सर्वेजनाः सुखिनो भवन्तु

THE MISCELLANY

Managing Editor: Dr. P. A. S. RAGHAVAN

MONTHLY JOURNAL OF THE SOUTH INDIAN BRANCH
INDIAN MEDICAL ASSOCIATION

XVII JUNE 1951 No.

JOURNAL OF THE MYSORE MEDICAL ASSOCIATION,

BRANCH OF THE

INDIAN MEDICAL ASSOCIATION

We welcome to our midst another medical journal, the journal of the Mysore Medical Association, Provincial Branch of the Indian Medical Association. We should rather re-welcome the old Mysore Medical Association's quarterly bulletin in its new garb and form. The Bulletin was meekly appearing every three months as a small booklet, for some years past, containing mainly the papers read at the periodical meetings of the Mysore Medical Association.

Last year came the happy tidings that the Mysore State Medical Association and the three branches of the Indian Medical Association at Bangalore, Mysore, Devenagere and a few more newly formed branches have joined and formed themselves into the Mysore Provincial Branch of the I. M. A. The Mysore Medical Journal now published on behalf of the Provincial Branch is slightly thicker than its former self and it is hoped that in course of time it would become quite bulky and useful. Besides containing original articles, it contains extracts, case notes, postings and transfers of Medical Officers in service and tit-bits.

We wish the journal all success and usefulness to the profession.

In passing we might remark that it is high time that the Indian Medical Association should make some changes in the nomenclatures. While formerly under the British rule we had Provinces under the new dispensation we have all States, and we wish the Mysore Provincial Branch could have styled itself as the Mysore State Branch of the I. M. A., in anticipation of the change that is bound to come in very soon. Most of the present Provincial Branches represent areas or regions such as Bengal, Orissa, Andhra, South India, Travancore-Cochin, Maharashtra, Madhya Pradesh, Madhya Bharat, Uthar Pradesh, Punjab etc., and it is as it should be. We hope the few Provincial Branches such as Mysore, Bombay etc. which stand in the name of Cities or towns, would change their names to indicate the area or region they cover.

P. A. S. RAGHAVAN,
Managing Editor.

(FOR CIRCULATION AMONGST MEMBERS ONLY)

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BRONCHIECTASIS

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Fellow of the American College of Chest Physicians, Coimbatore

Bronchiectasis is one of the commonest conditions mistaken for tuberculosis. It happens to be a great killer of man. Many cases escape undiagnosed, and a good number of cases produce no symptoms at all. Unless the physician has in his mind this condition when he examines a chest case, there is a chance of his missing it. Hence, I thought it would be worthwhile dealing briefly with its different aspects.

Bronchiectasis is a condition characterized by dilatation of one or more divisions of the bronchial tree, which sooner or later becomes complicated by infection. The detailed study and knowledge of the bronchial tree is of recent origin and the advancement of thoracic surgery is responsible for the attempt at the detailed study done.

Books describe the condition under various headings of which congenital and acquired are the main ones. Bronchiectasis is usually acquired while young. Farrel stated that 80% of his bronchiectatic patients acquired the disease during the first ten years. Kartogener found bronchiectasis and sinusitis frequently associated with dextrocardia and situs inversus, the Kartogener triad. He cited this in support of the theory that bronchiectasis is congenital. Olsen reviewed 85 cases of dextrocardia, seen between 1920–1941; evidence of bronchiectasis was found in 16·5% of these cases in contrast to less than 1% bronchiectasis in all other patients registered. He also mentioned bronchiectasis occurring in pairs of indentical twins, as further evidence for the congenital theory of bronchiectasis. In spite of the above observations, I am inclined to believe that most cases are of acquired origin.

Usually, the onset of bronchial dilatation is gradual, though occasionally it can be acute as in some of the cases encountered during the influenza epidemic of 1918–1919, in which, following a severe bronchitis, and peribronchitis, the bronchial wall became softened and easily distensible.

Any condition of the lungs and bronchi, that causes fibrosis or bronchial stenosis or both as pneumonoconiosis, corrosive gases, fungus infections, broncho pneumonia, bronchitis, empyema, lung abscess, and the like may be causative of bronchiectasis. Benign or malignant intrabronchial tumours, foreign bodies, large glands or fibrotic

bands pressing on the bronchial walls, all encourage the development of bronchiectasis.

Tuberculosis not infrequently involves the bronchial wall by direct extension. This may result in kinking or narrowing during the course of healing, which combined with fibrosis and contraction of the pulmonary parenchyma also cause bronchial dilatation. When secondary infection is superimposed, it is difficult to distinguish this tuberculous bronchiectasis from the more common variety except that the former is more prone to occur in upper lobes.

Bronchiectasis can occur anywhere in the lung. The left lower lobe is the one more frequently involved and the lingular segment of the left upper lobe also gets involved. The left lower lobe localization is due to drainage. The left main bronchus makes more of an angle with the trachea, than does the right one which is more of a continuation of the trachea. That occurring in the upper lobes, caused by the irregularly developing fibrosis of chronic tuberculosis, produces dilatations in the distorted, gnarled bronchi which does not present the regular pattern seen in the lower lobe bronchiectasis. The lower lobe bronchiectasis of tuberculous fibrosis is relatively benign because the drainage is downhill. In bronchiectasis limited to the right mid lobe, the causative factor seems to be the pressure on the bronchus by an unresolved glandular component of a primary complex. The peculiar distribution of the tracheo-bronchial glands favour this right mid lobe predilection.

The pathological changes in bronchiectasis are varied. The invasion of the bronchial walls and surrounding lung issue by pathogenic bacteria is followed by varying degrees of destruction and replacement by inelastic white fibrous scar tissue. The scar tissue when young is easily stretched by inspiration and the weight of the retained secretions, but becomes hard and contracted when older. The ciliated, columnar epithelium may be eroded in places leaving granulation tissue in its place. Blocked, infected secretions may extend into the lung producing lung abscess or pleural empyema. After each bout with an acute respiratory infection, the chronic bacterial infection spreads more extensively into the bronchial walls leaving more destruction and scar tissue formation. A greater and greater load is added to the right side of the heart by mechanical obstruction to blood flow, and the replacement of functional units in the lung. This recurs until the right ventricle fails and eventually congestive heart failure develops. If the patient does not die subsequently of metastatic abscess, pneumonia, nephritis or massive hæmorrhage, he will eventually die of heart failure from the chronic overwork or toxic myocarditis.

There is no micro-organism distinctive of bronchiectasis, but streptococci seem to play an important role.

The diagnosis of advanced bronchiectasis is easy. The coughing up of large amount of purulent sputum, dyspnœa, cyanosis, the clubbed fingers, the low-grade temperature with acute exacerbations, the hæmoptysis varying from slight streaking to massive hæmorrhage, all give definite leads to diagnosis.

To diagnose early bronchiectasis, constant suspicion and readiness to act are necessary. Persistent low-grade temperature, weight loss, and listlessness with or without cough that hangs on after an acute respiratory infection may be the first vague hint of developing bronchiectasis. In any suspected case, bronchography should be done. If there is suspicion of atelectasis, from a mucous plug or foreign body, growth or pressure from outside the bronchus, a bronchoscopy should also be done.

Practically all patients with bronchiectasis expectorate blood some time during their life time. The commonest experience is for the patient to raise a few mouthfuls of blood at infrequent and irregular intervals, with long periods of freedom form this symptom.

Physical signs :

Even extensive bronchiectasis can exist without causing detectable physical signs. Clubing of the terminal phalanges has long been considered a classical sign of bronchiectasis, but this has no such diagnostic importance.

Since bronchiectasis is often secondary to a variety of pathological conditions, within or without the lungs, it is not surprising that the physical signs vary tremendously. In certain cases, bronchiectasis may be so deep seated as to fail to give rise to physical signs on examination, although the symptom of cough with sputum and the X-ray findings together with the subsequent course of the disease, make the diagnosis clear. In other cases, the physical signs of coincident disease in the lungs such as tuberculosis or emphysema, so overshadows the signs of bronchiectasis, as to make diagnosis difficult.

The most characteristic symptom in a well established case is paroxysmal attacks of cough which occur 2 or 3 times a day, sometimes more frequently and are accompanied by the expectoration of large quantities of sputum. Many patients note that a sudden change of position will precipitate a coughing spell and some are able to bring on a paroxysm at will.

Much has been written about the characteristic sputum. It may be profuse, varying in amount, 600—1000 c.c. in 24 hours. It may be fœtid, permeating all the surroundings of the patient. This sputum may tend to separate into 3 layers. While occasionally all these characteristic features may be present, it is to be realized that they only occur in certain of the more advanced cases.

Dyspnœa is common in more advanced cases and may be due to a variety of factors.

Inspection of the chest in cases with an associated fibrosis may show considerable retraction of a portion of the chest with displacement of the heart towards the involved side. Palpation yields little of importance. If marked emphysema is present, fremitus is reduced; while in marked fibrosis, it is increased. Percussion also may not show any changes, but may help in estimating the nature and extent of cœxisting pulmonary changes. Auscultation shows the presence of rales of all sizes and sorts, together with modified breath sounds. They are of little significance in the diagnosis of bronchiectasis. The most useful single diagnostic procedure in the diagnosis of bronchiectasis is bronchography with the aid of radio-opaque material

insufflated into the lung. The first attempt at bronchography was that of Chevalier Jackson in 1905, He insufflated Bis. oxide into the bronchial tree through a bronchoscope. Since 1922, it is being used extensively in other countries. We in India, have not yet begun employing it as a routine diagnostic measure and except in a few institutions, the procedure is not at all known.

In 1922, Sicards and Forestier used lipiodol to delineate the bronchial tree. This preparation is given to determine the extent of the damage, and this is the only certain method for achieving this end. Patient must be postured before oil is given, so that cavities are as empty as possible. Where surgery is contemplated upon, each side and each lobe should be investigated separately and sufficient discrimination is necessary before its usage. The use of contrast media increases visibility and extends diagnostic accuracy of X-ray examinations when properly used. If the oil could be entirely and completely eliminated after bronchography, such aid as it gives would be unadulterated with disadvantage. But after bronchography, iodized oil is not completely eliminated for atleast a couple of weeks and while in the lung, it casts dense shadows and incites an inflammatory reaction. This pneumonitis diminishes respiratory reserve to some extent. The German preparation Iodipin and the Danish Iodumbrin are identical to lipiodol, which is universally used and is good. Recently, preparations have been introduced containing bromine in place of iodine.

The X-ray appearances are varied. Thin walled cavities may be clearly seen or there may be an area of apparent fibrosis. Sometimes, there is diffuse haziness suggestive of early tuberculous infiltrations. When the disease is situated in the left lower lobe, there may be a triangular shadow behind the heart, which indicates collapse of the left lower lobe. An appearance of increased translucency above the left diaphragm which indicates localized emphysema in this region is very suggestive of fibrosis or collapse and possibly bronchiectasis of the left lower lobe.

Treatment :

In the absence of symptoms, there is no need for treatment. With mild bronchiectasis, even though it be confined to a single lobe, when there are no symptoms except an occasional attack of bronchitis, treatment should be directed to improving the general health and increasing the resistance to infection. Autogenous vaccine may be tried. Treatment in cases of recurrent hæmoptysis is a matter of difficulty. If the hæmoptysis is only mild and occurs at long intervals, patient will not agree for lobectomy. In such cases, treatment by rest and good food only is possible. Severe bleeding is an indication for lobectomy.

In the suppurative group, the effect of postural drainage may be tried. Anatomy of the bronchial tree and the exact area affected, should be known for successful postural drainage. In bilateral cases, this is the only method of treatment which offers any prospect of improvement.

As suppuration of nasal sinuses and oral cavity is frequently responsible for keeping up the active bronchial

infection, it is essential that any sinusitis or pyorrhœa should be dealt with as effectively as possible before surgery is considered.

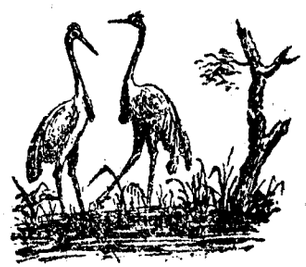
The treatment of advanced bronchiectasis is surgical removal of the affected area if this can be done. Lobectomy or other segmental operations or even pneumectomy occasionally are the surgical methods in use. When there is definite disease in a single lobe, lobectomy is the treatment of choice. Great advance has been made in the surgical treatment of bronchiectasis in the last few years. If more than one lobe is affected, removal of a whole lung is done now. Thoracoplasty has gone out of favour. Phrenic, A. P. and P. P. are being tried in some quarters, but I do not think they do much good. Phrenic and P. P. are useful procedures in uncontrollable hæmorrhage.

The treatment of cases too advanced for surgery is palliative. Postural or bronchoscopic drainage, penicillin, sulfa-drugs and streptomycin parenteraly or aerosol administration or sulfa drugs by mouth are useful during acute episodes. Unless there has been severe hæmoptysis, hypertension, dyspnœa or some other complications, all patients are encouraged to have postural drainage.

Autogenous vaccines, general hygenic measures, fresh air, good food with plenty of vitamins, residence in a warm dry climate, attention to cardiac complications, prompt treatment of sinusitis or tonsillitis are all essential. Cold, damp and changeable climates are conducive to respiratory infections and dust also should be avoided.

Since bronchiectatic patients lose large amount of protein in their copious sputum, food with high protein and vitamin content should be given. Smoking and snuffing are forbidden as the inflamed bronchi gets irritated by smoke and snuff and increase the cough.

Bronchiectasis is a very common condition and is to a very great extent preventable. If every patient with tardy recovery from acute infections of the lower respiratory tract be given the benefit of bronchoscopic aspiration, and in all chest cases of doubtful diagnosis, branchograms taken, and other appropriate investigations done, along with enforcing a strict regimen to maintain maximum resistance, brochiectasis, which takes a heavy toll of lives in our country, at present, can be made a rare condition.



ASSOCIATION NOTES

SOUTH INDIAN PROVINCIAL BRANCH, MADURAI

Minutes of Meeting of the Council of the South Indian Provincial Branch of the Indian Medical Association held at "Dasa Prakash", Ootacamund on Sunday the 8th April 1951 at 3-30 P. M.

The following members of the Council were present:

1.	Dr. U. Krishna Rau	President	Madras.
2.	Dr. Y. P. Vasudevan	Vice-President	Coimbatore.
3.	Dr. A. K. Rajagopalan	Hony. Secy.	Madurai.
4.	Dr. D. V. Venkappa	Hony. Jt. Secy.	Madras.
5.	Dr. P. V. Sundaram	Hony. Tresr.	Trichy.
6.	Dr. R. Varadarajan	...	Chingleput.
7.	Dr. C. S. V. Rajappa	...	do.
8.	Dr. K. V. Subramaniam	...	Coimbatore.
9.	Dr. T. V. Sivanandam	...	do.
10.	Dr. A. G. Leelakrishnan	...	do.
11.	Dr. S. Ganapathy	...	do.
12.	Dr. R. Sarathambal	...	do.
13.	Dr. N. G. Nair	...	do.
14.	Dr. L. Munisamy	...	do.
15.	Dr. M. Srinivasalu	...	Chettinad.
16.	Dr. T. S. Shetty	...	do.
17.	Dr. S. Subramaniam	...	do.
18.	Dr. P. B. Anangarachari	...	Madras.
19.	Dr. A. M. Sivaraman	...	do.
20.	Dr. R. Sankaran	...	do.
21.	Dr. C. Rama Rao	...	do.
22.	Dr. K. Rama Rao	...	do.
23.	Dr. Ramachandramoorthy	...	do.
24.	Dr. Damodaradoss	...	do.
25.	Dr. V. Samuel	...	do.
26.	Dr. P. Krishna Menon	...	Madurai.
27.	Dr. S. Kanthimathinatha Pillai	...	do.
28.	Dr. G. A. Naidu	...	do.
29.	Dr. C. V. Narayana Iyer	...	Malabar.
30.	Dr. A. B. Doss	...	do.
31.	Dr. (Capt.) A. Balasubramaniam	...	Nilgiris.
32.	Dr. T. D. Jeevarathinam	...	do.
33.	Dr. A. J. D'Souza	...	do.
34.	Dr. C. N. Narayanan	...	do.
35.	Dr. K. R. Hariharan	...	Salem.
36.	Dr. S. Valeeswaram	...	do.
37.	Dr. K. R. Kini	...	S. Kanara.
38.	Dr. K. B. Shetty	...	do.
39.	Dr. U. P. Mallayya	...	do.
40.	Dr. P. A. S. Raghavan	...	Trichy.
41.	Dr. C. R. Chary	...	do.
42.	Dr. A. Dharmarajan	...	do.
43.	Dr. R. Ganesan	...	do.

I. Condolence Resolution on the Death of Major M. G. Naidu:

The following resolution was moved from the Chair:

"This meeting of the Provincial Council places on record its deep sense of sorrow at the demise of Major M. G. Naidu, a former President of the I. M. A. and authorises the President to convey to Dr. Jayasurya its sincere condolences".

The resolution was passed unanimously, all members standing for a minute.

The President then said that as per Rule 7 (b) he has co-opted (1) Dr. P. B. Anangaracharia of Madras, a member of the All India Working Committee and (2) Dr. Jeevarathnam of Ooty for that meeting of the Provincial Council.

II. Business arising out of the last Minutes:

i. The House was informed that the resolution on the demise of Sardar Patel, Deputy Prime Minister was sent to the members of his family.

ii. *Selection of Candidates for Post-graduate training at Mt. Sinai Hospital, and other hospitals.*

The Circulars 23 and 26 were also considered with this item. The President informed the House of the procedure adopted by the Provincial Council and by the Selection Committee appointed by the Working Committee as to methods of selection. He read out the names of the candidates selected.

iii. *Resolution re: Purchase and possession of spirituous tinctures:*

The President informed the House that the Government have since passed orders permitting medical men to possess two pounds of these tinctures without a license. The matter of giving medical men a free license was being put forward before the Government.

iv. *Hakim and Vaidya Schemes:*

The President read out the resolution of the Joint Standing Committee of the Andhra and South Indian Provincial Branches passed at Rajahmundry on this subject. There was a discussion. Some members were of the opinion that it would be better for the I. M. A. not to give any opinion on this matter. But the majority were in favour of suggesting to Government that selected Hakims and Vaidyas with training of at least one year could be utilised as auxiliary health personnel only. The Council was unanimously of the opinion that they should not be permitted to work as doctors. The subject, was however, adjourned to the next meeting, so that the Provincial Council members may have the resolution of the Working Committee before them.

v. *Editing of the I. M. A. Journal in the South:*

The President explained how at Sholapur the Working Committee and the Central Council had decided to continue the present arrangements for one more year and to have the journal printed at Calcutta. The Provincial Council, however, was of the opinion that the Committee appointed to go into this question should meet before the next meeting of the Provincial Council and

submit final proposals which could be forwarded to the Working Committee for their consideration next year.

vi. *Simpson's Medical Centre*:

The President explained the dispute in this matter. The Chief Medical Officer of Simpson's Medical Centre certified that a particuler employee was fit to resume duty: another medical practitioner belonging to the College of Indian Medicine had certified that he was not fit. Since the Company supported the view of their doctor, the matter was taken before the Tribunal whose judgment is awaited.

The Provincial Council, however, appointed a committee to go into this matter thoroughly and to devise rules of procedure and methods of conduct to safeguard the medical officers in such industrial concerns and to see that the relationship between the employer and the medical officer and the employee and the medical officer is made more harmonious and congenial. The members of the Committee are:

1. Dr. Sivanandam, from Coimbatore (Secretary).
2. The President, Dr. U. Krishna Rau.
3. The Secretary, South Ind. Prov. Br. (Dr. A. K. Rajagopalan)
4. Dr. S. Subramaniam, Karaikudi, M. L. A.
5. „ U. P. Mallaya, M. L. A. Mangalore.
6. „ P. S. Sreenivasan, M. L. C., Conjeevaram.
7. „ Devasagayam, Medical Officer, Simpson's Medl. Centre.
8. „ K. S. Krishnan of Madura (Medl. Officer, T. V. S.)
9. „ V. P. Vasudevan, Coimbatore.
10. „ C. V. Narayana Iyer of Calicut.
11. „ P. A. S. Ragavan, Trichinopoly.

vii. *Insurance Scheme for Medical men*:

With this Circular No. 18 of the I. M. A. and Circular No. 10 of 50/51 of the Provincial Branch were considered together with the reply from the Coimbatore branch.

The President explained how this matter was discussed at Delhi and adjourned for talks between the actuaries of the big Insurance Companies for evolving common and agreed rates of premia. The matter was adjourned to the next meeting.

viii. *Disaffiliation of the North Arcot Dt. Branch.*

The President explained that he had attended the meeting of the Vellore Branch of the I. M. A. and spoken to the members and explained to them how important it is for doctors to join the I. M. A. He informed the House that the President of the North Arcot District Branch had promised to induce the N. A. District branch to withdraw the letter of disaffiliation. This is awaited.

ix. Regarding attendance at the Johannesburg Conference, the President explained that the Working Committee had refused to accept the invitation owing to the fact that there was colour bar in South Africa and Indians were not treated on level terms with Englishmen.

III. The Statement of Account submitted by the Treasurer was read and passed. It was decided that in view of the enormous expenditure, T. A. to members attending Provincial Council meetings need not be paid hereafter.

IV. I. M. A. Ref. 1182 re: issue of Diploms in place of University Degrees:

The President explained how this arose out of a reference by Capt. Shivapuri, Hony. Secretary of the Uttar Pradesh State Branch who drew the attention of the I. M. A. to a resolution passed by the South Indian Provincial Branch which suggested that the Government should have a Board of Examiners giving diplomas to medical men in place of University Degrees. The President explained that the Working Committee was of the opinion that it was not proper for the South Indian Provincial Branch to ask for such diplomas when the policy of the Indian Medical Association was for one uniform standard of medical education and that being the graduate type. The Provincial Council noted this direction of the Working Committee.

V. Editing the Miscellany:

After a discussion the Provincial Council resolved to address the Secretary of the Trichinopoly Branch and to ask them whether the offer of the branch made in 1947 with regard to the Miscellany was still holding good now and whether the Miscellany would be handed over to the South Indian Provincial Branch for being conducted as its official organ. Dr. P. A. S. Ragavan was in the meanwhile requested to continue the editing, printing and publishing of the journal till such time as a reply from Trichinopoly Branch and the decision of the Provincial Council is available.

VI. Letter from the Chettinad Branch requesting that the fund of the Ramanathapuram Branch be divided between the two branches in proportion to be fixed by the Provincial Council:

After a discussion the Provincial Council resolved to request the Ramanathapuram and Chettinad branches to settle their differences amicably.

VII. Disaffiliation of the Bangalore Branch.

The letter of the Bangalore branch disaffiliating themselves from the South Indian Provincial Branch an account of the formation of the Mysore Provincial Branch was read and recorded.

The Provincial Council resolved to place on record the assistance and cooperation given to it by the Bangalore branch all these years. The Provincial Council resolved to send messages of greetings and goodwill on the formation and on the occasion of the inauguration of the Mysore Provincial Branch.

VIII. Letters from Coimbatore and South Kanara Branches:

Read the letter from the Coimbatore District Chemists & Druggists Association. The Provincial Council was of the opinion that there should be no objection to keeping a copy of the prescription and returning the original to the patient.

The letter from the Canara Medical Supplies was read and recorded.

IX. Letter from Dr. Vasudeva Iyer of Tiruturaipoondi, Tanjore Branch Member:

As the practise that Dr. Vasudeva Iyer suggests now exists, it was resolved to take no further action.

X. Letters from Branches regarding CFC.

The President explained to the Provincial Council the viewpoint of the Working Committee in the matter of collection of C.F.C. and in the writing-off the arrears.

This Council authorises the Secretary, S. I. P. Branch of I. M. A., Madurai to go to Hyderabad with the relevant files to settle the CFC affairs (arrears) during the working committee of I. M. A. in the first week of July 1951;

The new rules with regard to payment of T. A. to members of the Central Council representing the branches in proportion to the number who have paid the C. F. C. was explained.

XI. Delegation Fee:

The Provincial Council accepted with thanks the delegation fee from the South Kanara Branch in connection with the last Provincial Conference.

XII. Read letter from Dr. K. B. Shetty regarding X-ray Films being taken as sales and Medical men being charged sales tax:

The Provincial Council after detailed discussion resolved that it was of the opinion that taking radiographs is only for the purpose of giving an opinion by the radiologist on the findings in the X-ray and hence it is only consultation work and not a sale and therefore is of opinion that no sales tax should be levied on the fees collected by the radiologist for taking X-ray photographs.

XIII. Read Dr. A. G. Leelakrishnan's letter:

In which he calls upon members of the Working Committee elected by this Council to ascertain the views of this council on important subjects affecting the I.M.A. prior to the Working Committee meeting. It was pointed out to the Provincial Council that the Indian Medical Association, on all important subjects affecting the I. M. A., circularises all branches before taking any decision. The members of the Working Committee have always been reflecting the views of the Provincial branches whenever their opinion is called for. The suggestions of Dr. Leelakrishnan were, however, noted.

XIV. Read letter from Dr. D. V. Venkappa re: Charges against Dr. T. S. Adisubramanyam by Major V. Krishna Rao:

The President ruled this out of order, as in his opinion, these letters refer to private differences between the members.

XV. Venue of the next Provincial Council:

It was decided to hold the next Provincial Council meeting at Chingleput in the first week of July prior to the meeting of the Working Committee at Hyderabad.

XVI. Venue of the All India Medical Conference:

The President explained how it would be difficult to arrange the Conference in Delhi as originally planned on account of the non-availability of buildings owing to other Conferences being held at about the same time. The Trichinopoly and Madras branches were addressed to in this matter. The representatives of the Trichinopoly branch expressed the willingness of their branch to call the All India Medical Conference to Trichy in December 1951, provided it would not clash with the General Elections and provided the holding of such a Conference was possible. The President was authorised to write to the Hony. Secretary, Indian Medical Association, Delhi and to get clarification on this matter.

XVII. Venue of the next Provincial Conference:

If the All India Medical Conference were to be held in Trichinopoly, it was decided not to hold the Provincial Conference for 1951, but to hold a meeting of the Provincial Council a day prior to the meeting of the Conference. If, however, the Conference is not to take place at Trichy, then the Provincial Council accepted the invitation of the Malabar branch to hold the next Provincial Conference at Calicut on the 9th, 6th and 10th September during the Onum holidays.

XVIII. I. M. A. Circulars:

(a) *Circular No. 14-re: Clinical Asst. Ships in the Mental Hospital, Dublin:*

Recorded. The only application received from Dr. M. G. Mohan Rao in reply to the Office Circular No. 7 was forwarded to the Centre on 20—3—51.

(b) *I. M. A. Circulars 15 & 16:* The Secretary informed the Provincial Council that he has addressed the Surgeon-General in the matter and that he had not yet received a reply. The Provincial Council decided to forward an answer to the Hony. Secretary at Delhi on receipt of reply from the Surgeon-General.

(c) *Circular No. 17:* Copy of the rules of the Provincial Branch has been sent.

(d) *Circular No. 18: Insurance Scheme vide II-vii.*

(e) *Circular No. 19: Amendment to rules re: T. A. to Central Council members.*

Read and recorded.

(f) *Circular No. 20.*

As there was no refugee doctors asking for help it was decided to inform the Centre accordingly.

(g) *I. M. A. Circular No. 21.*

The President explained the steps that are being taken to procure a site at Delhi and to build on it. He appealed to members to contribute liberally to that fund.

(h) *I. M. A. Circular No. 22.*

Recorded.

(i) *Circulars 23 and 26-Post-Graduate Course in Mt. Sinai Hospital.*
Recorded as the matter was discussed in an earlier part of the meeting.

(j) *Circular No. 21-Instructions to Secretaries of Branches*:
Recorded.

(k) *Circular No. 25-Senior Lecturership in Bacteriology*:
Read and recorded.

(l) *Circular No. 27-Import of foreign drugs:*

Since there was no difficulty in the South in getting drugs such as Penicillin, Streptomysin, and Chloromysin etc. the Provincial Council was of the opinion that no action need be taken.

(m) *Circular re; Degrees in Schedule "A" I. M. Council*:
Recorded.

XIX. **Formation of a Working Committee for the South Indian Provincial Branch:**

The President suggested that a Working Committee should be formed for the South Indian Provincial Branch. After discussion the subject was adjourned to the next meeting and the President was requested to put up a more detailed note on the subject.

XX. **Any other subject:**

(a) *Purchase of a typewriter for Treasurer's Office*:

This was adjourned to the next meeting and the Treasurer was asked to submit proposals as regards the cost of (1) a new typewriter and (2) a re-conditioned typewriter.

(b) *Purchase of Office furnilure for the Provincial office*:

The Secretary stated that he was withdrawing this subject from the agenda of the meeting.

XXI. **Vote of Thanks:**

The Provincial Council thanked Mr. K. Seetharama Rao, Proprietor of "Dasaprakash" Ootacamund for the very excellent arrangements he had made for the lodging of delegates and for the holding of the meeting of the Provincial Council.

The Provincial Council thanked the Niligiri Branch of the Indian Medical Association for inviting the Provincial Council to Ootacamund and for giving them TEA.

With a vote of thanks to the Chair, the meeting dissolved.

A. K. RAJAGOPALAN,
Provincial Secretary.

U. KRISHNA RAO,
President.

COIMBATORE BRANCH

President: Dr. M. G. Nair
Vice-President: Dr. I. Pichai Robert
Hony. Secretary: Dr. K. V. Subramanyam (Path)
Assoc. „ Dr. S. Balakrishnan
Hony. Treasurer: Dr. T. V. Sivanandam.

The montly meeting of the Coimbatore District Medical Association, Coimbatore was held on Saturday the 26th May 1951 at 6-30 P.M. Dr. M. G. Nair, the President presided. About 72 members attended the meeting.

After tea, the resolution of Dr. A. G. Leelakrishnan with the amendment by Dr. P. A. Natesan was unanimously adopted. A similar resolution of the Cuddalore Branch of the Indian Medical Association was approved by the General Body. The resolutions of the Tanjore Medical Association was also approved by the General Body. Circular letter Central 31/50-51 dated 9th April 1951 of the Indian Medical Association regarding the appointment of Medical officers to Banks was read by the Secretary.

The President then introduced the Lecturer of the day, Dr. C. Gopalan, M.D. (Madras,) PHD. (London), Dy. Director, Nutrion-Res. Lab. Coonoor, who gave a very short, interesting and instructive lecture on the "Clinical Uses of newer B vitamins." The lecturer dealt in detail the history, clinical uses, contra indication, dosage etc. of the two groups of Vitamins viz. Folic acid group and Vitamin B 12 group. After the lecture there was a lively discussion in which many took part.

There was a practical demonstration of a "SPHYGMOGRAPH' pulse recorder, a machine improvised by Dr. M. Krishnaswamy, which evoked keen interest in many members.

Dr. S. Balakrishnan, the Associate Secretary, proposed a vote of thanks. He first thanked Dr. M. N. Menon, the host of the day, for the tea and refreshments. Then he thanked all the members for having assembled in large numbers in spite of their heavy work. He then paid a glowing tribute to Dr. C. Gopalan, the lecturer of the day and also Dr. M. Krishnaswamy for the demonstration of the pulse recorded. The meeting came to a close at 8-30 P.M.

MATHURAI BRANCH

President: Dr. M. N. Rajan
Vice-President: Dr. T. S. Renga Iyengar
Hony. Secretary: Dr. P. Krishna Menon
Hony. Treasurer: Dr. A. S. Annamalai.

The monthly meeting of the Association was held at 4 P.M. on Saturday the 19th May 1951 at the Missionary Union Hall, Kodaikanal. The gathering of about sixty consisting of members, a large number of missionary doctors and the elite of Kodaikanal were treated to a pleasant tea party by Dr. P. Vadamalayan. The meeting began with Dr. M. N. Rajan in the chair. The minutes of the last meeting were read and adopted. Dr. J. S. Carman, M.D., F.R.C.S., Professor of Surgery, Christian Medical College, Vellore gave a short talk on "THE APPLICATION OF CERTAIN ABDOMINAL INCISIONS". He referred to an extended kidney incision for operations on the bowel on the right side, and explained its rationale. He explained

in detail the technique of several transverse abdominal incisions and outlined the advantages of planning incisions according to the case with which the abdominal viscera could be approached by such procedures. Such transverse incisions enabled operation for the major part under local anaesthesia, avoidance of prolonged retraction by strong retractors, additional safety in potentially shocked patients and early ambulation as well as ease for the operator. He suggested a transverse abdominal incision under local anaesthesia for gastro jejunostomy in poorly nourished and weak patients with pyloric obstruction, provided the patients had a wide subcostal angle. Dr. Carman answered a number of questions.

Dr. (Major) P. Govinda Rao, M.B.B.S., F.R.C.S. (Ed) then presented his paper on "SEXUAL DISORDERS OF THE MALE". During the course of his exhaustive survey of the subject, Dr. Govinda Rao, dealt with the three major problems of impotance, spermatorrhoea, and sterility in the male. He classified the causes and types of impotence, emphazised the value of a complete physical examination including instrumental examination, and outlined the treatment of impotence. He referred to the role of the bulbs and ischiocavernosus muscles in the sustenance of erection and described a new operation designed to give added tone to weak and flabby muscles met with in cases of impotence. The operation consists of plicating the loose folds of the bulbs and ischiocavernosus muscles in suitable fashion as to give it extra tonus, and is worthy of trial in selected cases. Dr. Govinda Rao referred to Testosterone and its modes of administration, and said its beneficial effects lasted only as long as therapy was maintained. Of spermatorrhoea and sterility the lecturer gave a lucid survey, and ended up by saying the young subject complaining of impotence or spermatorrhoea would be very greateful for however small a degree of improvement given him by restoring to the correct line of treatment which a competent urologist could prescribe. A very interesting discussion followed.

After a vote of thanks by the Secretary the meeting terminated.

PUDUKOTAH BRANCH

President: Dr. V. Sadasiva Iyer.
Vice-President: Dr. T. Baskaramenon,
Secretary & Treasurer: Dr. N. Thiagarajan.

The periodical meeting of the above Association was held at 4-30 p.m. on 5-5-1951 at the Town General Hospital, Pudukotah under the presidency of the President of the Association. Dr. (Miss) P. Rukmani was the host for the Tea. After tea, Dr. M. G. Ramachandra Rao, M.B.&C.M., moved the following resolution which was seconded by the Secretary and passed nem com. "The members of this branch offer their congratulations to Dr. K. Vasudeva Rao, M.D, F.R.C.P., T.D.D.(W)., on his appointment as the Director of Medical Services, Madras State." Then there was an interesting lecture on SKIN DISEASES IN GENERAL PRACTICE with demonstration of some cases by Major G. A. Naidu, M.B.B.S., F.D.S, of Erskine Hosiptal, Madura. This was followed by some discussion and the meeting terminated with a vote of thanks by the Secretary at 8-30 p.m.

RAMNAD BRANCH

President: Dr. M. G. Jones
Vice-President: Dr. S. Meenakshisundaram
Secretary: Dr. S. Sundaresan
Jt. Secretary: Dr. T. S. Ananthapadmanbhan.

The minutes of the meeting held at Schwarts High School Ramanathapuram at 4 p.m. on Thursday the 10th May 1951. The members present were entertained to tea by the Association. The Secretary read the minutes of previous meeting and the same was adopted. A circular received from the central office was read. Then the resignations of both the President and Vice President of the Association were placed before the members. They had to resign as the Government did not give them permission to accept the office. It was accepted with much regret.

Then the Secretary proposed the following names for the President and Vice President. President:—Dr. M. G. Jones, Ramanathapuram. Vice president:—Dr. S. Meenakshisundaram.

They were unanimously approved. Then the new President took the Chair and thanked the members present for having elected her as the President. Then as the outgoing President and District Medical Officer Ramanathapuram Dr. H. S. Subramanian was proceeding on leave. The Secretary and Dr. S. Janakiraman spoke about him in appreciative terms which was suitably replied by him. The Secretary proposed a vote of thanks to all those present, the authorities of the school, for allowing the use of their premises and the staff of the D.M.O's Office for the arrangements, and the meeting terminated.

TIRUCHY BRANCH

President: Dr. R. Kalamegham
Vice-President: Dr. T. V. Srinivasan
Secretary: Dr. C. R. Chari
Jt. Secy. & Treasurer: Dr. T. V. Sundaram.

A monthly meeting of the Association was held on Saturday the 21st April 1951 in the premises of the Bishop Heber High School, Teppakulam, Tiruchirapalli with Dr. R. Kalamegham, the President in the Chair. About 40 members were present. After Tea kindly provided by Dr. T. S. Balasubramanya Iyer, the President informed the members about the decision of the Managing Committee of the Association to hold the All India Medical Conference in December 1951, at Tiruchy and the same was ratified by the members. The circular regarding the advice of the Central Office at Delhi regarding the employment of Medical officers for banks and their remuneration for services rendered to the employees of the bank and their families, was intimated to the members. Then the President introduced Dr. S. Balasubramanyam M.B.B.S., the Dist Med. Officer, Coimbatore to the members. Dr. Balasubramanyam then gave a very interesting and instructive talk on the surgery of the intestinal tract with special reference to intestinal obstruction. There was some discussion in which the members took part in which it was forcedly pointed out that purgatives have no part in medicine or surgery. The Secretary then proposes a vote of thanks to the lecturer, the host of the evening and to the authorities of the Bishop Heber High School. The meeting terminated at about 9-15 p.m.

An informal meeting of the Association was held on Thursday the 26th April 1951 in the premises of the Rajaji Tuberculosis Sanatorium, Tiruchirapalli to meet the members of the Cholera Enquiry Committee who were visiting Tiruchy. Dr. R. Kalamegham the President was in the Chair. After Tea kindly provided by the Superintendent and the medical staff of the Sanatorium, the President introduced the guests to the members. The following were the guests of honour on the occassion.

Dr. Lall—Epidemiologist to the Government of India. He informed the members that he is investigating the occurrence of Epidemic Dropsy.

Lt. Col. Ahuja—Director of Central Path. Lab., the Chairman of the Cholera Enquiry Committee.

Dr. Wagle—Director of Hakline Institute—doing reasearch on plague. Dr. Tulle—Observer for W.H.O. who informed the members about the work of the W.H.O.

Dr. Jain—who is doing medical statistics work. Dr. C S. Pandit Dr. K. V. Venkataraman, Serologist to the Government of India, Dr. Narayana Rao, Director of King Institute.

Then Dr. K. V. Krishnan addressed the members on the Etiology, Symptamatology, diagnosis and treatment and also the preventive aspect of Scrub Typhus which was very much appreciated by the members. After some discussion, the Secretary proposed a vote of thanks to the honoured guests, the hosts for the evening and to the Superintendent of the Sanatorium for the use of the premises, the meeting terminated at about 7-45 p.m.

ADMISSION TO MEDICAL COLLEGES

TO CHILDREN OF MEDICAL MEN AND TREATING MEDICAL MEN AS BELONGING TO ESSENTIAL SERVICE

The following members of the Indian Medical Association waited on a deputation on the Hon'ble Sri P. S. Kumaraswamy Raja Chief Minister, Govt. of Madras at 9 A.M. on 18—6—51 and presented the following memorandum. They discussed the various points with the Hon'ble Chief Minister who gave a sympathetic hearing and promised to consider the points at the proper time. The deputationists were Dr. D. V. Venkappa, President, Dr. K. C. Nambiyar. Ex-President, Dr. A. M. Sivaraman, Hony Secretary, Madras Branch, Dr. U. Krishna Rau, President Dr. T. S. Tirumurthy, and Dr. P. A. S. Raghavan, Ex-Presidents of the South Indian Provincial Branch of the I.M.A.

1. **Rent Control and Essential Services.** In the provision of the amended legislation of the Madras Buildings (Lease and Rent Control Act. 1951) which has come into force on the 1st of May 1951 and has received the assent of the State Legislature, no mention is made of the medical profession who form part and parcel of the Essential Services for relief of human ailments and in other serious emergencies. The Government of India and other organisations such as Telephone Co. etc. have recognised the medical profession as belonging to the Essential Services. During the promulgation of the Rent Control Order and ever since its inception all these years, the medical profession was recognised as such. During the Great World War II and after, the profession was considered as belonging to the Essential Services. Petrol rations were given on a liberal scale to doctors on this account. It behoves, therefore, the State Government to treat the members of the medical profession as belonging to the Essential Services and not to curtail their legitimate privileges in the interests of medical relief to the masses of our country-men.

2. **Medical Certificates and Countersignatures.** Registered Medical Practitioners are entitled to issue certificates for Vaccination and Innoculation and this practice has been in vogue for a pretty long time. The Captains of ships and shipping companies accepted them hitherto. Recently they are insisting on these certificates being countersigned which is neither reasonable nor justifiable. The rules specify the countersignature to be free of charge but the Health Officer of the Corporation of Madras is now levying a fee of Rs. 2/- for each certificate countersigned. This procedure entails a lot of delay and inconvenience which can be avoided by removing these restrictions and getting the requisite certificates from practitioners registered under the Madras Medical Registration Act of 1914.

3. **Medical Colleges, Selection Committee and Admissions.** It is learnt that rules for admission to Medical Colleges in this State are being revised by the Committee today. It is the desire of the Association as well as the public that the Selection Committee for such admissions should have a non-official representative from the medical profession which is not only desirable but would also inspire confidence in the minds of the profession and the public. In this connection it is pertinent to point out the considered view of our Association that medical men's children should have preference in respect of admission to Medical Colleges for obvious reasons and as per our resolutions passed at the various Conferences of our Association.

ABSTRACTS FROM THE CURRENT MEDICAL LITERATURE

TREATMENT OF RINGWORM OF THE SCALP—*James Sommerville. M.B., Ch.B.—Physian for Diseases of the Skin, Western Infirmary, Glasgow*—The contagious character of Ringworm of the scalp has long been recognized. It is essentially a disease of children, especially those of school age, the incidence being highest usually between the age of six and seven. For this reason it interferes with education, particularly in the important early years of school life. The infection is most often sporadic but now and then assumes epidemic proportions. The latter is accounted for by two main causes: (1) a periodic biological increase; (2) spread due to failure to detect early cases in schools or orphanages.

Control of these early cases, in the past not easily accomplished, has during more recent times been greatly helped by two factors; (1) the introduction, in 1903, of Wood's filter lamp—a filter composed of a glass with barium and nickel oxide components which, used in conjunction with ultra-violet light, reveals a green fluorescence of the hairs affected with the common cause of ordinary scaly ringworm of the scalp; and (2) the growth of the School Medical Service. There can be no doubt that regular medical inspection at school has been responsible for detecting many early cases of scalp ringworm. This service has been further enhanced in many areas by the formation of units specially trained and equipped for controlling and treating the disease.

In discussing treatment it is wise to recall (1) that from 10 to 27 per cent. of cases tend to recover spontaneously; (2) that the human type of infection is apt to die out at puberty; and (3) that those cases due to infection from animal sources respond most readily to topical therapy. Thus treatment in general is somewhat governed by the above-mentioned factors before assessment or comparison can be made of particular forms of therapy. A note must here be added concerning the second observation, that up to date, hormonal therapy has proved of no value, Treatment may be divided into three main parts: (1) manual epilation; (2) epilation induced by X-ray irradiation or by thallium acetate by mouth; (3) the topical use of fungicides.

Manual Epilation

Manual epilation has been practised throughout the ages, and the skull cap of pitch plaster of Heliodorus found favour until the early twentieth century. It has been shown recently that by itself, manual epilation, carefully and methodically performed, can give more than 50 per cent. of cures. By most workers it is still used either directly or indirectly, as an adjunct to topical therapy, and even after X-ray irradiation. There is no doubt, and most authorities agree, that the routine and intensive use of manual epilation under Wood's glass filter, hastens and increases the potential cures ascribed to modern fungicidal agents. With the removal of the diseased hairs the follicles become more easy of access to the therapeutic agent used and greater penetration is obtained. Manual or mechanical epilation is achieved by the use of forceps, ordinary washing, friction by a small brush to rub in the application chosen and, in addition, by the use of adhesive therapy following loosening of the hairs by X-ray irradiation or after thallium acetate administration.

X-Ray Epilation

Of epilation induced by X-ray irradiation or by the administration of thallium acetate by mouth, the latter is now mainly restricted to a few cases; to the more restless children below school age, in whom X-ray irradiation would be difficult

to control. By and large, however, thallium acetate has fallen into comparative disuse because of its potential toxicity, particularly now that X-ray irradiation technique has become improved and more readily available. It must be remembered that X-ray irradiation is not in itself fungicidal; it merely induces a temporary and fairly rapid hair fall—usually within three weaks—the fungus coming away with the loosened hairs. Recent work has shown that without adjuvant therapy, and using only soap and water cleansing after the fifteenth day, at least, 87 per cent. of treated cases remained clear.

X-ray epilation must be carried out at units specially equipped and trained in the necessary technique. This consists of shaving the whole scalp and delivering a predetermined number of Röntgen units to five areas of the scalp (the so-called five-point or Adamson-Kienbock method: this is so delivered to the convex contour of the scalp that the fall off in dosage at the periphery of each area treated is overlapped by the irradiation of each adjacent area, and thus an almost uniform dosage for the whole surface is achieved. The hair loosens at the end of about two weeks, and its removal can be assisted by the use of slightly heated adhesive strapping. As already mentioned, however, this would seem to be unnecessary if careful and vigorous washing is carried out.

Fungicidal Agents

This, from the practitioners' point of view, is probably the section of greatest interest. In less recent times it was restricted to the use of iodine, or salicylic acid with benzoic acid or an ester of the latter. Success was variable and cure usually slow. More recently, however, the use of *iodine* has been resurrected. Strickler's method of using a complicated iodine compound in cotton-seed oil with a special wetting agent, following acidulation with 3 per cent acetic acid, is a reminder that iodine is still a useful fungicide and can produce 70 per cent of cures in three to three-and-a-half months.

Within recent years research into agents with fungicidal properties has introduced many new substances, particularly in the United States. The application of some of these has been instituted and investigated in this country within the past year or so. After many experiments it has been demonstrated, however, that high *in vitro* activity provides little indication of possible *in vivo* efficiency. It has been made clear, on the other hand, that therapeutic efficiency depends upon penetrative ability. consequently the vehicle or base employed is of extreme importance.

The most effective of the newer preparations include *phenylmercuric mitrate*, 0·5 per cent, with Crill No. 6 in carbowax 1500; *solicylavilide*, 5 per cent. hyamine 1 per cent. in carbowax 1500; and *copper undecylenate*, 5 per cent. in carbowax 1500. These compounds are used in the time-honoured way associated with older preparations: shaving of part or all of the scalp; repeated and thorough washing; careful and efficient application of the chosen medicament with the aid of a toothbrush; the usual precautions, by means of paper or linen linings for caps, to prevent transmission of the disease by infected hairs. And yet there would seem to be little or no uniformity of results obtained. Some workers claim only a small percentage of cures; the greater number, however, claim a varying high percentage of good results.

It cannot be denied, and indeed it is affirmed, that whatever form of therapy is chosen the main essential is the thoroughness with which the treatment is carried out and contributors to the present-day newer methods admit that epilation, be it by forceps, washing or friction with a brush, plays a not inconsiderable part in achieving success. It would seem

to be sound advice that if local therapy by fungicidal measures fails after three months, X-ray epilation must be considered.

Conclusion

In conclusion, it must remain a reflection on present-day medicine that no specific cure has so far been found, and it must be the fervent hope of all that some new and safe antibiotic may yet be discovered that will solve the difficult problem of ringworm of the scalp.

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ATHLETICS AND THE HEART—

Terence East, D.M., F.R.C.P.—The Practitioner—April '50—Physician and Physician in charge of Cardiological Department, King's College.

In discussing this question it will be assumed that the heart is apparently free from signs of disease. Should disease be present, and routine examination detect it, suitable restrictions in activity will, of course, be imposed. It is surprising how some young people, in spite of valvular defects, are able to carry out quite strenuous athletic pursuits, all in ignorance; such is the reserve power of the myocardium. But sooner or later symptoms develop and the defect is discovered. Routine examination at school should have prevented this unfortunate occurrence. But it often happens that children with heart lesions, who leave school at fifteen, get no further advice and do too much later on. In this articles the effect of athletics on the heart at various ages will be considered. Age and growth are two variable matters which need to be taken into account, and there is also a third which concerns the nature of the sport indulged in.

Heart Strain

Before going into details the often posed question may be asked once more: can a healthy heart ever be "strained"? In attempting to answer this it is first necessary to consider what the word "strain" really means. In the past, anatomical and physiological considerations have entered in and, indeed, the word is vague in its meaning. Formerly it has been supposed that the heart might become dilated owing to stretching of the muscles fibres and that, in consequence, signs of enlargement might appear; and this increase in size might lead to incompetence of the mitral valve, producing a systolic murmur at the apex. From the physiological angle the "strain" might be manifested by undue tachycardia, fatigue, and breathlessness on exertion; by a diminished exercise tolerance, by the appearance, in fact, of what has been called "the effort syndrome".

It is my belief that in a healthy heart anatomical changes are not produced by athletics, and I would quote the words of Sir Thomas Lewis: "The burden imposed by physiological acts upon the heart, however heavy those burden may be, never exhaust the heart's reserve". The physiological symptoms of the effort syndrome are related to the body and mind as a whole, rather than to the heart in particular.

Boys at School.—It is only too obvious that boys at school vary enormously in their capacity for athletics. Some may have the physique and the capacity for using it; others are not so inclined. Some have poor physique—often the frame outgrows the muscles; they are awkward and clumsy in movement. Some have stamina and pluck which will drive them to the last gasp—"they can because they think they can"; others flag and give in early. In many, or indeed most, of the things they do, there is scope for the natural ability, and boys will instinctively limit themselves to their capacity. It is in certain competitive sports that care is needed. The two important things in this

respect are long distance running and rowing. In almost everything else there is always a moment for a breather, but in these two it is not so.

Young adults.—Much of what has been said of boys at school can be applied to young adults at Universities, or when they have left school. Now their choice is freer, and they know their limitations better, and are less likely to be induced to enter for sports for which they are not actually fitted. Here, however, the competitive element is likely to be keener and the standard higher. There is no doubt that the level of attainment among the most proficient experts rises progressively. Records are always being broken; training is stricter and practice more perfect. At this age, of course, physical development is more complete; the muscles are better developed, the lanky youth has "filled out" and become strong and well-knit.

Minor infections.—It may be concluded that competitive and other sports will not damage a healthy heart in the young, or at any other age. The emphasis lies on the word "healthy". In this respect I do not mean frank disease, which at this age is likely to be valvular. It is important to bear in mind the transient, but nevertheless harmful, effects of the toxin of the minor infection on the myocardium. These may be met with as the result of an infection of the throat, or some such vague illness that can only merit the designation "influenza". That myocardial changes, transient but nevertheless certain, do occur is shown by alterations in the height and direction of the T wave of the electrocardiogram. The information is not very plentiful in such cases as these, but from the occasional examples seen there can be no doubt that in all probability transient changes are more common than might be supposed. Further, it must be remembered that the myocardium may well be in a temporary state of ill-health although no abnormalities appear in the electrocardiogram. With such things as this in mind it would be wise to restrict sports, certainly competitive sports, after even such a slight illness as those mentioned above. To undertake excessive physical activity too soon during convalescence may lead to a diminished capacity for exertion and a form of effort syndrome.

The Effort Syndrome

Many symptoms may be manifested here. Briefly, it describes a poor capacity for physical effort. This mny be shown by dyspnœa unduly easily provoked, by excessive and prolonged tachycardia, or by a proneness to early and undue fatigue. It is true that such reactions are apt to appear more easily in some persons than in others, and in many there is a strong element of neurosis, linked as often as not with anxiety. There is a certain lack of stamina and pluck; to reverse Virgil's quotation, "they can't becauso they think they can't". Much of this is constitutional and associated with the mental make-up and physical habitus. Such boys or adolescents will avoid excessive activity instinctively. In the easy times of peace they can follow their tastes. It was nearly a century ago in the American Civil War that this unsuitability for the ardour of military service was described by da Costa; and it reappeared again in the 1914-18 war, and was extensively studied by Lewis. The practical point is that, when necessary, careful and gradual training can greatly improve these young fellows and many can be raised to a high pitch of endurance and vigour. But nothing can be made of others if their hearts are not in it. Realization of this in the 1939-45 war avoided many of the troubles due to effort syndrome, in spite of much more severe tests of endurance.

The practical point is that those who have charge of boys and young adolescents should watch that they do not

attempt things beyond their strength to which keenness or the pressure of their fellows' opinion may lead them. Not that their hearts will become diseased, or "strained", but that the whole physiological reaction of the individual to exertion becomes impaired.

School Boys

To sum up the view concerning the activities of school boys, the sport most likely to do harm is cross-country running. In the growing adolescent I believe this were better omitted altogether. Rowing also needs careful consideration, but here the risk is less, for the faint oarsman is at least being carried along by the others and he can save himself by surreptitious "sugaring". But crews are carefully picked and undergo long periods of steady progressive training, so that such a lamentable default is seldom likely to arise. Shorter running races are rarely likely to be harmful, nor is football.

Young Men's Sports

After the school age many cease athletics; only those who are keen and physically fitted will continue. The grades of achievement and the competition are correspondingly higher: the rigours of the tests are all the more severe. Perhaps the highest levels are those of the long distance races, such as the Marathon Race, or the long rowing races. It is true that the Varsity race from Putney to Mortlake is always held up as a high test for the two crews, but many crews other than those of the older Universities accomplish it with less réclame. The studies of Bramwell and Ellis years ago on Marathon runners showed that on the whole they tended to be past their first youth, that they were small men, whose hearts were on the whole rather large for their bodies. This is in keeping with the observation that any actively running animals have large hearts.

It seems evident that to reach the furthest limits of human endurance in the athletic world the heart must be sound. No one can be an athlete of any prowess unless it is. A large efficient heart is certainly an essential for anyone who would aspire to rival Pheidippides.

Sport in Later Life

How long should a man keep up his football, running, rowing or squash rackets, or whatever he enjoys? May sport in middle age do harm? The answer to this in the vast majority of cases is a domestic one. Marriage and a young family soon shackle his limbs, and pushing the perambulator or leading a toddler will be the limit of the past quarter-miler. But this is all in the natnre of things. If others wish to continue, no harm is likely to accrue; the important point is to realize when the activities cease to be a pleasure and become a pain. The unsatisfactory type of case is he who suddenly realizes that middle age and its spread is upon him and who, all too late, may seek to regain fitness by injudicious exercise. Defects may already have developed in the heart and now harm may be done. But this in not common as a rule, for as often as not such attempts to regain fitness are all part of New Year resolutions which melt with the spring. But it is safe to say that those men who keep up their fitness and do not allow themselves to deteriorate suffer no harm as the years go by, and slowly they do less as they grow older.

(To be continued)

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ODDS & ENDS

Doctor: "It is a good thing you came to me now?"
Patient: "Why? Are you so down and out of work?"

Doctor's Wife: "Dear, if you are coming with me for the dance, you nust forget you are a physician, because you start counting the pulse of every lady that stretches her hand.

Friend: Did the Doctor X-Ray you?
Patient: He not only X-Rayed me but also ultra violated me.
Friend: Did he take your pulse?
Patient: No. He left it pulsating.

It may be true, he is a successful practitioner. But how can I give a certificate to a quack?

"Why not say he is an unqualified success?

Patient: Who is the doctor that is going to operate on me?
Nurse: Kilpatrick.
Patient: He shall not operate on me.
Nurse: Why not? He is an able surgeon.
Patient: May be for others. Not for me, my name is Patrick.

Compliment to the Doctor:

A woman recovering from the effects of chloroform complained "Doctor, everything was so beautiful, till I saw your face."

Registered No. M. 4839

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