *Prelepaka Jwaram.* Sense of numbness, heaviness, and heat; chilliness; low fever; body surface feeling gummy; excess of Kapham and pittam. (3) In this variety, while one part of the body is hot, the other part remains cold. Kapha and pitta are affected by overburnt and vitiated rasa. (4) If pittam gets localised in the trunk and Kapha in the extremities, the former will be hot and the latter cold. (5) If pittam remains in the extremities and Kapha in the trunk, the former will be hot and the latter cold. (6) *Seethadi jwaram* Kapha and Vata first affect the skin and give rise to an attack of cold. On its subsidence pittam gets aggravated and increases the body heat. At this stage following features are noted. Sour eructations; fainting; intoxication; thirst. (7) *Dahadhi Jwaram.* Pittam first affects the skin and increases the body heat; when it subsides Kapha and vata get increase and give rise to cold. Laziness; fatigue; expectoration; vomiting. Prognosis of this variety is bad.

Vitiated doshas giving rise to fevers, affect the sapta dhatus and produce symptoms and signs characteristic of the dhatu involved. These are called *dhatu-gata-jwaras.* Following are the varieties. (1) *Rasa dhatu-gata-jwaram.* Heaviness and pain all over the body; burning sensation of a severe type; alteration of the facial expression; mental depression; lack of courage; confusion of mind; low voice; insomnia; headache; emaciation; debility; dyspnoea; deep yawning; sweating and chilliness of the neck; hairs standing up on their ends; frequency of the pulse rate; discomfort in the abdomen with a sense of something coming out from the region of the heart; nausea; vomiting; salivation; thirst; tongue rough and dry; excess of Kapha. (2) *Rakta dhatu gata jwa-*

ram. Fainting; giddiness; incoherent speech; confusion of mind; sulliness; raving; feeling sleepy; sense of sinking; rolling of the head; weakness; heaviness of the head; sense of reeling; tendency to jump about; fever; burning sensation especially of the palms and soles; acute pain in the eyebrows; pain all over the body especially in the joints; body feeling as if cut and crushed; haematemisis; inflammatory swellings; urticarial eruptions; redness of the body surface; perspiration; chilliness; emaciation; watering of the eyes; vomiting; thirst; sliminess and yellowish discolouration of the tongue; constipation; heartbrun; diarrhoea; dysentery; excess of Kapham in the throat. (3) *Mamsa dhatu gata jwaram*—Fatigue; confusion of mind; raving; low voice; cramps in the muscles of the calf; burning sensation in all regions of the body; pain in the extremities; throwing out the extremities because of some discomfort; dryness and roughness of the body surface with a feeling as if something is smeared over it; tremor; pain all over the body; shiny appearence of the skin; perspiration; hairs; standing up on their ends; chilliness; swelling; Fever; thirst; increased quantity of stools and wine; foul odour in the mouth; pain and discomfort in the abdomen; dryness of the lips; bitter taste in the mouth; eructation; Vomiting; yawning; hiccough; dyspnoea; dimness of vision; watering of the eyes; excess of vata. (4) *Medho dhatu gata jwaram.* Fainting; incoherent speech; dislike for good smell; rolling of the head; pricking pain in the head; excessive perspiration; fatigue; intolerable fever; tremor; conjunctivitis; watering of the eyes; thirst; vomiting; foul odour in the mouth; nausea; indigestion; disgust for food; discomfort after taking water, clinical feauters of this variety resembles to a great extent that of the mamasa dhatugata Jwaram. (5) *Asthi dhatu jwaram.* Pain in the bones as if they are being broken; dragging pain in various parts of the body; pallor of complexion; flabbiness of the tissues; burning sensation; sometimes chilliness; emaciation; weakness; Swelling all over the body; loss of body lustre; difficulty to get up from the bed; headache; rolling of the head; yellowish discolouration of the eyes; nails pale and rounded; dyspnoea; making loud noises; latent fever; hiccough; pain in the lower part of the abdomen; severe diarrhoea; vomiting; indigestion; disgust for food; nausea; eructations. (6) *Majja-dhatu-gata-jwaram*-fainting; low voice; loss of memory; dimness of vision; weakness; loss of complexion; chilliness; burning sensation in the body interior; cutting pain at varrious parts of the body (marmas); sometimes general pain all over the body; discomfort below the thighs and knees; trembling of the head, face and eyes; hiccough; cough; dyspnoea; yawning; emaciation; eructation; vomiting with bitter taste; dyspepsia; disgust for food; flatulence; diarrhoea; obstruction to the normal courses of apana and prana, (7) *Sukra dhatu gata jwaram* Confusion of mind; loss of memory; raving; excessive or disturbed sleep; low voice; impairment of the sense organs; rolling of the head; emaciation; dimness of vision; cough; dyspnoea; pallor of complexion; thickening of the tissues; tremor; swelling; perspiration in the face; chilliness of the extremities; Pain in the eyebrows, top of the head, neck, chest, epigastrium, umbillicus, lips, testis, knee, ankle, hip, great toe, index finger and skin (marmas); erection of the penis; excessive secretion of semen; contraction of the penis; hiccough; toothache; eructations; nausea; vomiting; disgust for food; sweet taste in the mouth; indigestion; diarrhoea; death of the patient is very common in this variety. The gravity of the fevers affecting rasam, raktam, mamsam, medas, asthi and majja increases in the order of the dhatus enumerated. The first four are easily curable and the last two are curable with great difficulty. Death is very frequent in the majja dhatu gata jwaram. Sukra dhatu gata jwaram is invariably fatal. Authors who consider charmam (skin) as a dhatu, describe a *charma dhatu gata jwaram,* clinical features are as follows. Painting; incoherent speech; sense of heat and burning sensation all over the body; irregular and slow pulse; headache; thirst; great desire for water; pallor of complexion; salivation.

Jwaras named according to some feature clinching the diagnosis are follows. (1) *Suka Sanni.* This is a variety of sannipatha jwara. It attacks a person who while suffering from indigestion, takes an oil bath, eats food with curd, and has sexual intercourse. Perspiration all over the body or in the neck; redness of the eyes; fever; disgust for food; excessive aggravation of the doshas. (2) *Sapta dosha jwaram*—A continuous fever during the first nine days is called *Taruna jwaram.* If during that stage, a patient indulges in spicy food, cold water, substances with sour, bitter pungent and astringent tastes, ghee, gingely oil, jaggery, cold things pansupari, new cloths, red apparels, flowers with strong scents, camphor, musk and such aromatics, airy places, luxurious beds, moonlight, sexual intercourse, cooling measures, reading, riding, walking long distances, anger, crying and such things, doshas get further excited and give rise to dosha jwaras. Following varieties are described. (a) *Apakya dosha jwa-*

ram. Fainting; excessive raving; laziness; fever; confusion of mind; thirst; pain in the chest. (b) *Samgama dosha jwaram.* This arives after sexual indulgence. Confusion of mind; uttering falsehood; pain all over the body; tremor; heart burn; frequently getting up from the bed; chilliness of the palms and soles; heart burn (c) *Vishama dosha jwaram*—Fever; burning sensation especially in the stomach; excessive thirst; pulse irregular and frequent; perspiration. (d) *Vishama seetha dosha jwaram.* Daily two to four attacks of fever; raving; delirium; rolling in the bed; headache; tongue is thickened and rough. (e) *Peetajimmaka dosha jwaram.* Fainting; confusion of mind; fear; tremor; hoarse voice; fever; sweating; tongue is yellow, dry, rough and cracked; (f) *Raktajimmaka dosha jwaram.* Fever, thirst; burning sensation; tongue is red, rough and slightly clongated. (g) *Krishna jimmaka dosha jwaram.* Tongue is black, dry and rough; frequently getting up from bed; delirium; flatulence; pruritis; sweating; thirst; swelling; burning sensation; tuitchings; debility of the extremities; darkness of complexion. (3) *Sareera jwaram.* Fever here sets in with intense burning sensation of the whole body before other features are manifested. (4) *Manaseeka jwaram.* Mental troubles such as grief are first noticed in this variety. (5) *Sowmya jwaram.* Kapha and Pitta are primarily disordered. Then Kapha and Vata get involved. Thus there is a predominance of cold in the beginning of the fever. Giddiness; disturbed sleep; weakness; swelling; redness of the eyes; hiccough; pain in the chest; dyspnoea; cough; weak pulse; perspiration; vomiting; tongue is red and rough. (6) *Theekshna jwaram.* Pittam alone getting excited affcct the skin and gives rise to a severe sense of heat. This causes a violent disturbance of the Vata and Kapha in the body interior and produces cold and the features of a severe fever. (8) *Antharvega jwaram* or *Ot jwaram* while Kapha and Pitta are aggravated, Vata gets localised in the abdomen. Much discomfort in that region of the abdomen; constipation; excessive burning sensation in the body interior; thirst; pain in the joints and bones; lack of perspiration; drying up of the doshas and malas; giddiness; incoherent speech. (8) *Bahirvega jwaram* or *Veli jwaram.* This involves the skin without affecting the sapta dhatus. Symptoms set in suddenly and disappears rapidly. Body surface is very hot. Thirst and other features of the antharvega jwaras are present here to a slight extent. This is easily curable. (9) and (10) *Prakritha and Vaikritha jwaras.* If in a ritu, a

jwara is caused by the same dosha as that which gets aggravated in that season, it is called prakritha jwaram. Jwara produced by a dosha which is dissimilar to the dominant dosha of that season is called vaikritha jwaram. Thus jwaras produced by vata, pitta and kapa in the varsha ritu, sarath ritu and vasantha ritu are prakritham. All others are vaikritham. Prakritha jwaras produced by vata and vaikritha jwaras are curable with difficulty. (11) *Ama jwaram*—Fainting; confusion of mind; lethargy; disturbed sleep; rolling of the head; heaviness, rigidity and discomfort in the body; weakness; tremor; chilliness of the extremities; palpitation; discomfort in the heart; cough; dyspnoea; hiccough; yawning; severe fever; polyuria; pain in the abdomen; salivation; nausea; indigestion; distaste in the mouth; lack of hunger; thirst; diarrhoea with mucus in the stools; sometimes constipation; flatulence; watering of the eyes. (12) *Nirama jwaram.* This is the name given to a continuous fever on its eighth day. Patient has hunger; body is light; fever gets lessened; disturbed doshas are eliminated. (13) *Pachyamana jwaram.* Increased severity of an already existing fever; incoherent speech; loss of memory; giddiness; angry look; great discomfort in the body owing to the high fever; rolling in the bed; tremor; dyspnoea; perspiration; chilliness of the body; change of complexion; thirst; watery diarrhoea; salivation; tendency to vomiting; borbyrygmi. (14) *Deiva prakopa jwaram*—This is produced by supernatural agents. Whole body feels cold, rigid and painful; heaviness and rolling of the head; perspiration; hiccough; eructation. (15) *Gandharva jwaram*—confusion of mind; frequent fainting; singing; ridiculing; giddiness; lethargy; anger; weakness; wasting; headache; regidity; swelling all over the body; inability to move the joints; wet dreams; frequent micturition; hiccough; dyspnoea; chaithyam; watering and yellowish discolouration of the eyes; slight colic; lack of hunger; eructations. (16) *Tantrika jwaram*—giddiness; raving; weakness; pain all over the body; perspiration in the neck and forehead; pulse wiry and rapid. (17) *Pralapa jwaram*—confusion of mind; disturbed sleep; pallor; anaemia; chilliness; tongue rough and yellow; pain in the throat; perspiration in the neck and forehead. (18) *Seetha jwaram*—giddiness; weakness; dirturbed sleep; swelling; redness of the eyes; perspiration; pain in the chest; cough; dyspnoea; hiccough; tongue rough and red; weak pulse; vomiting; excess of kapha. (19) *Vyarvai jwaram.* Fainting; confusion of mind; wryness of the face; dejection; excessive talking

especially foul words; sense of reeling; rolling of the head; fatigue; emaciation; discomfort; pain in the head and ear; yellowish discolouration of the extremities; excessive perspiration; low fever; hiccough; dyspnoea; eructation; flatulence; tongue is rough; pulse wiry, rapid and sometimes irregular; excess of of kapha. (20) *Haridra jwaram.* Yellowish discolouration and eruptions all over the body; oily appearence of the face; heaviness and rolling of the head; weakness; excessive talking; chaityam; rigidity; pain in the eyes and nails; swelling of the joints; chilliness of the extremities; yawning; hiccough; eructation; froth and bitter taste in the mouth; thirst; dryness of the throat; heartburn; indigestion; constipation (21) *Udhaya jwaram.* This comes in the mornings. Raving; excessive talking; chilliness of the palms and soles; pain all over the body as if cut and crushed; yawning; thirst; eructation; indigestion; bitter taste in the tongue. (2) *Madyana jwaram.* This comes in the midday. Fainting; tremor; dejection; headache; perspiration especially in the neck and forehead; much uneasiness; excessive talking; weakness; yawning; hiccough; thirst; dryness of the throat and tongue; saliva reddish and foul-smelling; eructation; polyuria; pruritis; excessive cold (23) *Malai jwaram.* This comes in the evenings. Headache; raving; chilliness; swelling; hiccough; yawning; flatulence; constipation; bitter taste in the mouth; vomiting. (24) *Nisi jwaram.* Fever sets in at midnight. Raving; disturbed sleep; sense of reeling; ringing in the head and ears; weakness; excessive cold; chilliness of the extremities; perspiration; excessive thirst; diarrhoea; polyuria. (25) *Tapa jwaram.* Raving; great discomfort; disturbed sleep; excessive burning sensation; excessive cold; weakness; heart burn; dryness of the tongue even though much water is taken; indigestion. (26) *Athapa jwaram.* This is produced by continuous walking in the forenoon sun of the months of April, May, June and July. Raving; confusion of mind; much discomfort; dejection; burning sensation; headache; congestion of the face; giddiness; tendency to sleep frequently; choking sensation; tremor of the extremities; watering of the eyes; toothache; thirst; dryness of the mouth; diarrhoea. (27) *Eenathoni jwaram.* Low voice; raving; dejection; much discomfort; loss of understanding; rigidity; perspiration; chilliness of the whole body; body feeling as if cut and crushed; tremor; dark complexion; colic; tongue is rough; bitter froth in the mouth; pulse wiry and rapid. (28) *Eppa jwaram*—confusion of mind; headache; pain and watering of the

eyes; body feeling as if turned to the sides; pruritis and trembling of the head; eructations; heartburn; vomiting; thirst; dryness of the throat; impaired digestion; constipation. (29) *Kottavi jwaram.* Excessive yawning; hiccough; chilliness; cold perspiration all over the body; pain and ringing in the ears and head; intermittant attacks of tremors; low voice; giddiness; thickening of the tissues; toothache; flatulence; indigestion; vomiting with sour and bitter taste; excessive thirst; excessive kapha in the throat. (30) *Anidrai jwaram.* Insommia; burning sensation in the body; giddiness; rolling of the head; dyspnoea; excessive cold; much crying; fainting; low voice; thirst; dryness of the mouth and tongue; frequent cough; pain in the lower part of thigh and calf muscles. (31) *Sushka jwaram.* Emaciation; evcessive heat; burning sensation; pain in the eyes and head; cold; perspiration; toothache; prostration; body feeling as if cut and crushed; hairs standing up on their ends; excessive sleep; laziness foul talking; anger; indigestion. (32) *Purana jwaram.* Fever persists for a long time; weakness; rolling of the head; sweating all over the body; seminal emission; nausea; colic; indigestion; disgust for food; cough; excess of kapha; decrease of vata. (33) *Pakshantara jwaram.* Fever comes once in every fortnight; sense of heat and cold; absence of mind; headache; weakness; emaciation; swelling; pallor; change of complexion; cough; jaundice; thirst; nausea; indigestion. (34) *Matha jwaram.* This comes every month. (35) *Varsha jwaram* is the one that comes once in a year. (36) *Kampa jwaram.* Tremor; chilliness of the whole body; sweating; heaviness of the head; watering of the eyes; dejection; rolling of the head; much discomfort; weakness; crying; disturbed sleep; rigidity; pain in the joints; yawning; distaste in the mouth; thirst; eructation; pustules in the mouth and tongue; sour vomiting; diarrhœa; pulse wiry and rapid. (37) *Trikala jwaram.* Fever comes thrice daily viz. in the morning midday and evening. Fainting; confusion of mind; raving; singing; grinding of the teeth; wryness and congestion of the face; weakness; tremor; slight heat; diminution of sleep; fatigue; perspiration; impairment of hearing; dyspnoea; yawning; cough; hiccough; thirst; tongue is rough; tendency to vomiting; diarrhoea.

Following are jwaras coming as complications to other diseases. (1) *Moorchai jwaram.* Fainting; weakness; rolling of the head; raving; excessive talking; low voice and at times aphasia; emaciation; redness and watering of the eyes; chilliness of the extremities; cold; dyspnoea; haematuria; bitter taste in the

mouth; colic; great vitiation of vata (2) *Krimi jwaram.* Worms even up to 500 coming out either by the mouth or by the anus; severe colic in the abdomen; flatulence; eructation; vomiting; indigestion; fainting; disturbed sleep; giddiness; mental worry; heaviness of the body; dyspnoea; emaciation; chilliness all over the body; sultriness. (3) *Sosha jwaram.* Emaciation; sultriness; fainting; raving; much discomfort; chilliness; hairs standing up on their ends; restlessness; dyspnoea; smokiness of the conjunctiva; dimness of vision; watering of the eyes; polyuria and frequent micturition; flatulence and pain in the abdomen; dryness and redness of the tongue and mouth; indigestion; vomitting. (4) *Vrana jwaram.* This arises as a complication of septic ulcers; Much pain local and general; 'chaityam'; headache; weakness; disturbed sleep; confusion of mind; emaciation; dryness of the ear and forehead; conjunctivitis; tremor; chilliness of the extremities; nausea; bitter taste in the mouth; dyspnoea. (5) *Agnimantha jwaram.* Lack of hunger and thirst for 7-10 days; weakness; loss of complexion; burning sensation; emaciation; headache; cough; dyspnoea; hiccough; constipation; thirst; nausea; disgust for food; eructation; vomiting; tendency to crying; liablity to other kinds of fevers, small pox and similar eruptive conditions, and diarrhoea. (6) *Vanthi jwaram.* Vomiting of blood with sour taste in the mouth; severe heart burn; passing of mucus; persistant thirst; sultriness; perspiration in the neck and forehead; weakness; chilliness of the extremities; body feeling as if crushed; fading of complexion; seminal emission. (7) *Vikkal jwaram.* Excessive hiccough; dyspnoea; perspiration; fainting; weakness; raving; disturbed sleep; heaviness of the head; pain in the joints; impairment of digestion; thirst; vomiting; diarrhoea; heartburn; aggravation of vata and kapha. (8) *Kasa jwaram.* Persistant fever; fainting; confusion of mind; fatigue; rolling of the head; tremor; weakness; low voice; burning sensation in the eyes and head; expectoration of a red, frothy, white or multicoloured sputum; hiccough; yawning; sweating; thirst; eructation; vomiting; pain in the abdomen; diarrhœa. (9) *Pitaka jwaram.* Eruptions of varying sizes from that of a mustard; burning sensation; dejection; rolling of the head; sweating; raving; disturbed sleep; excessive talking; low voice; chaityam; tremor; pain in the thighs and knees; discomfort in the eyes; thirst; tongue is dry and rough; froth from the mouth; eructation; vomiting; hiccough. (10) *Potaka jwaram.* Pustules all over the body of the size of a green gram; raving; much discomfort; burning sensation; tremor; weakness: inability to get up; restlessness; fading of the complexion; singing; making funs; disturbed sleep; redness of the eyes; thirst; heartburn; pain in the abdomen; diarrhoea; dyspnoea; weak pulse. (11) *Sobai jwaram.* Swelling in the joints; excessive cold; ringing in the ears; weakness; fainting; rolling of the head; pain in the head, forehead, eyes and abdomen; choking sensation; colic; hairs standing up on their ends; burning sensation; sense as if the extremities are boiled; watering of the eyes; tremor; dyspnoea: hiccough; yawning; flatulence; indigestion; constipation. (12) *Anaha jwaram.* constipation; pain in the anal region: indigestion; thirst; dryness of the throat; frequent micturition: chilliness; heaviness of the head and body; sense of ringing in the middle of the forehead; pallor; redness of the eyes; hairs standing up on their ends; pulse is displaced, irregular, week and rapid.

Following list gives the western diagnosis of some of the fevers described in the above paragaaphs. This is compiled from actual practice. While the Indian diagnosis denote the pathological changes in the body taken as a whole, the western terminology expresses the particular lesion either from the pathological or aetiological or both points of view, forming a sort of complement to the other system. e.g. vata kapha jwaram is a fever due to the disturbance of the dynamic (vata) and static (kapha) aspects of the body taken as a whole. In one case it happens to be lobar pneumonia i.e. inflammation of the lobes of the lungs due to pneumococcus (pathological and aetiological) in another case Typhoid i.e. a fever due to Bacillus Typhosus (aetiological) in a third case Acute Bronchitis i. e. inflammation of the bronchi (pathological) and so on. As the terms in the two systems are variant each in their own way, no correlation is possible between them. Where there is much constitutional disturbance (on which is based the Indian diagnosis), there may or may not be any local lesion (which indicates the western nomenclature) and vice versa. On the other hand, for a complete diagnosis and treatment, the Indian and Western methods i.e. the study of the whole and the parts are of mutual help to each other.

Vata jwaram. Influenza; Dengue; Pyrexia of unknown origin. *Pitta jwaram.* Influenza; Malaria; Pyrexia of unknown origin, *Kapha jwaram.* Influenza; Pyrexia of unknown origin; cold with fever; Acute Bronchitis; Broncho-Pneumonia; Lobar Pneumonia; Pleurisy. *Vata Pitta jwaram.* Typhoid; Bacillus coli infection; Influenza; Dengue; Malaria; Febricula; Pyrexia of unknown origin; Vaginitis. *Vata Kapha jwaram.* Typhoid; Influenza;

Malaria; Pyrexia of unknown origin; Acute Bronchitis; Broncho-Pneumonia; Lobar Pneumonia; Pleurisy; Pericarditis. *Pitta Kapha jwaram.* Typhoid; Paratyphoid; Influenza; Dengue; Malaria; Kala Azar; Febricula; Pyrexia of unknown origin; cold with fever; Broncho-Pneumonia; Lobar Pneumonia; Hepatitis. *Pitta Vata jwaram*—Typhoid; Paratyphoid; Influenza; Dengue; Malaria; Kala Azar; Febricula; Pyrexia of unknown origin; Lobar Pneumonia; Liver Abscess. *Kapha Pitta jwaram*—Typhoid; Iufluenza; Malaria; Broncho-Pneumonia; Lobar Pneumonia; Pleruisy; Appendicitis. *Kapha Vata jwaram*—Influeza; Kala Azar; Febricula; Pyrexia of unknown origin. *Sannipatha* hoea. *jwaram.* Typhoid; Bacillus coli Infection; Broncho-Pneumonia; Hysteria. *Aganthuka jwaram.* Burns with Fever. *Vishama jwaras.* Paratyphoid; Influenza; Malaria; Kala-Azar; Pyrexia of unknown origin. *Kasa jwaram.* Chronic Bronchitis; Broncho-Pneumonia; Lobar Pneumonia; Acute colitis. *Seetha jwaram*—Influenza; Rheumatic fever; Febricula; cold with fever; cystitis. *Jwaram as complication of other diseases. Nerikatti jwaram.* Filarial fever; *with Andaveekkam.* Orchitis; *with Pakkasoolai*—Pleuro-Pneumonia; *with Mahodaram*—Acute Nephritis; *with Sobai*—Kala Azar; *with Mayakkam*—Acute Dyspepsia; *with Piramiyam*—Gonorr-

(To be continned.)

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TREATMENT OF SANNIPATA JWARA.

(Continued from page 106.)

However few the symptoms may be, if the line of treatment is not strictly followed in Sannipata fever, or if the doshas are very much, the patient may get any of the following ten complications. They are—difficulty in breathing, unconsiousness, loss of appetite, vomiting, extreme thirst, diarrhoea, constipation, hiccough, cough and burning sensation all over the body. The treatment usually adopted in these conditions are given below.

The first and commonest complication is dyspnoea. This is generally met with in that variety of Sannipata where Kapha predominates and causes the occlusion of the srothas. In such a condition, fomentation to the chest is to be given after the application of the oil prepared with the theekshna and ushna drugs. As madhyam has got the power of opening the srothas arishtam can be used in graduated doss. To start with about ½ to 1 oz of *Dasamularishtam* can be given. Along with that

Kasthuri, Gorochanam, Rudraksham and *Panchasringam* can be given.

The next common complication is unconsciousness (mada, murcha etc.) In this condition theekshnanjanam should be applied. The following may be applied.

Sireeshabeejam	1 Part	To be rubbed with Gomutram and to be applied to the eyes.
Pippalee	1 „	
Maricham	1 „	
Saindhavan	1 „	

—Bhava Misra—Madhyamakhanda Sannipata jwara 643.

Nasyam with *Drona pushpiswarasa* or *Ardrakaswarasa* can also be given. If the patient is restless and does not get proper sleep lepams for the head can be applied.

1. Kachoradi churnam with Breast milk or mixed with butter.

2. Rasnadi churnam with Breast milk or mixed with butter.

3. Breast milk with Karpooram and Kunkuma Kesaram.

Loss of proper taste is also a very common complaint. In that condition the following may be done.

Mathulungan	1 part	To be ground with honey and ghee and applied over the tongue.
Seeds of Promogranate	2 „	
Sarkara	1 „	
Draksha	1 „	
Kharjura	1 „	

(Gadanigraham 1-6-29)

Vomiting is the next complication. For this a decoction of *Laja, Bilvamulam* and *Shunthee* works very favourably in all most every case. *Hreebaram* or *Utpalam* to be powdered and mixed with honey or ghee can also be given.

For thirst the most useful medicine is the seetha kashayam prepared with coriander (Dhania) taken with sugar every hour or half-hour.

Diarrhœa is one of the distressing complication. Decoctions that are antipyreties are many which will also stop the diarrhœa are to be given. In certain cases constipation may be present. In these cases Phalavarthes made out of theekshna drugs are to be applied. Afterwards a deccotion prepared with the following may be given.

Hareethaki	1 Part	Kashayam to be prepared 2 to 4 oz. dose at bed time or at any time accord- to the suitability.
Aragwadha	,,	
Thikta	,,	
Trivrith	,,	
Amalaki	,,	

The following medicine is good for cough.

Twak	1 Part	Grind as a paste with honey and about 5-10 gr. to be taken every half-hour or when ever there is tendency to cough.
Ela	,,	
Patram	,,	
Pippali	,,	
Draksha	,,	

Nasyam given with Saindhavam and Sthanyam is good for hiccough.

The following Kashayam also may be given.

Bala	3	Kashayam ½ oz. every second hour or according to the condition.
Dhanyakam	2	
Shunti	1	

If there is burning sensation all over the body external application of Seetha veerya drugs as chandanam, useeram etc, may be good.

Sathadhouta ghritham may also be applied.

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CLINICAL NOTES.

A CASE OF TETANUS TREATED WITH INDIAN MEDICINE

T. G. RAMAMURTHI IYER,

Medical Officer, Avalpundurai, Erode.

Kolandan, Hindu, male, aged 24, married, Postal mail Runner, was seen by me on 23-3-1935.

History:—

About 17 days previous to my visit he got a wound in his right toe, which became septic and symptoms of Tetanus developed on the 15th day. Ever since the wound was got he was treated privately by a native physician. As he was not getting better I was called in to treat the patient.

He was found in the following condition when I saw him.

Temperature 102° F. in the armpit, Pulse—94, p. m.

Respiration distressed during fits, lock-jaw, severe tonic contractions of the muscles of the neck and chest. During fits the body was arched backwards (opisthotonos), was unable to swallow, had thirst and hunger. Fits were frequent, in the interval he swallowed water and gruel.

I gave ½ grain Morphia hypodermically, cauterised the wound with carbolic acid.

The following recipe was immediately prepared and administered.

Hen with black flesh		1.
Mustard seeds	...	q. s.
Gingily oil	...	12. Fl. ozs.
Margosa oil	....	12. ,,

The hen was cured, mustard seeds were filled in the cavity, sutured and roasted in the mixed oils until the hen became dark brown.

This oil was administered internally in tablespoonful doses T. D. S. and also rubbed all over the body from head to foot.

The patient was kept in a dark room away from noice and light. Diet:—Rice gruel and boiled and cooled water.

When I saw him the next evening, the temperature was 100° F. and fits were less frequent.

The treatment was repeated and the fits gradually stopped on the 5th day.

He was allowed usual diet on the 5th day.

The wound was found healed up on the 7th day.

Remarks:—It was surprising to note the results of this oil treatment in this case, and there was no opportunity for a village medical officer to try on a large number of cases of this nature.

The formula of this oil was given by a very old native physician, who treated a similar case successfully in my presence a dozen years ago.

———

SANNIPATA JWARA

BY

AYURVEDACHARYA N. MADHAVA MENON, A.M. A.C.

Medical Officer, Ayurvedic Inpatient wards, Kilpauk Hospital.

The following are the clinical notes of some of the typical cases of Sannipata Jwara wherein the agglutination test (Widal's reaction) was positive. Generally in such cases, the treatment adopted in the Ayurvedic ward is almost the same. At present the

statistics of the cases treated would not be of any use for judging the efficacy of the treatment as the number of beds in the ward are few and consequently the typhoid cases treated in a year are few. Statistics of a few cases are always fallacious. However from my experience I may state the success of the typhoid cases has always been good and what is more no distressing complications arose in these cases. Therefore I may recommend this treatment in clinically suspected cases of typhoid.

CASE NO. I

A Hindu boy aged 17 was admitted on 10-8-1935 with continuous fever of 10 days duration.

History of the Present illness. About ten days back he got severe shivering. He took to bed. He noticed sometime later high fever. It was continuous. He had no treatment for these ten days.

Previous History. Nothing particular.

Condition on admission. Patient was weak; moderately nourished; eyes watery and darkish brown; tongue coated and protruded with difficulty. There was pain in the abdomen on deep palpation. Bowels were hard and passed only once in a day. His appetite was not good and he had no inclination to take anything. Liver and spleen were not palpable. Heart and Lungs nothing particular. Pulse slow and soft. (76 per minute) B. P. 95 and 55. Temp. was continuous and on the day of admission it was 103.

Widals reaction.

B. Typhosis positive 1—200.
B. Para typhosis A & C Negative 1—25.
,, B positive 1—50.
B. coli negative 1—25.
Blood smear—no Paracyte.

Progress and Treatment

10-8	*Diet*	*Medicine*
	Arabian coffee 2 pts.	1. Swachanda Bhairawa pills 3.
	Laja paya I 2 pts.	Sudarsan ch. gr. 15
	Barlly water 2 pts.	3 doses 3 times with honey.
14-8		2. Panchathikta kashaya oz. 6, 2 oz, three times after the pills.

The general condition and the temp. was very much the same. The patient commenced passing loose motions about 3 to 4 times a day. The motions were yellowish green and foul smelling, complained of pain in the abdomen and was a little flatulant. There was gurgling on the lower part of the adbomen. This is the 14th day of the fever.

1. Sannipata Bhairava pills 6
   Trikatu ch. gr. 15
   Athivisha ch. gr. 15
   3 doses 3 times with honey.

2. Chinnaruhadi Kashaya oz. 6
   Kutajarishtam oz. 1½
   1/3 Part three times a day to be followed after No. 1.

On the first few days medicines which are mild jwaraghna (anti pyretics) were given. After four days as the patient's condition had not improved and started passing loose motions treatment was changed to control the diarrhoea and also more powerful jwaraghna (anti pyretic) was given. Chinnaruhadi Kashaya (Sahasra Yoga—Kashaya Prakarana) was found invariably good in cases of typhoid fever. When there is diarrhoea it controls and it doesn't constipate. It is deepaniam and pachaniam.

On 17-8 the temp. came for the first time to 99·4 F in the morning and went up to 103° F in the evening. As the diarrhoea stopped, Kutazarishtam and Athivisha ch were removed from the prescription. The temp. came down slowly by lysis and became normal on 24-8. His appetite improved. Bread and milk were added to his diet. His bowels did not move regularly.

27-8
1. Lohasavam oz. 1
   Dasamularishtam oz. 1
   Hamsodakam oz. 2
   1/3 Part T. D,

2. Thiktaka ghritham 1 tola at bed time.

As the temp. came down to normal and as the general condition was to be improved Rasayanam treatment was adopted. Milk and ghee were given. Ghee was given in the night because it was august (Gharmepi cha ghritam nisi.)

1-9. He improved considerably, rise and mutton soup were added to his diet. He was asked to take the above medicine from out patient and was discharged on 3-9-1935.

Remarks

This case was Sannipata Jwaram with Vata and Pitta as predominant doshas. He came only in the second week and so the treatment of the first week was not done here. The treatment adopted here was to bring down Pitta and to treat from Kaphastana.

CASE NO. II

A Hindu boy aged 7 was admitted on 20-8-'35 for continuous fever and cough of 10 days duration.

History of Present illness. About 10 days back he had shivering and got fever. Two or three days later he devoloped cough. The fever was continuous and the cough was persistant. There was large quantity of frothy sputum. He was not able to take any food. He had some private treatment and as he found no improvement he got admitted in the Hospital.

History of previous illness, nothing particular.

Condition on admission. The patient was very weak and emaciated. Tongue was thickly coated, he had no appetite. The abdomen was slightly flatulant and tympanitic. Bowels darkish yellow, watery and passed two to three times a day. Liver palpated about three fingers and spleen was not palpable, urine was free and high colored.

Lungs. Rales of various sizes heard all over the lungs. There was persistant cough, sputum frothy and no blood. No Pneumococci Respiration 38-45. per minute.

Heart was quick and feeble—pulse 120 p. m. (Vata Kapha type.)

Blood. No paracytes, Slight leucopenia.

Widal's Reaction.

B. Typhosis		Positive 1 in 200
B. P. Typhosis A & C		Negative 1 in 25
B. P. ,,	B	Positive 1 in 50
B. Coli		Negative 1 in 25

Temperature was remittent ranging between 99° and 103° F. The patient was now and then delerious.

Progress and Treatment

20-8	*Diet*	*Medicine*
	A. Coffee 2 pts, Barle water 2 pts. Laja peya I, 2 pts.	1. Karpuradi ch gr. 15 Pravala gr. 6 Swachanda pills 3 made into three doses and given three times with honey.
		2. Vasarishta oz. ½ Dasamula Katu Trayadi Kashaya oz. 3 ⅓ part given after the above.
		3. Sasisara Tailam oz. ⅓ applied over the chest and fomented with wheat bran.

No. 1 is given to bring down both fever and the accumlated Kapha from the chest.

No. 2 & 3 are anti Vata and Kapha—Expectorant and sedative.

The same treatment was continued till 29th. The temp. during the period was remittent ranging from 99 to 103° F, His bowels moved once a day. He coughed and brought forth large quantity of frothy sputum. Occasionally there was some blood in the sputum and it stopped when Laksha ch. and Sithophaladi were substituted in the place of Karpooradi ch. His diet was increased by adding milk and bread. He became strong and as the cough also was less he was discharged on 3-9-1935. He was asked to take the following medicine from the O. P. for about 15 days.

Lohasavam	oz. ½	1/3 part T. D.
Draksharishta	oz. ½	
Hamsodaka	oz. 2	

Remarks—This case is sannipta jwaram of vata kaph type. The treatment adopted here is to bring down the highly increased docha to the level of the other two-kapha was brought down.

RESOLUTIONS PASSED AT THE 5th L. I. M. CONFERNCE MADRAS. DECEMBER 1935.

1. This Conference requests all the Local Board authorities to depute all their L. I. M. employees to attend the L. I. M. Conference at Madras and to meet at least half the cost of conveyance charges so as to enable medical officers serving in distant places to benefit by such conferences.

2. This Conference requests all the L. I. M. Members in a District to form themselves into a District Medical Association, if they have not formed one already, and to convene meetings every month.

3. This Conference appeals to the members of the Association, Local Board and Municipal employees in particular, to remit their membership subscriptions regularly to the Secretary of the Association.

4. This Conference strongly deprecates the practice of certain District Boards to keep medical officers temporary for a long time, thus denying them the privileges of permanence, contribution to Provident Fund and such other rights which accrue consequent to confirmation.

5. This Conference resolves, that, in future conferences, the Executive Committee arrange to devote more time to questions of Academic and Scientific interests than on questions of merely administrative importance.

6. This Conference appeals to the Darbars of the Native States of India to recognise and appoint L. I. Ms as medical officers in institutions of Indian Medicine in their states.

7. This Conference resolves to collect and contribute towards the L. I. M. research fund which will finance exchange project of L. I. M. in the European Universities.

8. This Conference resolves to supply the German Akademie with 25 copies of the Osman Committee Reports and 25 copies of the Curriculum of the Government Indian Medical School at an early date.

9. Whereas it has been the practice of certain local bodies to oust the existing incumbants from places and post stipendiaries of such bodies, this Conference requests the Government to alter the orders since the existing incumbants are subjected to great hardsips consequent on being ousted.

Statement Showing the Receipts and Expenditure of the year 1934 of the 4th L, I. M. Conference Collections.

Collections by Delegate fees 113×2	...	226	0	0			
Associated members 10×2 ...	...	20	0	0			
Members of Reception Committee 13×5	...	65	0	0			
Exhibition of Pharmacies 9×10 ...	...	90	0	0			
Donations	...	83	0	0			
do by Maha Rajah of Pithapuram	...	100	0	0			
Payments to	...						
Cost of Envelopes ...	...				2	1	0
„ Note book ...	...				0	1	6
Postal Expenses	...				45	3	9
Conveyance charges	...				15	5	0
School Exihibition ...	...				9	0	0
Printing charges	...				57	14	0
Badges etc.	...				19	8	0
L. I. M. Association Registration Expenses					52	0	0
Flower garlands	...				11	5	0
Coolies for shifting Benches ...	...				17	8	0
Cost of Refreshments ...	...				98	0	0
Type writting charges... ...	...				10	0	0
Decoration charges ...	...				27	5	6
Guest charges Paid to Hostel	...				11	12	0
Volunteers Conveyance ...	...				0	10	0
		584	0	0	377	9	9
Balance C. O.					206	6	3
		584	0	0	584	0	0

The Receipts and Payments are verified and found correct.

K. V. SUBBA RAO.

REVIEWS.

THE HAND BOOK OF INDIAN MEDICINE

OR

THE GEMS OF SIDDHA SYSTEM (IN ENGLISH)

BY

DR. T. G. RAMAMURTI IYER

Published by Sri Vani Vilas Press, Fort, Erode, Cost Rs. 5 or 10 sh.

It had always been a difficult problem to express ancient Indian scientific and philosophic truths in English and the attempts previously made by western orientalists and Indian authors were criticised by scientists and philosophers. It was never before so palpably gross and misleading as in the book under review. The first nineteen chapters are full of such misleading terms. We will point out one or two such things so that people who make such attempts will at least be warned. "The principle nerves are three—Ida—Vata—left sympathetic; Pingala Pitta-right sympthetic;—Sushumna —Kapha spinal cord" (pages 54 and 55). This kind of classification is continued. In page 68 we read "Prana vayu is the principal *gas*"; "the gases guide all the functions," (page 69) "Amritha kala (the choroid plexas) that secrets the nectar called Amritha (cerebrospinal fluid, etc. (page 88). Such readings as these can be multiplied. No comment is required to show the grotesqueness. Amritha of yogis to be called as cerebrospinal fluid is some thing which we cannot understand. The later portion of the book which deals with the Materia medica and preperations is readable and would be useful for Indian practitioners. It would have been better if the author has used vernacular names for various drugs along with the botanical and western terminalogy. We would also like to suggest to give the sources from which the prescriptions are taken so that people who are interested in reading the original may refer.

When oriental language is written in English there is a convention that the words should be transliterated in a particular form. We hope the author will carry that convention in the future editions of the book.

V. N.

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Dr. Y. SREENIVASACHARYULU,

A. M. A. C.

వైద్యయోగరత్నావళి

ఇందు మద్రాసు గవర్నమెంటువారిచే 2411 జి. ఓ. యందు అంగీకరింపబడిన ఔషధ ప్రకరణములున్ను, మరికొన్ని ముఖ్య యోగములున్ను చేర్పబడినవి.

ఈ ఔషధయోగములను చేయుటయందలి సాంప్రదాయమును, వానిని వ్యాధులందు ప్రయోగింపవలసిన విధానములును చక్కగ వివరింపబడినవి.

ఇది ఆయుర్వేద వైద్యులకును ముఖ్యముగ లోకలుబోర్డు, మ్యునిసిపల్ వైద్యశాలలందు పనిచేయుచున్న వైద్యులకును, ఫార్మశీలవారికిని చాల యుపయోగకరము.

వెల రూ. 2—0—0

సంపాదకుడు:— **ములుగు రామలింగయ్య,**

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DHARA, PIZICHAL AND KIZI.

BY

V. NARAYANASWAMI, L.I.M.

Sneha combined with massage (Mardana) and Sweda, though recognised in all Ayurvedic Texts, are only developed in all their technicalities and detail by the physicians in Malabar. The above mentioned treatment is not only indicated, in diseases due to Vata, paralysis etc., but also in various other diseases where elimination of bad matter from the body is necessary and in many instances, they are done to recoupe lost vitality. They may be done even for a Swastha (Healthy man) to prevent old age and attendant inconveniences.

Massage or scientific rubbing is in practice even from very early times. Hippocrates wisely said "rubbing can bind and loosen, can make flesh and cause parts to waste; hard rubbing binds, soft rubbing loosens; much rubbing causes parts to waste moderate rubbing makes them grow." (Quoted in Manual of Massage—Ellison). This quotation shows that from the very early days massage was practised by all people all the world over.

In modern times a set of people in Europe and America have started what is called Physiotheraphy. The main work of these centres or clinics is mainly to give various kinds of massages. The science and practice of massage is not only popular in modern times but it was also popular in ancient times. The perfection of orientalists in this direction is so much that even now Japanese and Chinese have centres in various parts of the globe.

It is not the intention to describe in detail the various methods of massage developed and practised by various countries. But, an attempt is made here to point out in modern

language the benefits of massages. The massage practised in India, especially by Malabar Physicians differs fundamentally from that of any other country. All over it is the manipulation of finger tips of the palm. But in India it is not only the physical manipulation, but also, getting into the tissues the therapeutic value of various medicated oils. Therefore, in essence the combination of medicated oil with the manipulation of fingers and palm should necessarily be of greater value than either the one or the other.

"Massage increases the cutaneous circulation and has a beneficial influence upon the sensory nerve endings.. Carbon dioxide is given off and an equivalent amount of oxygen is absorbed. This process may be accelerated when the skin is kept in a good condition by massage." (The theory and practice of Massage, page 19—Copestake.)

The benefit of massage to the involuntary muscles is great. While pressure is applied to the muscle, the blood from that tissue is pressed out and while the muscle is being relaxed fresh amount of blood comes to the deep muscles. "Fatigue is an indication that waste is greater than exertion and want of exercise is relieved by massage (Graham) Quoted Ibid page 18.) It is said that fatigue is produced by the accumulation of various toxic materials in the muscles. If these toxic materials are removed by massage, the tissues get the normal tone. In cases when the tone of muscle is lost or wasting is produced by impaired nutrition in all those cases massage with suitable medicated oils will certainly increase the size and strength of the affected limbs." "Voluntary movement means exercise of the nervous system, as well as of the muscular and in many cases helped by massage are those of used up nervous energy, in whom exercise in the ordinary way would only increase exhaustion, but massage in such cases is very beneficial." (Ibid page 18).

Massage exerts influence even on circulation. The nervous and lymphatic circulation are accelerated by massage. Even in cases of anaemia massage has increased red corpuscles and the haemoglobin; in these cases it is not suggested that massage manufactures the corpuscles or the colouring matter but it helps them to come again to circulation from the dorment centres. "The heat producing property oxyheamoglobin in the blood stream, is distributed more evenly throughout the body and thus the temperature of the body is regulated." (Massage and Therapeutic Exercise - Mary Mc Millan)

The influence that massage exerts upon the nervous system is great. It has the power of renewing the vitality of the nerves and spinal cord. "In cases of neurasthenia, in which there is sluggish nerve reaction there is no doubt that stimulation through motor, sensory and sympathetic systems will sometimes show excellent results when all else fails" (Ibid page 61). The therapeutic value of massage according to the ancient and modern writers do not differ. The Sneha-vidhi and the Sweda treatment goes one step further than the Physuotherapeutist of modern treatment, as in the former not only mechanical but also medicinal effects could be had. "The skin and muscles are stroked, kneaded, squeezed, rolled and tapped, with the result that—

(a) The functions of the skin are improved;
(b) The flow of blood and lymph is quickened;
(c) Blood is attracted to the surface from internal parts;
(d) Nerves are stimulated or soothened, as the case may be;
(e) Effete matter is got rid of;
(f) Adhesions of soft parts are broken down;
(g) Swelling and thickening of tissues are reduced;
(h) Nutrition is increased."

(Lesson on massage (page 5). Margaret Palmer) Comparison of the above with the following from Dhara Kalpa will clearly indicate the conception in Hindu medicine the effect of Dhara and massage. "The Dhatus get strong; his strength, appetite and Ojas (Magnetism?) are increased; The sense organs become keen, old age is delayed; fractures get set up and the Doshas get normal.

This section is begun with a heading on Dhara, Pizichal and Kizi. I will briefly describe the method of procedure for all these things. As the methods are both a science and an art mere description would be of no avail as many of these technicalities are to be seen and learnt.

The armamentarium required for these special treatments are the following:—

1. A plank of wood prepared from jack fruit tree, fig tree, sandalwood, banian tree, etc. It should consist of a single plank and grooved in the middle in such a way the out-line of the body in lying posture is comfortable. It should be four hasthas in length (10 feet) and one deergahastha in breadth (3 feet).

2. A chatty with a hole in the centre which will admit a small finger. This may also be made of gold, silver or iron.

3. A cocoanut shell with serrated margin and a hole.

4. A small piece of cloth.

5. Suitable medicated oil Chatu sneham, Tila Tailam, Ghritam or combinations of them according to the doshas.

6. Suitable men proficient in the art of massage, who are strong and kind hearted and who possess pleasing disposition.

The process is proceeded in the following way.

The season that is selected should be what is called sadharana neither too hot nor too cold and when the Doshas are not very much aggravated (chaitra and karthiga). The patient is given a mild purgative on the previous day. The physician should judge whether the patient requires one, or two or all the three treatments combined together. For convenience I will describe the process as done in a patient where all the three are beneficial.

The patient undressed is put on the plank. A small piece of cloth is tied round over the eye brow to prevent oil coming to his eyes. The chatti with the cocoanut shell in it and a piece of wick attached to both and passed through the hole, is tied about 18" from the level of the head. At least three people are required one on each side and the other near the head holding the chatti. About 30 to 40 ozs. of oil is poured into the chatti. Persons on either side keep their own oils warmed. The process begins simultaneously. The person near the head slowly moves the chatti this side and that side and there will be a continuous flow of oil guided by the wick and the serration of the cocoanut shell. Before the chatty completely empties, the oil that has flown down is replaced to the chatty. At the same time the persons on either side dip the oil in a piece of cloth squeeze the oil on the surface of the body. This process continues for about an hour. Both these processes are called Dhara and Pizichal. (The words are derived from the action).

Later the third process, calld Kizi begins. This is the sweda karma. Among the thirteen varieties mentioned above, there is what is called Pinda swedam or Sankara swedam. The same is Kizi. This kizi is of two kinds according to the condition of the disease. Either Navarai Rice or Godhuma or Masha, etc. may be used or a bundle of leaves collected and put into a piece of cloth and tied. If it is former, Navarai Rice, etc., they can be tied in a piece of cloth and boiled in special decoction according to the disease. That bundle is rubbed all over the body. There is a double advantage in this method. The tissues not only obtain sweda but also nutrition through the pores of the skin. In cases where the nutrition is not required leaves of various trees which have the property of subduing Vayu can be used. Then the person takes hot water bath. This course of treatment is for 14 days and this can be repeated till the desired effect is got. During this course internal medication also is indicated according to the condition of the patient. A mild laxative can be given daily.

The process of application of oil to the head is divided into four varieties, 1. Abhyanga 2. Parishechanam 3. Pichu and 4. Sirovasthi. Successively one is better than the other. Abhyanga is mere application of oil to the head and rubbing. Parishechana is pouring down of the medicated oil. Pichu is application of cloth saturated with oil, on the head. Sirovasthi is keeping of medicated oil on the head. The last is done in the following way. The patient is prepared by sodhana karma. He should be seated on a foot stool. A leather, a foot in breadth and having the circumference of the head should be selected and tied around the forehead. The crevices should be stuffed with black gram paste. Then suitably medicated and warm oil should be poured over the head. The oil should be at least two inches from the hair root. It should be kept there till there is exudation of fluid from the mouth and nose. This is general time, but specially in cases of Vata diseases 10,000 matras, in Pitta diseases 8,000 matras and in Kapha diseases 6,000 matras is the time. The process can be repeated for seven days.

———:o:———

THE PRIMITIVE SEEDS OF THE HEALING ART

BY

BHISHAGWARA D. NARAYANA RAO, A.M.A.C. & A.L.I.M.,

Hony. A. M. O. Govt. Indian Medical School Hospital, Madras.

Indeed every student and practitioner of the Art of Healing desires to know from what original sources the basic principles of his art have sprouted and how man in the earliest periods of his existence came to know of them and how such simple principles have gradually transformed themselves from a very simple to a very complex art as is known to him at the present time. Really it is a fact to be regretted very much, that in the institutions of Medicine where in the various branches of the art alone are taught to the exclusion of its history a knowledge of which by itself forms a separate branch of science in the words of Suddolt.

By many civilised nations of the ancient world, the origin of medicine was attributed to their Gods. It was referred by the Hindus to Brahma the Grandsire and supreme creator of the universe, by the Greeks to Appolo, by the Egyptians to God Thot, etc. Leaving aside for the present the mythological aspect, within a short compass in these few pages, we will try to aquaint ourselves with some of the facts relating to the origin of the medical science from a very humble beginning in the prehistoric periods which might have probably occupied for a several thousands of years and how it had slowly developed into a huge form.

Of course many many centuries might have rolled over before such primitive principles have become an art and science. Since disease, decay and death (Nature's economy) have co-existed always with the advance of life, it is quite logical to guess that the study of diseases and their cure must also have been contemporaneous and as such that some sort of rudimentary practice of medicine was in existence from the earliest periods of man's existence upon the face of this earth with the dawn and development of his instinctive and intellectual tendencies.

With the earliest man, the knowledge of medicine was chiefly instinctive. It is very probable to think, that the very instinct of preservation against the reaction of the two chief principles of heat and cold might have naturally resulted in the building of habitation and also search for the means of curative and hygienic practices. The primitive men could have understood that cold and heat under certain circumstances produce certain uneasy symptoms and when they became affected, guided by their instinct, they attempted at the application of agents that were of antognostic nature. As food when they used certain plants and roots, they recognised that some produced warmth some cold, some others vomitting and certain others purging and some others more harm even death. Now and then when these men congregated together in the course of their conversations compared their experiences, who had also experienced similar symptoms and tried various means for the relief of them which ultimately might probably have resulted in knowing a particular method or remedy that was the most efficacious one among all. As an example of this kind of acquiring knowledge, the following may be noted, though the practice does not belong to the remotest neolithic ages only. Such practices seem to be in vogue even in the early pre-christianic decades. About the year 300 B. C. when Herodotus visited Babylon, he says in respect to the state of medicine in that city as follows: "The following custom seems to me the wisest of their institutions next to the one lately praised. They have no physicians, but when a man is ill, they lay him in the public square and the passers by come up to him and if they ever had this disease themselves or have known any one who has suffered from it, they give him advice, recommending him to do whatever they found good in their own case or in the case known to them and no one is allowed to pass without asking him what his ailment is." The primitive man must have used, those things that he was able to procure most easily as therapeutical agents and remedial measures. Even though there is not any authentic record of medicines used by the primitive man and even though we cannot definitely say what diseases were prevalent during those days, we can at least believe that in the earliest periods of his existence, he was obliged to consider the question of medicine induced by the innate natural sentiment which he possesses to remove pain from his fellowman which led him to search for a means of cure and thus he must have been at least in possession of a petty stock of medical knowledge. From *Rig Veda* which is the oldest book in the library of man, we learn that a plant *Soma* by name was used by the Indo-Aryans as a medicinal agent. During those days, i.e., in the first stage of the medical civilisation crude drugs might have been employed, prepared in the roughest manner such as fresh juices and powders.

After the lapse of some years and when the powers of observation and the faculty of reasoning have developed in him, he (the primitive man) enhanced his knowledge gained by facts of the above nature by utilising his powers and studying closely the methods indicated in the Book of Nature as by observing how animals by their instinct, protect their own existence and of their offsprings and when they fall sick, by what means they try to get themselves cured by the usage of the leaves, roots, stems etc., of certain plants. Atharvana Veda says that from animals and birds man has learnt the art of medicine and the same view appears to be prevalent also in other countries and the following is an interesting account of some animals and birds from the practices of which the primitive man who lived almost in association with them came to know the properties and the uses of certain plants in diseases as referred by Pliny in his Natural History.

"The hippopotamus has been our instructor in one of the operations of medicine. When the animal has become too bulky by continued over feeding, it goes down to the banks

of the rivers and examines the reeds which have been recently cut; and as soon as it has found a stump that is very sharp, it presses its body against it and so wounds one of its veins in the thigh and by the flow of blood thus produced, which would otherwise have fallen into a morbid state, is relieved; after which it covers up the wound with Mud..... The bird called the *Ibis* a native of the same country Egypt.....by means of its hooked beak, it leaves the body through that part by which it is especially necessary for the health that the residuous food should be discharged. The power of the herb *dittany* in extracting arrows was first disclosed to us by stags.....the weapon being discharged on their feeding upon this plant. The same animals, too, when they happen to have been wounded by the *phalangium*, a species of the spider or by any insect of a similar nature, cure themselves by eating crabs. The tortoise recruits its powers of effectually resisting serpents by eating the plant which is known as *ceenila bubula*. When an elephant has happened to devour a chameleon which is of the same colour with the herbage, it counteracts the poison by means of the wild olive. Bears when they have eaten of the fruits of *mandrake* lick up numbers of ants. A raven when it has killed a chameleon, a contest in which even the conqueror suffers, counteracts the poison by means of laurel.....

Thus, we see that some of the various practices of animals observed by men of by gone times have also probably formed one of the original sources from which has developed the present day enormous science and art of healing since then with the intellectual and material environments of man.

After the lapse of some decades, people began to believe that diseases were chiefly caused by the anger of Gods and due to the action of the evil spirits and out of such belief the better man of the primitive ages tried to discover some practical method to invoke the clemancy of the higher and superhuman powers and prayed for the assistance for his familiar deities and also tried to appease the evil spirit. For this purpose a member from the tribe was chosen, who originally displayed a special skill in the cure of diseases and he was made the priest also called "Medicine man," his duties being to employ methods suitable for pacifying the anger of Gods and for expelling the evil spirit from the body of the patient and to restore him to health. In the earliest ages every man was his own physician. But during the later periods, the art of healing fell into the hands of special men, the medico-priests who had discouraged all efforts

to enhance the medical knowledge regarding the use of plants, etc., fearing that such an encouragement would diminish their own power and influence. During the period of medicine man or medico-priests, prayers, sacrifices incantations, chantings and charms were among the attempts at cure and talismans, amulets, medicine stones may be mentioned as some of the remedies which were believed to afford the wearer protection against the influence of the evil spirits. Even in the so called civilised present days, we find such practices and remedies not only among the civilised folk but also among the many civilised people. The Vedas of Hindus are a mine of such prayers.

Indeed one will be surprised for the great courage and enterprise with which the medicine men of those ages have performed the surgical operations.

However some of the recent excavations that were undertaken in the various parts of the world have thrown ample light on the state of the knowledge of medicine in the neolithic age. Trephinned skulls, anchylosed joints, fractured bones, necrosed bones, rhachitic bones, etc., stand as an evidence to give us some idea of some of the diseases that were in existence then and their skill in the practice of surgery also. In the literature of the Greeks, it is so mentioned that by charms, bleeding from wounds was arrested and wounds themselves cured. For a great number of years holding of such superstitious belief played an important part in the minds of people and temple medical practice became very prevalent.

Summarising the beginnings of medicine, the earliest was instinctive, then added to the instinctive observatory both being purely of vegetable nature and thirdly is the period of cures by chanting and by prayers.*

* Reference literature will be given at the conclusion of the essay.

(To be continued.)

IN THE REALM OF INDIAN MEDICINE

BASIC PRINCIPLES

BY

V. ACHUTHAN NAIR, L.I.M.

The whole of universe—the movable and immovable, the mutable and immutable, the visible and invisible, all contained in it, according to Hindu science, are said to have their derivation from "Panchabhuthas" or five elements, viz., the principles of space, air, fire, water and earth. Although it is beyond the scope of our senses, as we are, to perceive as to how a thing originates directly from these, when we watch an object all through its alterations we will see it ultimately dispersing into five elements leaving nothing behind. The law that, that which remains after the complete dissolution of a thing is held responsible for its source enables us to correctly presume that the world owes its origin to "Panchabhuthas." The "Bhuthas" or elements, although they are the common cause of the world, being the effects of some others, are not causes in themselves. A man of investigating intellect, if he takes interest in thoughts beyond the elements seeking after causes and effects he has to step through "Thanmathras," "Indriyas," "Ahankaras" and "Mahathathwa" to reach the original and root cause "Avyaktha" or "Moolaprakrithi." This "Avyaktha" is a cause in itself and not an effect of any other. Hindu science has defined this as an equilibrium of three "Gunas," viz., "Sathwa," "Rajas" and "Thamas". These three are so inexplicably interwoven to form "Avyaktha" that they are inseperable and indistinguishable from one another from the most subtle "Mahathathwa" which can be conceived only with a great scrutinizing intellectual capacity to that silliest object in the world that can never escape notice are the effects of this "Moolaprakrithi." Now coming again to the world and its cause, I have to say something more. Presuming the world has a common source, the reason for the difference that all objects so obviously possess from one another that we find no two things similar in it, remains yet to be explained. To clear off this slight but pertinent doubt Hindu science does not suffer to borrow another cause or accept the existence of a sixth element. Nothing there is in the world that is not a consolidation of the five elements. Even the earth, water, fire, air and space that we percieve with our senses are said to contain a mixture of those subtle five elements in each. But the proportion with which these elements exist in one object is not similar to that in any other. It is this inexplicable dissimilarity which constitutes a unique compound of each object that makes men, animals, trees and mountains in the world with individual inequalities in each. A slight difference from the natural proportion of eliments existing in an object tends to make an appreciable change in it. A deviation in the proportion so great as to make it impossible for the elements to co-exist to form an object brings naturally the peril or death of the latter when the components are seperated and liberated. So much for the world and its cause. Well, what have all these abstruse theories to do with Ayurveda? The answer is that I have just done with the fundamental principles of Ayurveda which to some of you is not yet disclosed. The key to reveal it lies in one word and that is "Thridosha." We have to displace the name "Panchabhuthas" by the word "Thridoshas" to get a theory exclusively of Ayurveda. Everything that has been said of "Bhuthas" now applies for "Doshas." Thus we find each and every object in the world as an unequal combination of "Thridoshas" with dissimilar proportions in each. We have read in Ayurvedic books about seven "Prakrithis"—one "Sama prakrithi" and six "Vishama prakrithis." This former is an inextricable equal combination of "Thridoshas" that can be seen only in "Avyaktha" or "Moolaprakrithi." According to the degree of variation in the proportion with which "Thridoshas" naturally exist in an object the ancient Ayurvedists have briefly divided the world into six sections under the headings of "Vishama prakrithis." An alteration in co-ordination with the natural proportion of "Thridoshas" with which they form an object constitutes to make a physiological change in it; whereas a change in the proportion regardless of its nature, brings a pathological change in the object. A deviation so wide that "Thridoshas" cannot co-exist together in an object accounts for the death or dissolution of it whereby the three are set free and seperated. The proportion of "Thridoshas" an object naturally possesses in it is what we call "Prakrithi"; and a derangement in that proportion is known by the name "Vikrithi". The former is "health" and the latter 'disease'. The secret of correct diagnosis lies in finding out the exact degree of deviation from the natural proportion of "Thridoshas." Similarly, the secret of treating a disease lies in choosing a remedy in which

the proportion of "Thridoshas" is such that, if utilized is able to bring back the natural proportion of "Thridoshas" in the diseased.

Here ends the theoretical principles of Ayurveda, and we find it complete in itself. It has been based upon certain subtle and true principles that are indispensable to the existence of world itself. The theory of "Thridosha" is found analogous to the law of universe. In a book named "Greek Thinkers" Professor Gomperz writes: "The human being is a part of the whole of nature and cannot be understood without. What is wanted is a satisfactory general view of the process of the universe, possessing this we shall find the key in our hand which will open the most secret recesses of the art of medicine." As far as the principles of Ayurveda are concerned we find this statement true to the very letter. The author by making such a remark appears to have thoroughly dissatisfied with the theory of modern medicine. Centuries ago Hindus have achieved a general theory of nature which to them is satisfactory. In the "Anglo-Indian studies" of Longmans, he writes: "To the Hindu the universe is no mere fortuitous concourse of atoms, no puzzling labrynth of purposeless activities and inactivities, but a cosmos capable of consistant explanation, an ordered sequence of cause and effect a mighty whole of which human beings are just one part..... Working on these lines the Hindu Physician did not study medicine as an isolated art, but as branch of and in connection with the science of universe. To his idea, philosophy, science and religion have always been inextricably interwoven." From this wise tenable statement of the author, we can infer how high his regards were towards Ayurveda which is exhaustive and convincing. Its due to diagnosis and key to treatment are never incomplete; the actual treatment is simplicity itself; yet it has stood the test of more than four thousand years in India.

Western system of medicine owes its origin to Hindus through Arabia; whereas Ayurvedic works do not denote any foreign origin. It is said that the name of "Charaka" repeatedly occurs in Latin translations from the Arabic of Avicenna, Rhazes and Serapion. Thus we see the Ayurvedic system to be neither crude nor quackish but perhaps the most scientific of all treatments still containing enough information for an Allopathic doctor.

Allopathic medicine has become extremely complex. Sir James Mackenzie in his book named "Future of Medicine" writes: "The fact that medicine is becoming so complex

implies that it is being pursued on wrong lines, for a subject which is based on natural laws becomes easier to understand as the laws become better known." Again he says: "what is considered to be progress in medicine cannot be true progress because it does not make for simplification." He says rather more emphatically again. "Our present qualification of disease in the living is based npon the morbid anatomy of the dead and the idea has sprung up in consequence that ailments can be classified according to gross structural changes such as can be seen post-mortem. Vast numbers of patients, however, have ailments which cannot be so classified—there is as yet no structural change. Their signs of disease is distressful sensation. Then comes the error, the doctor is apt to take the most prominent symptom or sensation and consider it to be the disease, for example, 'neuralgea, dyspepsia, anaemia, palpitation, neurasthenia.' The truth is that there are always in these cases other symptoms present, and when these symptoms are gathered together they are found to show a disturbance of so many different organs that the conclusion is forced that there is a common cause which upsets the balance of different organs and symptoms." It is obvious in this wide authentic writings that the author has realized the difficulty in following the Allopathic system of medicine which being founded on a materialistic basis fails very often in respect of diagnosis and treatment.

Material interpretation such as wind, bile and phlegm of "Thridoshas" mentioned in Ayurvedic books is only a product of a bird's eye view of the science with a profound ignorance even of its rudimentary principles; for, 'Vata', 'Pitta' and 'Kapha' (Thridoshas) have only a nominal importance while they actually represent certain subtle and spiritual forces in three different groups. It is impossible to find potent physiological expressions in western medicine corresponding 'Vata, Pitta and Kapha' described in Ayurveda. If the word "Thridosha" is understood as a common name given to all the functions, viz., sustentive, correlative and generative we will be nearer the truth.

Research in medicine: Now coming to research and subsequent progress in the field of medicine Allopathic system varies very much from Ayurveda. The far sighted founders of Ayurveda by making it irrefutably perfect have left little scope for us to conduct any research work in it. An attempt to investigate further in the field will result only in a clearer comprehension of those principles that have already been

found out. Hence, it is as well to say that Ayurveda is proof to researches or impermeable to investigations. A faithful and earnest search in the existing literature of Ayurveda to have a real conception concerning the ancient intelligentia and its everlasting usefulness will reveal very many useful secrets that are not still within the scope of western medicine to discover. Most of us are so preoccupied and short sighted that we are unable either to have a correct comprehensions of ancient texts or to realise the wonderful intellectual faculties of ancient rishis whose extreme sympathy towards suffering humanity has been recorded in the shape of Ayurvedic works.

Allopathic medicine unlike Ayurvedic system, has a materialistic basis. The ever changing tendency seen in Allopathy is only a slow reflection of infinite mutation that constantly takes place on matter. Research and consequent progress are inevitable for the upkeep of those sciences that have matter as their basis. Being constructed on a materialistic foundation Allopathic medicine inevitably needs change. But however rapidly we may conduct researches with a view to accelerate the progress of our knowledge in western system of medicine, we always find ourselves in a position far below the point we ought to have reached by our own incessant endeavour. This is owing to our inability to keep pace with the constant changes taking place on matter. This also accounts for the imperfect condition of Allopathy. Although the advancement of our knowledge as a result of investigation is, no doubt, a clear evidence for the scientific basis of a theory, the fact that the same knowledge is subject to alteration according to further researches is rather undesirable for a perfect science. No science is perfect as long as it is a subject of researches. In a science progress is a loop hole that is fatal to its perfection. Allopathy is a science whose true and usefnl teachings remain always in the future. There will be no gains by suffering the ill-effect of a thing first and knowing the real cause of it next. We are wilfully putting the cart before the horse and helplessly pretending that we are progressing. Until and unless the materialistic basis of Allopathy gives itself away to a more fundamental one, it will go on progressing and progressing knowing no end for perfection, and before the western system of medicine reaches its perfection it cannot compete with Ayurveda.

"If western medical research were to be directed more towards breadth than towards depth (as seems the tendency at present) assumption might not be so often taken for knowledge," says Dorothea Chaplin. "It is true that scientific instruments of modern times offer great advantages, but does the ability of man to draw right conclusions improve at the same rate as the scientific apparatus invented by him?"

"The microscope is but an instrument, though a valuable one; it is necessary that the mind which takes the observations should have an unbiassed judgment."

"X-ray treatment is held up one day as being without parallel for curing all chronic disorders, while another day radium is hailed as the panacea for complaints of long standing. Have the by-effects and after effects of these methods of cure been fully considered by western physicians?"

"How often may a thoughtful reader observe in the writings and speeches of distinguished members of medical profession the unknown, the uncertain, the possible, the probable and the plausible set forth as scientific truths?"

Difference in treatment:—With respect to treatment also western system varies very much. An Allopathic doctor defines a disease as due to difficiency of calcium in blood. His most modern treatment for it is, a machanical injection of few grains of calcium in a solution prepared in the laboratory into one of the veins of the diseased. By this process although the patient temporarily gets an apparent relief the root cause of the disease in him remains the same. This is more or less hiding the actual suffering from the patient in his own tissues.

Ayurveda does not believe in 'specific' treatment for 'specific' disease. The basic principle of Ayurveda is unity of disease and unity of treatment. It is not the manifestations of particular disease that an Ayurvedic physician attacks, but the root cause of all diseases and disorders physical and mental "physiological and psychological actions in the human system are so inextricably interwoven that to an Ayurvedist physiology divorced from psychology would be too crude to deserve the name of science. To an Ayurvedic physician consumption is a physiological phthisis and anger psychological phthisis; both arise from depletion of nerve force and both seriously undermine health by accelerating that depletion.

'An Ayurvedic physician does not believe in fighting disease with disease, poison with poison, germs with germs; his idea of healing is elimination, not suppression.'

New inventions and discoveries:—Scientific inventions and attractive discoveries day by day add prestige to western medical science; but Ayurvedic science is stagnant and stable. The discretion of a doctor based on his experience to choose a particular remedy for a particular disease should also be considered as a discovery made by him. This sort of discovery or invention is common in both systems of medicine. This particular discovery of a doctor in treating a disease very often differs from the general and acknowledged line of treatment for the same disease prescribed by scientific discoveries. Thus we see two discoveries moving independently on their own lines, in western medical field; one is scientific and the other particular. To be benefited by both is as difficult a job as to hit an oscillating pendulam with an object moving in one's own hand. The physician's actions are not found to be in concord with the principles that he is expected to follow. An Ayurvedic physician also is entitled to make omissions and commissions in a sasthric prescription according to his own experience. This also is a particular discovery which varies with each physician and in each disease. But the basic principles of the science he follows being stable not a single of his pertinent particularities fall beyond the zone of those principles.

Germs in Medicine:—The role of germs in Allopathic field is so great that a major portion of it has been already infected with them; and their growth and multiplication are going on in such an utmost speed under microscope that in near future whole of western medicine will be full of germs. Worms and germs are mentioned as disease producers in Indian medical books also; but as they can do nothing in the system without provoking "Thridoshas" the importance that is due to them is most legitimately conferred on the latter. I do not intend to indulge much on this subjects which would deserve a special treatise, lest it would consume a pretty large portion of this article.

Surgical side of Ayurveda. Progress made in the Surgical aspect of western medicine is too often set forth as an argument to prove its superiority. It is true modern medicine has much usefully advanced towards that cutting process of diseased tissues. But surgery is not an art that is exclusively of Allopaths. Any one would be convinced of this fact if only he takes pains to read the book "Susrutha" in which almost all the difficult operations that are being performed today are prescribed and most ably described. Even the definitions regarding the shape, etc., of instruments seen in the book are found to be almost similar to that we see in modern scientific instruments.

According to the great Historian Sir William Hunter many centuries ago at the monastic medical university of Nalanda, near modern Gaya, Ayurvedic surgeons successfully performed the operation of rhinoplasty and other acts of surgical skill. In old Hindu medical books one may find the description of that branch of surgery which deals with the improvement of deformed ears and noses and forming of new ones, one of the scientific additions to modern surgery. But now-a-days Ayurvedists have no surgery worthy of the name. This is due to the law of today that cruelly disallows an Ayurvedic physician to perform any operation. Moreover Indian medicine is scarcely benefited by the industrial advancement in the country which inevitably plays an important part in the surgical side of medicine. There is a surgical prescription for "Chidrodara" mentioned in 'Chikitsasthasthana' of 'Ashtangahridaya.' After the mode of operation having been described the text advises us to get that big sort of common black ant and make it bite the operated wall of the gut together so as to keep both edges of the wound in apposition permenantly. An Allopathic surgeon may perhaps laugh at this raw advice. He does it, because I may tell you, in the flashing light of modern science his power of vision is so undermined that he is unable to perceive the underlying useful principle in that advice. A surgeon of today stitches an incision he had made on an abdominal viscera with the modern 'Cat-gut,' The advantage he claims for this 'Cat-gut' is, that it besides serving as a thread to stitch the part, being made of animal matter gets naturally absorbed into the system and thus avoids the risk of removing a stitch from a delicate wall of abdominal viscera. A scientific useful advantage indeed!! But a simple black ant also serves the same purpose. Being an animal matter, it also gets absorbed in the system when the healing process is going on in the wound. The only difference is one is 'scientific and modern,' while the other is 'crude and old.' Is it not like a European shooting a snake with his gun and telling that Indians cannot kill it when, as a matter of fact, Indians need only a small stick to kill the same? From this what we infer is, that modern surgery owes much towards industrial evolution for its progress while its actual principles remain the same with that in Ayurveda.

The principle of cutting cannot very much change. The progress made in the surgical field is almost

devoured by the modification of instruments and equipments used for operation. Instruments, of course, belong to industrial world. And we find industry as a part of surgery. Success of an operation depends more on the experience of the surgeon who performs it than on his knowledge in its principles. Experience is a thing that mainly depend on opportunities, To an Ayurvedic physician opportunities are nil. Consquently alas! Surgery has passed from the books of Indian medicine into the hands of western doctors. Now, is it not the surgery of Ayurvedists that Allopaths boast as their own and practice? Where will they bury their 'Laperotomy' and 'Caesarian section' if tomorrow's government is to prohibit an Allopath to hold a surgical knife? What other difference will you find between our surgery and their surgery if tomorrow onwards industry does not produce scalpels and forceps except that ours is original and theirs copied? Does this not convince you that the most dexterous surgeons of today are flourishing under borrowed plumes? yet — in spite of all these, we find modern surgery not devoid of danger, Harold Burrows, F.R.C.S., in his book named "Mistakes and accidents of surgery" writes; "The surgeon of today is a sailor of past age. He, too, is embarked upon oceans that are unmapped and wide. For ever and with much labour, feeling his way with the lead as it were, he is beset with incessant troubles, Innumerable are the surgical disasters with which he is menaced, unnoticed or unrecorded are their causes unavoidable their repetitions." From these wise straight forward remarks anyone can fairly judge, how little the progress made in the surgical field of Allopathy legitimately contributes to its superiority.

Pubiic proclivities aud medicine Almost all the socalled civilized men in the country are found to be hostile towards Indian medicine. Many who are distinguished in Allopathic science are sadly found to make some unfair public remarks about Ayurveda whenever they get opportunity. To form a correct and comparative opinion about the two sciences one should be equally conversant with both. It is a fallacy to believe that our ignonimons ignorance in one science can be legitimately compensated with a profound knowledge in another. A sweeping remark which has been made of a subject without knowing its pros and cons naturally merits oblivion like an unreliable rumour. The idea that the illustrious system of Ayurveda can be measured with a twinkling flash of modern science is not commendable. It is still premature to draw any comparison between the Indian and Western systems of medicine; for as I have already said, one is perfect while the other had still to achive progress.

Despite being ill-named as unscientific and fictitious, Ayurveda is found more serviceable and appealing to the public. If statistics were taken of the number of Ayurvedic doctors and the patients they treat annually it will be found astonishingly greater than that of Allopathic doctors and their patients. The theory of Ayurveda is purely scientific albeit, is possible to find certain fictitious stories concerning the source of certain drugs, etc., in some parts of the scriptures. But such incredible stories have little power to hamper with the scientific sanctity of its true principles. For instance, Ayurvedic books say that 'Abhaya' (1st of Myrobalans) has a purgative action when administered internally. This statement we find in our practice too true to be refuted. As long as it holds good in our practical experience it is our duty to believe that it has been built upon scientific basis. So it should be unequivocally accepted that Ayurveda is unscientific only where it is fictitious. The fictitious stories although they are well-nigh unscientific at times command a strong influence over certain sentimental aspects of men especially when they are sick. This legitimately accounts for their usefulness and inclusion among true principles. I have seen some 'modernized' persons who in good health were professed enemies of Ayurvedic treatment in sick bed, got 'fed' up with Allopathic treatment and willingly give themselves up to the care of Ayurvedic physicians and get completely cured. Why much — the fact that Ayurveda still survives more profusely than it did before inspite of repeated and vehement attacks from various sources with a view to annihilate it, itself is a sufficient proof for its scientific basis. Either one is immensely prejudiced to overlook the free teachings of Ayurveda or he is incorrigibly westernized to disbelieve if any of the oriental sciences so as to speak that Ayurveda is unscientific and should be subjected to researches before it is time for the world to enjoy its sweet and valuable fruits.

A request to L. I. Ms.—Now, before concluding I take the liberty to say something particularly of L.I.Ms. A grievous opinion that is now prevalent among the public is, that L. I. Ms. are advocating more of western medicine than of Indian medicine. Although this is an allegation based on prejudice I am not in a position to justify the innocence

of L. I. Ms. in this respect. Certain tendencies seen among some L. I. Ms. show an unwarrantable inclination towards occidentalism. To achieve equal status with Allopathic doctors a practitioner in Indian medicine should not turn his coat and imitate them in all respects. It was with shame I read recently in one of the local papers that an L. I. M. felt cheap of his position when the president of Indian Medical Association in one of his itinerant lectures said that L I. Ms. are not eligible to join the Association. We must not forget, here that the name Indian Medical Association which ought to represent an association of practitioners in Indian Medicine is strangely enough bestowed on a body of Allopathic doctors. L. I. Ms. as the diploma denotes, are avowed and authorized practitioners in Indian medicine only; and their affiliation to a society of Allopathic practitioners is extremely suicidal to the interest of Indian Medicine. It is true that L.I.Ms. possess an adequate knowledge in Allopathy also; but that does not constitute to increase the numerical strength of Allopathic doctors. On the contrary a comparative knowledge an L. I. M. so gains contributes only to enhance his faith in Indian medicine by knowing its real and greater value. The progress made in the Allopathic system by researches which is one of the main objects of I. M. A. will be no whit conducive to the growth of Indian medicine. Every drop of sweat ought to be fruitfully spent in the vast field of Indian medicine. So, if any Allopathic practitioner believes that L. I. Ms. should be kept away from joining the I. M. A. so as to maintain its prestige and power it must be the principle of every L. I. M. to wash his hands off any Allopathic organization and thus keep up his own dignity.

An Indian Medical Association exclusively for practitioners in Indian medicine can easily be formed and ably worked with a view to propagate Indian medicine and establish Indian medical institutions in various parts of the country, if the factions squabbles that now exist among ourselves could only be got the better of. To attain this unity L. I. Ms. should also consider the welfare of other practitioners who are classified as B. class practitioners according to the recent Government order. One cannot really enhance his position by an endeavour to mutilate that of others.

RAKTA PITTAM—GROUP

BY

V. K. VENKATASWAMI, M.B., B.S., F.I.M.

Next to Jwaram, *Rakta pittam* group of diseases is taken up for study in accordance with the Siddha classification of diseases which is based upon the involvement of the pancha—vayus—prana, apana, vyana, udhana and samana—by extrinsic causes such as injuries and poisons, and intrinsic factors such as errors in the sexual elements of the parents before impregnation; faults of the maternal system during pregnancy; errors in food, drink, bathing and exercise; starvation; anxiety, fear, anger and passion; abnormal activities; change of place and climate; repression of normal reflexes as defaecation, mictuirition, passing of flatus, sexual emission, cough, sneezing, yawning, vomiting, breathing, shedding of tears, hunger, thirst, sleep and fatigue. Since this kind of grouping is not found in ayurvedic texts, the following details are given here.

Affections produced by poisons form separate groups-*Vishadhibedha padalam* and *kitadhi bedha padalam*. This is because they directly affect the prana vayu, while all other diseases produce changes in the rest of the vayus. These other disorders are primarily divided into general and special affections. Under the general group are included two sections, viz., (1) *Karna roga padalam*—Diseases of the organs situated in the upper part of the body (*Urdhvangam*) except eyes, viz., Ear, Nose, Throat, Teeth, Mouth, Tongue, Lips, Palate, Scalp, Skull and Head. (2) *Vranabedha padalam*—Affections characterised by some gross structural changes such as ulcers, sinuses, discharges, tumours, hard swellings and various cutaneous manifestations. In both these cases, the way in which the vayus are affected and the doshas, dhatus and malas involved, is very complicated, owing to the localisation and specific nature of the pathological changes. This is the reason why they are classified under a general heading. The special diseases are those where we can trace the way in which the causal agents affect the vayus and give rise to morbid entities. These are divided into ten sections, as follows.

Jwaram — *Jwararogapadalam* — comes first as the whole system is involved in the affection. It is called the king of diseases. Pittam gets

primarily affected and disturbs the normal processes of digestion and excretion This results in the accumulation of imperfect products of metabolism which affect the entire organism.

Next group — *Rakta-pitta-roga-padalam*—comprises *Rakta-pittam—Achirkaram—Asthisravam—Kasam—Kshayakasam— Swasam — Vikkal — Kshayam — Kurarkammal — Arochakam—Vanthi* and *Marbunoi.* All these are caused by vyana and udhana vayus affecting the rakta dhatu, organs of the chest, and spleen. Rest of the vayus, pittam and kapham are secondarily involved.

Under the third group—*Daharoga-padalam* — comes, *Daham—Mathathyayam — Matham — Moorchai — —Sanyasam—Moolam - Udhavartam - charmakeelam - Athisaram—Guthabramsam-Grahani-Alasam-Vishuchi* and *Ajeernam.* Here, samana and apana vayus undergo abnormal changes along with a marked vitiation of pittam. Amam (imperfect products of metabolism) accumulates and affects the sapta dhatus, rest of the vayus and doshas.

Diseases included in the fourth section *Asmari roga padalam* — are *Asmari — Mootradosham — Megam Megakatti—Vriddhi—Andarogam—* and *Gulmam* Apana vayu is the main element disturbed in these affections. Pitta and vata are also greatly vitiated, vatam especially being very much involved in the organs about the umbillicus, scrotum and amasayam. In the end all the doshas get out of equilibrium.

Fifth group—*Anaha roga padalam* —deals with—*Anaham—Ashtilam—Thuni - Pratithuni — Jalakurmam—Soolai-Mahodaram-Pleeham-Pandu-Kamalai — Sobai — Visarpam* and *Masurika.* Loss of balance in the actions of the udhana and apana vayus, i.e., between the reflexes of the upper and lower parts of the body, gives rise to these diseases. Along with this, samana vayu gets affected, pitta and kapha effervesce owing to obstruction in their normal flow, all the conducting paths become clogged, and the harmonious working of the three doshas is lost.

Vispota roga padalam is the sixth section. It comprises—*Vispotam—Seetha pittam—Amapittam—Amla-pittam-Kshudra masoorika-Kushtam* —and *Krimi rogam.* Samana vayu is vitiated here. Pittam also gets greatly excited. Both these factors produce abnormal changes in other doshas, cause effervescence of the rasam and raktam, give rise to great variations in the quantity of amam, and consequent obstruction to the normal circulation of the doshas.

In the seventh group—*Vata roga padalam*—diseases caused by the pancha vayus are described. They

are 84 in number. Most of them are functional.

Next section called *Maha vata roga padalam* describes those cases of vata rogas which are associated with some permanent structural alterations. Besides these, 40 pitta diseases, 20 kapha disorders, and affections where the pancha vayus undergoing qualitative changes-*Vigunam*-mixes with other doshas, dhatus and malas, come under this heading.

Athisthula roga padalam is the ninth section. *Athisthulam—Athisutkam—Maladu—Vashthi* and *Balarogam* are dealt with here. All these arise out of samana vayu vitiation which produces great disturbance in the digestive fires of the system. It is important to note that the entire affections peculiar to women and children are based upon the pathology of this group.

Last division-*Unmatha roga padalam*—includes — *Unmatham—Apasmaram—Vali*—and *Netra rogam.* These are caused by disturbed samana and apana vayus altering the normal course of the doshas and drying up the conducting paths of the heart, mind and knowledge. Diseases of the eye are included here because they are caused by vitiated doshas ascending up from the region of apana to the brain and eyes.

RAKTA PITTAM

The causes of rakta-pittam are—excessive wandering in the sun; too much exercise; great misery; long walks; frequent sexual intercourse; and the use of caustics and articles which are hot, keen (thikshnam), sour and pungent. By all these factors pittam gets excited and burnt up. Similar changes then occur in raktam (blood), pleeham (spleen) and yakrith (liver). Abnormal blood begins to exude either through the upper orifices (*urdhvakam*) as nose, ears, eyes and mouth or through the lower outlets (*athokam*) as urethra, vagina and anus or through the hair follicles and the openings of the sweat-glands or by means of all these ways (*ubhaya margam*).

Following are the premonitary signs and symptoms of this disease—Impairment of the digestive capacity; increased desire for cold and sour things; sense of heat and dryness in the throat; vomiting; nausea; smell of iron in the breath; foul odour and sour or metallic taste in the mouth; cough; dyspnœa; low voice; smoky complexion; heaviness of the head; confusion of mind; yellow, red, green and such discolouration of the eyes; dark, red, yellow or multicoloured vision; and dreams of bloody hues.

Varieties of rakta-pittam are—(1) *Vatikam.* Blood is dark-red frothy and dry (2) *Paithikam.* Blood is thick in consistency and is brown, black, straw-coloured, slightly blue tinged or multi-coloured. (3) *Sleshmikam*—Blood is heavy, solidified,

pale, oily and slimy. The clinical features of the *dwandva* and *sannipatha* cases can be inferred from that of the above varieties.

Complications—Disgust for food; indigestion; vomiting; thirst; diarrhœa; fermentation and burning of the food in the alimentary canal; cough; dyspnœa; excessive discomfort in the heart; fever; delirium; pallor; debility; fainting; œdema; burning sensation in the body; persistent sense of discouragement; feeling of heat in the head; purulent discharge from the nose; and death.

Prognosis—cases caused by single dosha and where the blood comes out through the upper orifices of the body are easily curable. Palliative measures only are possible in dwandva varieties and in cases where bleeding takes place by the lower outlets. In general, the following are some of the features of good prognosis—blood comes out by one part only; patient is very strong; quantity lost is moderate and it does not gush out; cool and enjoyable weather; absence of complications; and the case has set in recently.

Conditions of incurability, i.e., of bad prognosis are—blood comes out through all parts of the body; all the three doshas are affected; the force and the quantity of the fluid that issues is very great; the disease sets in old persons or in a patient who is suffering from impairment of digestion or who does not take his food due to nausea or who is emaciated by some other affection; the outcoming blood resembles, meat washings, muddy water, putrefied blood which has been boiled, a mixture of fat pus and blood, liver—has red, yellow, green, dark, blue or rainbow tints—possesses a fishy odour—and does not easily get washed from clothes; bleeding occurs in more than one places as ears, mouths, eyes, hair follicles, and the region of the heart; eyes are greatly congested and his vision assumes a bloody hue.

No single term of the western medicine can exactly express the significance of rakta-pittam. All conditions where there is a tendency for bleeding from any part of the body due to some alteration in the quality of blood, will come under this heading. It does not include cases that are produced by injuries and local lesions and that appear as complications in affections such as anaemia, jaundice, cirrhosis of liver, small pox, diseases of the heart, septicaemia, typhoid, etc. Haemophilia, purpura, scurvy, haemorrhagic diseases of the new born and similar entities may be considered under rakta-pittam.

ACHIRKARAM

The normal menstrual blood, due to some obstruction in its usual path of flow accumulates in the uterus.

Vayu then acts upon it and causes a black discolouration and a foul smell. At the time of the next period or even during the interval, great discomfort is caused and the whole morbid material gets expelled. There may also be bleeding by the mouth. Terms Achirkaram, Pradaram, and Perumpadu are applied to this condition. Some include it under piramiyam or premeham.

The causes of achirkaram are—Indigestion; *adhyachanam* i.e., eating food before the quantity last taken has been digested; incompatible wines; abortion; excessive sexual intercourse; riding; mental worry; frequent employment of starvation treatment; carrying heavy weights; injury; and day-sleep.

Following are the clinical features—Discomfort, pain, and a feeling as if the whole body is crushed, are common to all varieties. (1) *Vatachirkaram*—Discharge is dry, red or dark, frothy, scanty and resembles meat washings. Pain in the abdomen is marked. (2) *Pittachirkaram*—Blood comes out very rapidly. It is blue, green, black or red and hot. Fever is present. (3) *Sleshmachirkaram*—The fluid is pale slimy and mixed with mucus, has a putrefying odour and resembles meat or rice washings, (4 to 6) *Dwandvachirkarams*—The discharge in the *vata-pitta* cases quickly evaporates, in the *pitta-kapha* conditions is mixed with clot and in the *kapha-vata* varieties looks like pus. (7) *Sannipathachirkaram*—The blood has a foul odour of a faecal, urinary or putrefying nature and resembles honey, yellow orpiment, ghee and bonemarrow. Fever and loss of consciousness may also be present. (8) When the rasa dhatu gets much heated, the blood that comes out loses all its natural colour or a bone-marrow like fluid is voided with much pain. Term *asthisravam* is applied to this variety. Some call the later condition *elumburukkirogam*.

When the blood lost is very great the following complications set in—Debility; giddiness; fainting; delirium; thirst; burning sensation; incoherent speech; pallor; laziness; and vata diseases. Features of bad prognosis are—Involvement of all the three doshas; frequen tand excessive loss of blood; thirst; burning sensation; fever; anaemial debility.

Menorrhagia, Metrorrhagia and Leucorrhoea are the three conditions that will come under this heading.

KASAM

Kasam is a condition where the disturbed prana and udhana vayus along with vitiated kapha and pitta doshas—kapha being more affected than pitta—comes out of the mouth giving rise to a sound similar to that caused in a broken bell-metal. The abnormal vayus fill up the chest,

neck and head. Causal agents are—Exposure to smoke; accumulation of kapha in the respiratory tract owing to excessive amam in the system; abnormal exercise; eating dry foods; food getting into the airpassages; suppression of reflexes such as sneezing, etc.

Varieties of kasam are—vata kasam; Pitta kasam; kapha kasam; kshata kasam or rakta kasam; and kshaya kasam. The seriousness of the disease increases in the order given above. Each variety is capable of becoming kshaya-kasam finally.

The premonitary features of kasam are—Presence of granulations in the mouth and throat; or a sense as if they are present therein; retching in the throat; lack of desire for food or inability to swallow; nausea; crushing pain in all the organs of the body; pain is marked especially in the back, chest and loins; seeing motes floating before the eyes.

Vatakasam—Pricking pain in the head especially of the temporal region, heart, abdomen and loins; dryness of the chest, throat and face; loss of facial expression; diminution of bodily strength and ojas; low and hoarse voice; mental confusion; drowsiness; great discomfort; short dry coughs in quick succession; expectoration in small quantities of watery sputum that has become solidified; hairs standing up on their ends.

Pitta-kasam—Burning sensation in the throat and chest; hacking cough with irritation in the throat; expectoration of an yellowish bitter sputum; dryness and bitter taste in the mouth; thirst; vomiting of an yellowish, bitter and pungent fluid; haematemisis; sour eructations; fever; yellowish discolouration of the eyes and nails; delusion; low voice; dimness of vision; pallor.

Kapha kasam—Headache; lack of desire for food; nausea; vomiting; accumulation of vayu and an excess of kapha in the system; a sort of discomfort in the throat with a feeling of something smeared in it; expectoration of a thick white sputum; heaviness of the body; slight pain in the chest; spasmodic pain in the region of the kidney; dislike for getting up and going about; watering from the nose; pruritis; hairs becoming rough; glistening of the skin.

Rakta kasam or *Kshata kasam*—Injury to the chest is produced in the case of a person whose system is dry, by causes such as excessive exercise, long walk, carrying heavy weights; fighting severely, controlling horses and elephants with great force, etc. Vayu then becomes weakened and mingling with raktam and pittam in the chest, produces this variety of kasam. Clinical features are—dry cough; haemoptysis; expectoration of an yellowish, dry and nodular

sputum mixed with blood; marked pain in the throat; great tenderness in the chest that it cannot be even touched; chest pain of different kinds such as breaking, pricking with needles, crushing, burning, etc.; pain in the joints, back and the sides of the body; tremor; fever; dyspnœa; thirst; nausea; low voice; tremor; cooing sound in the throat as that of a pigeon; diminution of hunger, sexual desire, body strength and complexion; haematuria.

Kshayakasam—By causes such as incompatible and unsuitable foods, excessive exercise, suppression of reflexes, very soft temperament, and mental worry, jataragni gets completely destroyed and all the three doshas become excited. Vata is especially aggravated and the sapta dhatus are also involved in the vitiation. These factors give rise to kshaya kasam which may result in kshayam. Clinical features are—cough; expectoration of a foul smelling, purulent, multicoloured, (yellow, green, or scarlet red)sour, sputum; haemoptysis; pain in all the organs of the body; pain in the sides with a feeling as if it is beaten; breaking pain in the chest; fever; sense of heat; fainting; unreasonable desire for hot and cold things; frequent desire for food; weakness; brightness in the eyes; clear expression of the face; muscular wasting; emaciation; great weakness; setting in of Kshayam or occurrence of death.

Jarakasam—This affects old people. All the saptadhatus undergo changes. Clinical features are cough, dyspnoea, emaciation, vomiting and hoarse voice.

Prognosis—Kasams due to single doshas are easily curable. Cases caused by dwandva doshas, are curable with difficulty. Palliative treatment only is possible in jara-kasam. Kshathakasam and Kshaya-kasam can be relieved only with very great difficulty. In Kshaya-kasam especially, as all the three doshas are affected, prognosis is very bad. Aged persons and patients who are already very weak invariably succumb to these two conditions. If however, the patient is strong, or the disease is in the early stage, or all the four essentials of therapeutics viz., the doctor, the patient, the medicine and the nurse, are of an ideal type, there may be response to treatment or at least palliative measures can be administered. As a general rule, in all varieties of Kasam, the presence of dyspnoea, cough, fever, thirst, vomiting and diarrhoea, indicates the approach of death.

The literal meaning of Kasam is cough. This translation is very misleading, as cough in western medicine is only a symptom, while Kasam comprises definite clinical entities. Acute and chronic bronchitis, emphysema, bronchiectasis, early phthisis and such conditions, where cough dominates the clinical picture and there is some local lesion in the respiratory passages, will come under Kasam.

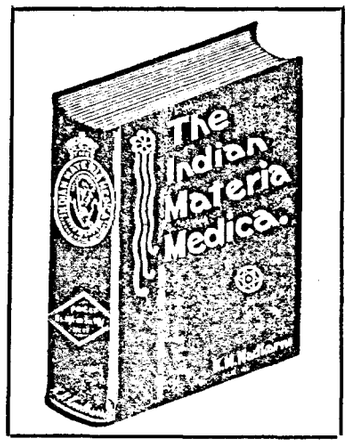
OBITUARY

We regret to record the death of Dr. D.Nagarajan, L.M.S. (Mad.), L.R.C.P. (Lond.), M.R.C.S. (Eng.), D.T.M.H. (Lond.), Lecturer in Midwifery, Government Indian Medical School on 6th of August 1936 from Typhoid. He was born in 1892 and after graduating himself in the Madras Medical College, he joined the Allopathic staff of the Indian Medical School in 1925. He was first the Anatomy Lecturer. In 1930 he proceeded to England for higher studies. In 1933 he returned to the School and was the first Allopathic Lecturer ever since.

Whatever work he undertook it was always characterised by his devotion and sincerity. In his untimely death the School has lost a conscientious worker, the students an efficient teacher and the patients a considerate doctor. He leaves behind, to bemoan his death, his old parents, wife and two children and innumerable relatives, students and friends.

◆ ◆ ◆ ◆

We are sorry again to record the death of Dr. K. Narayana Rao, L.I.M. in the middle of August 1936 from Typhoid. He took his diploma in May 1935. After finishing his apprentice course in the Government Indian Medical School Hospital he was working with his uncle Dr. U. Rama Rao and his cousin Dr. U. Krishna Rao, M.B., B.S. in Madras. We convey our condolences to the bereaved family.



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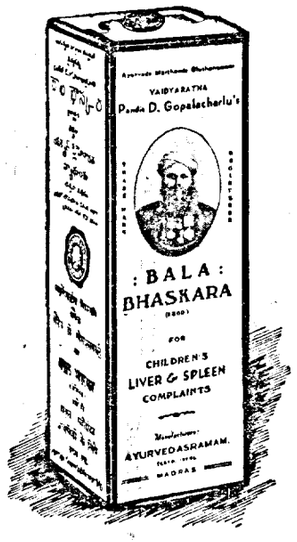

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