

177617

IL
L: 4: 7.211mN31
MC
N49.16.1042
177617

MEDICO-SURGICAL SUGGESTIONS

Vol. XVI.

OCTOBER 1947.

No. 10.

NOVARSENOBILLON
brand Neosarsphenamine

'NOVARSENOBILLON' brand Neosarsphenamine is the drug of choice in primary and secondary syphilis. It is of value also in later stages of the disease after preliminary treatment by bismuth or mercury. 'NOVARSENOBILLON' is specific in the treatment of yaws and rat-bite fever.

SUPPLIES:—In evacuated ampoules of:
0.15 gm. 0.45 gm. 0.75 gm.
0.90 gm. 0.90 gm.

TRADE MARK

JL
4:7m21, N31
N47-16.10-12
177617

LOCULA

A 10% Solution of P-aminobenzene Sulphonacetamide Sodium,
in neutral aqueous medium.

Indicated in all inflammatory processes of the eyes originating
from bacterial infections, such as
CONJUNCTIVITIS, IRITIS, TRACHOMA, OPHTHALMIA
NEONATORUM and CORNEAL ULCERS.

Supplied in phials of 10 c. c. of 10% solution.

The following adjuvants are also available :—

SULFOCID (tablets):—Tubes of 20 tablets of 7½gr each of
P-aminobenzene Sulphonacetamide.

SULFOCID SODIUM:—Box of 6 ampoules of 5 c. c. containing
30% solution of P-aminobenzene
Sulphonacetamide sodium.

East India Pharmaceutical Works, Limited,
TOLLYGUNGE, CALCUTTA.

VITAPLEX

(Elixir Vit. B Complex)

A well adjusted concentrated preparation for the treatment of
nutritional deficiency diseases.

Useful in all Vitamin B deficiency diseases.

SPECIALLY INDICATED IN

NEURITIS, ANOREXIA AND POLYNEURITIS.

AVAILABLE IN BOTTLES OF 4 OZS.

East India Pharmaceutical Works, Limited,
TOLLYGUNGE, CALCUTTA.

MEDICO-SURGICAL SUGGESTIONS

(Established 1932.)

VOL. XVI

OCTOBER 1947

No. 10

THE ROLE OF X-RAYS IN MALIGNANT DISEASE *

K. P. MODY.†

Medical science has advanced to such a high pitch of elaboration and specialisation that it is practically impossible for anyone to keep in touch with the latest developments. And so it is not surprising that there should be such colossal ignorance about such a highly technical subject as X-ray treatment. Neither in the course of undergraduate education nor in the higher examinations such as the M.D. or the M.S. or the F.R.C.S. has any attempt been made to impart even the elements of the subject. Such ignorance has far reaching effects on the welfare of the patients. If I for one were completely ignorant of the newer drugs such as Penicillin, the Sulpha compounds, the innumerable Vitamins and Hormonic preparations, it would not make the slightest difference as I am never called upon to pass opinion upon their value or otherwise on any particular case. But whether you are the family physician or the consultant or belong to one of the specialities, you will have the responsibility of advising your patient about X-ray treatment, and moreover you will have the responsibility of treating your patients for various symptoms that develop during the course of and as a result of such treatment.

There is much ignorance on the subject, and there exist various misconceptions about the effects of X-rays and their so called dangers. First and foremost there is an idea that X-rays cause burns. They will of course do so if they are misused through ignorance on the part of the radiologist. Similar disasters could happen with other therapeutic agents if misused. When the usual reactions appear such as redness and inflammation of the skin and mucous membrane, patients and doctors are frightened and discouraged from completing the full course of treatment, thus defeating its very object, namely a complete destruction of the neoplastic process. It is not sufficiently recognised, not even by radiologists, that underdosage is valueless, nay more, it is positively harmful, in as much as the temporary improvement produced by such incomplete treatment soon gives place to extensive proliferation of the

* Paper read before the Bombay Medical Conference, 1946.

† Radiologist, Tata Memorial Hospital.

neoplasm and a recurrence which can no longer be controlled. The cardinal rule in the treatment of malignant disease is that the treatment must be given in one full course and one only. Repeated series of exposures are valueless. Reaction with adequate treatment is bound to be fairly severe, there is intense epidermitis and mucositis at the height of treatment, but these always heal within six weeks. Unfortunately even radiologists are often scared of pushing the dose to the legitimate extent, and how often do we see patients who are said to have received a course of deep X-rays without any visible changes on the skin. In this connection I may quote a passage from the Transactions of the New York Memorial Hospital, one of the largest cancer centres in the World: "It must be recognised that to day one usually has not delivered a cancericidal dose to a breast cancer unless the skin of the axilla and breast are nearly blistered. There will also be intense epidermitis where there are moisture areas such as the axilla and submammary fold, and this is probably the chief reason which keeps the radiologist from delivering adequate doses. Surgeons unfamiliar with the intense reaction produced by modern therapy are shocked to see such violent reactions. It is the rare surgeon who is familiar with the facts surrounding modern radiation treatment. These reactions as a rule clear up in about 3 to 6 weeks."

Another bogey often raised is that X-ray treatment causes fatal anaemia. This requires some explanation. Blood changes take place and the blood picture is altered, and hence the necessity for frequent blood counts during the course of treatment. The effects are on the W.B.C. and not on the R.B.C. With the massive doses used in modern practice, particularly when large segments are being radiated as in cancer of the cervix uteri, the leucocyte count drops and a moderate degree of leucopenia is produced. When it drops below 3,000 per c.mm. treatment has to be suspended. This effect is only temporary and recovery always takes place soon after the course is concluded. Thousands of exposures have been given by us and hundreds of thousands are being given all over the World and yet there is no evidence that patients ever suffer from fatal anaemia from therapeutic doses.

Cancer in a neglected case is a terrible disease. The incidence of cancer is universal irrespective of race, nationality or geographical position. We in India have unfortunately no accurate statistical data, we have to rely on foreign figures. In the United States cancer stands second on the list of mortality statistics and tuberculosis occupies the ninth place. It is likely that in India tuberculosis heads the list, but all the same the incidence of cancer is very high. Some of the best men have been working on the problem and although we now know many more facts about the disease than ever before, a great deal still remains to be done. A few outstanding facts stand out clearly.

1. That the only chance of a successful cure is in the early stages of the disease. Early diagnosis is therefore important.
2. That the only cure for the disease is surgery or radiation or both.

3. That there are no injections or drugs, chemical or otherwise that can cure the disease.

4. That whatever method we employ, whether surgery or radiation, must be thorough and radical and must aim at complete eradication of the neoplasm. Half measures are futile.

X-rays have been used as a therapeutic agent ever since their discovery in 1895. In those days machines were crude and systems of dosage were unknown. Deep therapy machines were first designed just after the Great War, in 1918, by the Germans in Erlangen, but a precise instrument of measuring the dose came much later, in 1929. The instrument is called the "r" meter and the unit of dosage is known as the international "r". Very precise doses can now be delivered, results can be duplicated and technics can be standardised. The cancericidal dose can thus be precisely stated and is about 5000 to 5500 r units.

Radiation treatment of malignant diseases is based on important biological considerations.

1. Radiation acts on individual cells. If the dose is adequate the cell is destroyed beyond recovery. If the dose is insufficient cellular activity is retarded but the cell ultimately recovers. These effects are produced on all cells, on some more on some less, hence, the terms "radiosensitive" and "radio-resistant". These effects are produced on diseased as well as healthy cells. Fortunately the effects on healthy cells are less lethal than on malignant cells and it is because of this difference that we can utilise X-rays for their therapeutic effects. Obviously if normal and diseased tissues were equally affected, we would be destroying healthy tissues in trying to destroy the diseased tissues, just what happens with any escharotic agent such as the cautery or carbolic acid.

2. Those cells which are in a state of active proliferation, actively multiplying and dividing are more radio-sensitive than the highly differentiated ones. And hence it follows that highly malignant, anaplastic tumours are more readily acted upon than the slow growing well differentiated group. As a general rule, squamous and epidermoid carcinoma are comparatively radio-sensitive and adeno-carcinoma radio resistant. This latter group is suitable for surgery because of their radio-resistant character.

3. Cells are most sensitive to radiation in their premitotic phase and are resistant to radiation when cell division has taken place. This forms the basis of the modern divided dose technic of delivering X-ray treatment. When deep therapy was first introduced an attempt was made to give a full cancericidal dose in one or

two sittings. This entailed a terrific strain on the system, but now we give small daily doses for 3 to 6 weeks and the result have been greatly improved.

Biopsy is of paramount importance. It adds precision to our diagnosis, but much more than that it will tell us whether the tumor is likely to respond to radiation, and to what extent, and gives us valuable data for prognosis. The indications of X ray treatment in malignant diseases are almost universal. For convenience of classification we may divide our cases into 3 groups.

1. Those cases which we expect to cure completely. These are the early cases of squamous and epidermoid carcinoma of the oro-pharynx, the larynx, the cervix uteri and the skin.

2. Late stages where we do not expect a cure but mere palliation, of symptoms. We have often been agreeably surprised at the marked improvement in some of these hopeless cases, and hence we try and treat every case. Pain is relieved, infection is controlled, ulcers heal and the patients are more comfortable.

3. The post-operative group, usually breast carcinomata. Sometimes in selected cases pre-operative radiation is also given.

We now pass on to a brief survey of cancer in the different systems. Cancer of the tongue heads our list. For clinical and radiological purposes we recognise cancer of the anterior two-thirds and that of the base or posterior third. In foreign clinics cancer in the anterior two-thirds predominates. In our experience the posterior third furnishes by far the greatest number of cases. About 10 years back tongue cancer was treated with radium, and even now-a-days a few centres use radium. But the modern trend is to treat such cases with deep X-rays. There are many advantages in using X-rays in preference to radium. With X-rays there is no trauma, none of the pains associated with radium implantation, no hospitalisation is necessary and there is better depth dose distribution. Moreover it offers extreme simplicity of operation, whereas radium implantation involves elaborate and complicated calculations. In cancer of the base of the tongue, which forms the much larger group, there can be no question of using radium owing to the inaccessible location. Such cases are best treated by X-rays using two fields, one on each side of the neck, centred a little below the angle of the jaw. Daily doses are given for a period of three to five weeks. These are sensitive tumours, the immediate response is excellent, unfortunately the end results are only about 15 per cent cures, because of the liability to glandular metastases early in the disease.

Intra-oral treatment is a technical improvement of very great value in tongue and mouth cancers. The rays can be directed onto the lesion without having to go through intervening healthy tissues, by means of a special cone introduced in the mouth. Result of

treatment in early cases are from 50 per cent to 60 per cent cures, so long as there are no glandular metastases. When the glands are enlarged and affected the prognosis drops to 10 per cent cures.

Cancer of the larynx comes next in our series of cases. These fall into two categories, cancer of the Intrinsic larynx and that of the Extrinsic larynx. Here again we find a marked difference in their incidence. Extrinsic larynx carcinoma is much more prevalent than the intrinsic group, as contrasted with the incidence in foreign clinics where the intrinsic group predominates. The intrinsic larynx group can be very efficiently treated by surgical procedures, radiation being reserved for inoperable cases. Extrinsic laryngeal cancers on the other hand are a radiation problem; they are sensitive tumours. Even advanced cases do well, though only temporarily; early and moderately advanced cases offer a good prognosis. Unfortunately most of our cases come in an advanced stage of the disease, one reason being that they present few symptoms in the early stages and the first indication is a mass of metastatic glands. The prognosis is only about 10 per cent chance of cure.

Breast cancer forms another large group. These tumours are adenocarcinomata. They are radio-resistant lesions and are essentially suitable for radical surgery. A radical mastectomy is the treatment of choice and the results vary from 75 per cent cures when they are limited to the breast alone, to 30 per cent cures when the axillary glands are already affected, demonstrating again the importance of early diagnosis. Even in this group X-ray treatment has wide applications. In the first place there are a large number of inoperable cases, owing to advanced disease or cardiac and renal complications or general debility and asthenia. The disease can be controlled for a number of years, ulceration can be prevented and if present healing can be promoted. Post-operative and in some cases pre-operative treatment helps appreciably in improving the results of surgery. Post-operative treatment is usually given in those cases where the axillary glands are already affected. The axilla requires meticulous dissection and it is understandable that during this dissection some glands may be left behind because of adhesions or difficulty of approach. It is also possible that during such dissection cancer cells may be disseminated in the wound.

Cancer of the cervix uteri is extremely common in this country and unfortunately we meet with a large number of young women in this group, below the age of 40 and even 30. Concensus of opinion is in favour of radiation as the treatment of choice. There are surgeons who prefer to operate. This is not the place to enter into a controversy as to which is the superior method, but one thing is certain that treatment must be radical and thorough. If one operates, it must be a true Wertheim and not a glorified hysterectomy.

The Wertheim operation is a very formidable procedure associated with a definite mortality rate. Radiation is a comparatively simpler procedure, not attended with immediate risks and produces equally good results. In every case, however small and early the lesion may appear, both X-rays and radium should be used, the reason being that in high as 30 per cent of the cases, the parametrium and glands are involved without giving any clinical evidence. It is the combination of X-rays and radium that is effective in producing the best results, radium for the primary and X-rays for the primary as well as the parametrium. Such practice has been established after extensive statistical studies and there are no two opinions on the subject. Results are excellent in early cases, 75 to 80 per cent 5 year cures can be secured.

Carcinoma of the gastro-intestinal system is extremely common in foreign countries. In America, out of a total number of 170,000 deaths from cancer every year, there are 75,000 from the gastro-intestinal tract with a large percentage of stomach cases. In our series at the Tata Memorial Hospital in the first 5000 cases, there were only 170 cases of cancer in this location. These are adenocarcinomata and are highly radio-resistant and are unsuitable for radiation treatment.

Carcinoma of the esophagus is a tragic problem; the patient is doomed. Though these are radio-sensitive tumors, the end results are most disappointing. Extremely few cases of successful cures have been recorded. Temporary improvement is, however, assured in the majority of cases, the patient who comes up with inanition and almost complete inability to swallow finds his passage opened up, he can eat with reasonable comfort, puts on weight and is generally improved. Very intensive doses have to be given. It is worth recording that out of the 114 cases treated at the Tata Memorial Hospital, 4 have survived over 2 years, two of these over four years.

Other common locations are cancer of the tonsil, buccal mucosa and cheek. These usually do well. Skin cancer is comparatively rare in this country. Out of our first 5,000 cases there were 78 cases of Skin Carcinoma as contrasted with 1,500 such cases at the Holt Institute, Manchester, in 4 years. Prognosis is excellent.

Other types of malignancy are also favourably influenced. These include Hodgkin's disease and the malignant group of Lymphomas, and the Leukæmias. The disease can be controlled but unfortunately cannot be cured. Large groups of glands external as well as mediastinal and the abdominal group can be made to disappear, unfortunately to reappear in another location. All that we can say is that treatment keeps the patient comfortable and perhaps prolongs his life.

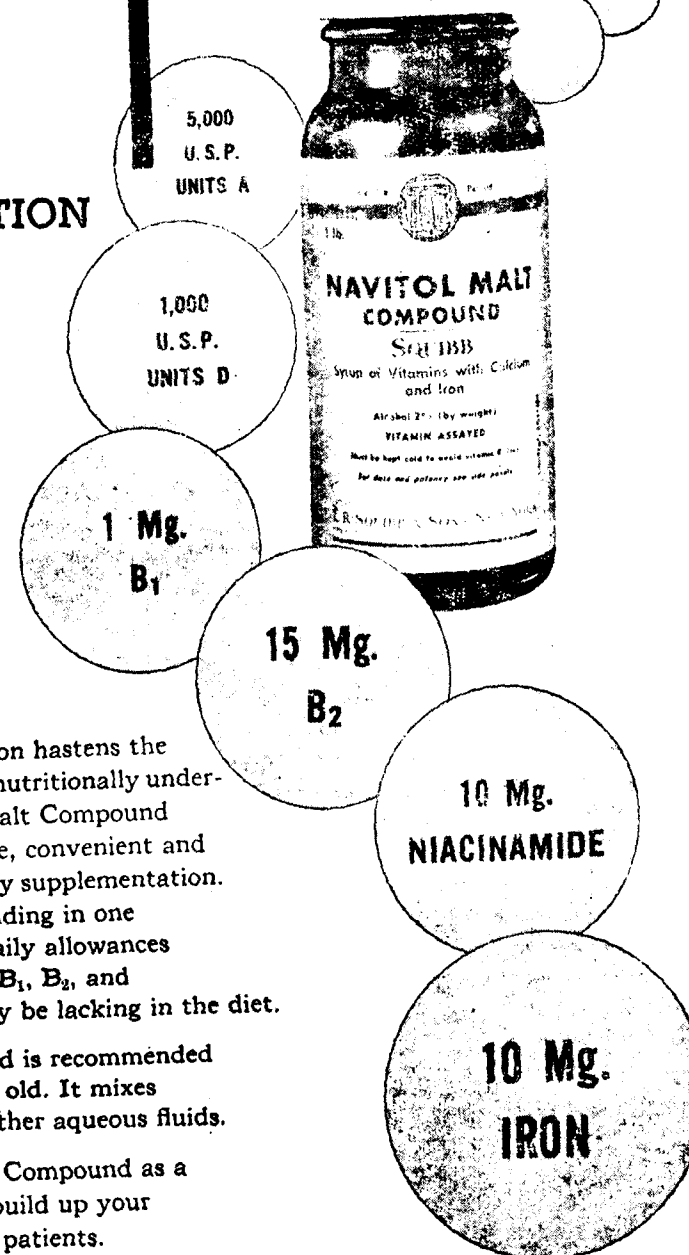
The principal drawback in X-ray treatment is that in radiating diseased tissues we have to go through healthy tissues as well.

R_x

DIETARY SUPPLEMENTATION

The
Pleasant
Effective
Way

one
tablespoonful
provides:



Dietary supplementation hastens the return to good health of nutritionally under-par patients. Navitol Malt Compound Squibb offers a palatable, convenient and effective means of dietary supplementation. It is a tasty syrup providing in one tablespoonful the full daily allowances of iron, vitamins A, D, B₁, B₂, and Niacinamide, which may be lacking in the diet.

Navitol Malt Compound is recommended for patients, young and old. It mixes readily with milk and other aqueous fluids.

Prescribe Navitol Malt Compound as a dietary supplement to build up your nutritionally under-par patients.

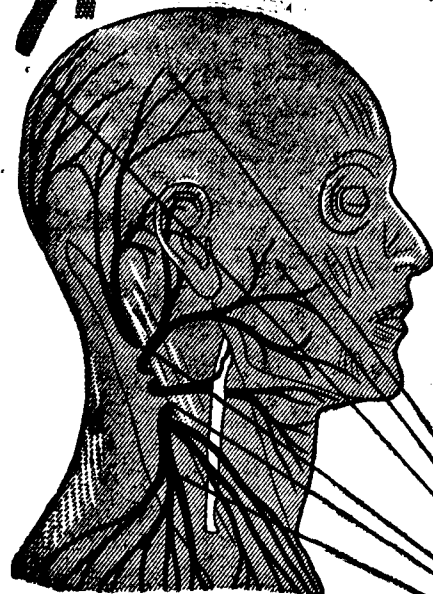
E. R. SQUIBB & SONS · NEW YORK

MANUFACTURING CHEMISTS TO THE MEDICAL PROFESSION SINCE 1868

Representatives: MARTIN & HARRIS, LTD.

CALCUTTA BOMBAY MADRAS KARACHI RANGOON DELHI LAHORE

A PRIZED FORMULA



Consisting of Calcium Glycero-phosphate, Sodium, Potassium, Manganese, Iron and Strychnine in exactly right proportions.



NERVITONE

THE MOST EFFECTIVE NERVE TONIC

Calcium, Potassium and Sodium in combination with Glycero-phosphates supply the mineral constituents so often found deficient in our daily diet, or depleted by wasting diseases. Iron and Manganese supply the blood-forming constituents when there is anaemia and loss of blood, and Strychnine provides the initial bucking up.

INDICATIONS: Most effective in cases of nervous and sexual debility, low vitality, muscular fatigue and mental or physical exhaustion during convalescence from any illness.

ALEMBIC CHEMICAL WORKS COMPANY, LIMITED, BARODA.

When ordering please mention *Medico-Surgical Suggestions*.

Intra-oral and intra-cavitary therapy in Cervix cancers obviate to a large extent this disability. Attempts are also made by suitable surgical measures to expose the part so that radiation can be given directly. This has been tried in gastric cancer, cancer of the bladder and rectum, so far with inconclusive results.

Dosage in malignant disease has to be heavy if complete sterilisation of the growth is intended. Underdosage as stated before is valueless, on the other hand overdosage brings its own dangers. During the course of treatment the patient is examined from time to time and his reactions carefully noted. Constant collaboration with the surgeon and Pathologist is essential for ensuring the best possible results.

Medical Notes & News.

The following Draft Questionnaire has been issued by the Indian Medical Association to be answered by the members of the medical profession and sent to the undersigned to help the Indian Medical Association to formulate their views:—

QUESTIONS

1. What is your impression of Medicine as a Science?

(i) Is it one and indivisible like Physics, Chemistry, Astronomy, etc.?

(ii) Can it be divided into separate water-tight compartments as Ayurvedic, Unani, Modern Scientific and so forth?

(iii) Is it possible to synthesise all these systems into an all-comprehensive system, into the corpus of which all available medical knowledge should be absorbed and thus a unified system evolved?

(iv) Is not in your opinion the study of Physics, Chemistry, Biology, Anatomy, Physiology, Pharmacology, Pathology, Bacteriology, Radiology, etc. indispensable for the teaching of Medicine, whether it is called by Ayurvedic, Unani or any other name?

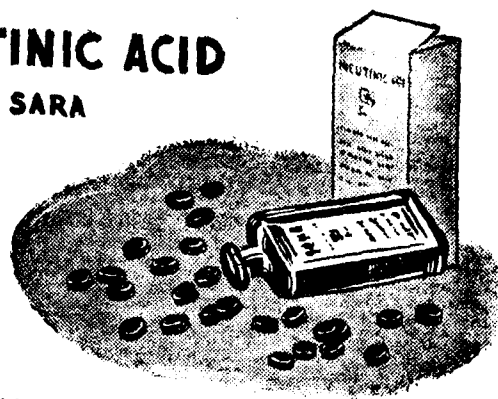
(v) If so, do you not think that the teaching of these subjects in the schools and colleges of so many different and parallel systems would cause an enormous waste of men, material, time and money?

(vi) Are not these subjects actually taught in these Ayurvedic and Unani institutions in an apologetic and rudimentary form, which defeat the purpose for which they are meant?

(vii) And as a result thereof, is it not a fact that the products of these institutions possess inadequate knowledge for scientific medical relief, preventive and curative?

(viii) Can the country afford to wait, or waste its endeavours, when it must produce 1,85,000, fully qualified medical men, to attain

NICOTINIC ACID SARA



Nicotinic Acid Sara is a white odourless crystalline powder, melting between 234°—237°C. It is non-hygroscopic and one gram dissolves in 60cc. of water at ordinary temperatures. It is stable in the dry state.

INDICATIONS: Nicotinic Acid is a specific in the treatment of pellagra and its administration in clinical doses produces striking results in clearing up the glossitis, stomatitis, gingivitis, pharyngitis, dermal lesions and mental stupor and depression of this deficiency disease.

Pellagra, indigestion, forgetfulness and insomnia respond to Nicotinic Acid Sara. Porphyrinuria, whether due to Pellagra or to the toxic effects of the Sulphonamide drugs is counteracted by Nicotinic Acid Sara. In association with liver extract, it gives good results in sprue and pernicious anaemia. It is also useful in the treatment of delirium tremens.

DOSAGE: Although optimal dosage varies according to the deficiency of the vitamin, oral administration of 500 mgms., in 10 doses of 50 mgms. each is safe and effective for the average patient with pellagra. Administration of 50 mgms., at one-hour intervals ten times a day is more effective than a single large dose.

In grown up children, the dosage varies from 50 to 300 mgms., and for children from 2 to 6 years, 25 mgms. are sufficient. Nicotinic Acid Sara is available as tablets containing 50 mgms., each packed in bottles of 25, 100 and 500 tablets.

REACTION: The absorption of this vitamin is followed by flushing, burning and itching. But these are harmless and disappear within a short time.

Note: This Vitamin—an important member of the Vitamin B Complex—is now prepared in India synthetically by Sarabhai Chemicals (Fine Chemicals Division).



SARABHAI CHEMICALS

(Pharmaceutical Division)

Baroda

Ahmedabad

SC (Med) 4

SHILPI

When ordering please mention *Medico-Surgical Suggestions*.

even half the efficiency of medical aid provided for by other civilised countries, within the next 25 years, according to the Bhoire Report?

2. In view of the fact that Medicine and Materia Medica are practically the only subjects, that are taught and practised by the Ayurvedic and Unani systems of the present day all other branches of medicine having passed into oblivion, do you think that their purpose would be best served if medical wards were set apart for them in modern medical colleges, in charge of Ayurvedic and Unani experts, to treat such patients as are willing to undergo treatment in these systems?

How would you like if facts and figures from these departments, especially from the case-notes of the cured patients, were followed up by modern methods of study and statistics, and the drugs and medicines used by those physicians were further examined pharmacologically and clinically, so that finally they might be added and incorporated into the Indian Pharmacopoeia?

Do you not think that India being a poor country, can ill afford to have 3 systems of medicine, running side by side, each having its own practitioners, hospitals and sanatoria, its laboratories and trained staff?

Do you agree, therefore, in view of the reasons mentioned above, that there is no reason why the three systems cannot be combined and amalgamated into a one and all-comprehensive system?

What is your opinion of creating chairs and stipends in these colleges for competent workers of these systems, in order to salvage drugs and medicines from them, that might stand the scrutiny of scientific methods?

3. In view of the fact that other Asiatic countries, such as China, Japan, Turkey, etc., have solved similar problems in their respective countries, by bringing medical practice into one recognised and uniform system, do you not think that it is essential in the best interest of the country that there should be a fusion and synthesis of these systems into the modern scientific system as indicated above?

What other constructive suggestion can you make?

4. Do you consider that scientific research and standardisation of Indian drugs would materially help to popularise indigenous drugs and medicine, their utilization in schemes of Medical Relief, and their compilation in the Indian Pharmacopoeia?

What are your suggestions in this regard?

5. Are you agreed therefore that, as regards medical teaching there should be only one type of medical colleges, teaching all basic scientific pre-clinical and clinical subjects according to the modern syllabus, under the Indian Medical Council?

What are your suggestions?

6. Do you agree that in modern times, when Medicine has become an exact science, the well-being of a country and its people,

is dependent on the cultivation of a scientific outlook and that it is fraught with the gravest consequences, if we choose for emotional, national or any other consideration to discard a scientific discipline and go back to the practice of the mediæval ages?

7. Do you agree that scientific medicine is based on all available human knowledge, past or present indigenous or foreign and therefore all that is best in these systems may be absorbed and utilised to add to the fund of world-knowledge?

Do you know that these systems have made great contributions to medicine in the past, that already quite one-third of all the drugs in the official pharmacopœia are indigenous, and that more and more are being tested added or rejected from day to day?

8. Do you agree that there can be no short-cuts to the acquisition of the requisite scientific knowledge for practising medicine and that therefore the training has to be prolonged, laborious and expensive in order that it may be efficient?

Do you agree that producing practitioners, doctors, kavirajes and hakims, with varying degrees of doubtful competence is not only inimical to the advance of scientific medicine but dangerous to the health of the people?

9. Do you agree that the efficiency of medical aid depends necessarily upon (i) Diagnosis, i. e., the determination of an etio-pathological target, eliminating and differentiating diseases that might cause same or similar symptoms, and upon (ii) Treatment based upon choice of drugs as indicated and made available by the progress of science?

Do you agree that both of these depend upon a comprehensive clinical case-taking and sometime a complicated examination by X-rays and Laboratories?

Do you agree therefore that an apparently simple complaint such as, sore-throat, stiff-neck, mild fever for a few days, slight diarrhœa with blood, anæmia and weakness, etc., may be due to causes from most benign to most malignant and therefore should not be treated merely for cheapness, for the consolation of some treatment that may be available ready at hand?

Do you not think therefore that it is the fundamental duty of the Government to provide best medical aid for all people dissolving all barriers of poverty, ignorance, etc., at whatever cost necessary for the purpose?

What are your constructive suggestions for the Government to supply and for the people to demand?

In India where millions die every year from preventible diseases is it possible to practise any system of medicine without an adequate knowledge of the acute infectious diseases, their cause, transmission and treatment, to reduce death-rates and adopt preventive measures against Malaria, K. A., Tuberculosis, Dysenteries, Pneumonia, Diphtheria, Septicæmia, V. D., etc.?

10. How do you purpose to utilise the existing Registered practitioners of the indigenous systems of medicine?

Do you consider it feasible to give them the privilege of a condensed course of medicine, for those who are willing and able to avail themselves of it, in mixed English and Indian languages if necessary, so that they may be utilised as practitioners possessing minimum registrable qualification during the period of transition when there is a great dearth of medical men? What other suggestions would you make in this regard?

11. In view of the fact that there have been long time-gaps, loss of continuity, mutilation, loss of literature, interpolation of unscientific and absurd materials, and effete matters into the text of these ancient books, and of the fact that these systems are being taught only theoretically from books in the Tol system or the apprentice system, for more than a thousand years without reference to the objective details of the human body in health and the changes caused therein by disease and in view of the fact that it is very difficult (in some cases impossible or at most, speculative only) to interpret the meaning of such fundamental terms and terminology such as Shira, Dhamani, Kala, Peshi Snayu, Rasa, Meda, Majja, etc., as used in the books thousands of years ago (during which period these systems became static and remained stagnant) as evidenced by raging controversy over them amongst their leaders and experts for the last 10 or 15 years do you think that these ancient works (whose number is about half a dozen only) can only be utilised for research by scholars and not for imparting a regular system of training?

12. What is your opinion of examination of a patient, for clinical case-taking by Ayurvedic and Unani practitioners?

Do you think that the various systems of the body, viz., the Nervous, Circulatory, Respiratory, Gastrointestinal, Urogenital, the Eye, Ear, Nose, Throat, etc. are or can be examined by Ayurvedic and Unani practitioners for interpretation of symptoms, differential diagnosis of diseases and for the management of diet and treatment in a scientific manner?

K. K. SEN GUPTA,

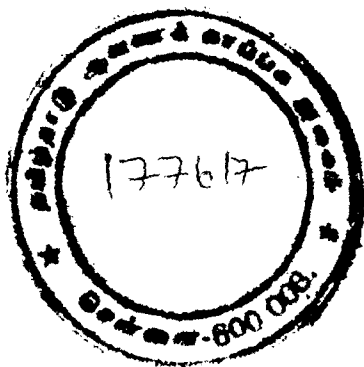
*Convener, Central Committee of the Indian Medical Association
on the Indigenous Systems of Medicine.
45/1B, Beadon Street, Calcutta.*

Copy of the Questionnaire (No. III) circulated by the Committee appointed by the Government of India to elicit the opinion of the members of the Medical profession on the Indigenous System of Medicine.

QUESTIONS

1. What are the characteristics of the indigenous systems which specially commend them to the people?

2. What are the special features of the indigenous systems which give them a distinctive and pre-eminent value from the point of view of the health of the community?
3. Any special research on indigenous systems which you have carried out? Please supply copies of your research publications.
4. In addition to physical examination, are any laboratory tests or technique peculiar to the indigenous system, used by you?
5. Are you in favour of any control over the teaching and practice of Indigenous Medicine on the lines of the control by the Indian Medical Council?
6. What measures would you suggest to increase the usefulness of the indigenous systems?
7. How can the measures suggested be made part of a comprehensive plan of medical relief?
8. How can the existing Vaidyas and Hakims be utilised, as an immediate measure, in any composite scheme of health service in rural areas?
9. What measures can be taken to improve the facilities for training in indigenous systems of medicine?
Should there be a uniform standard of teaching and examination of these systems all over India?
10. Should the students of the western medicine be taught the indigenous system of medicine? If so, at what stage of their studies?
11. Are you in favour of evolving one system of medicine in India by a process of fusion of the Ayurvedic, Unani and the Western systems? If so, what are your proposals?



251, Hornby Road, BOMBAY

Explanatory literature, clinical reports and sample on request.

Available at all chemists.

A product of HIMCO Laboratories who gave you Diabetox, Malarina, Leucol, Tensex, Kurchina etc.

LEPROSY

45 days' internal and external treatment including those for fumigation and bath for all types of Leprosy, acute or chronic. Mr P. Veeraswamy, Cocanada:—I am cured by yours alone. Dr. Sreeramulu of Leprosy Relief Assn.:—Good results both on acute and chronic where other remedies failed Rs. 12/8 per full set. V P. Charges extra.

LEUCODERMA

30 days' internal and external treatment for Leucoderma (white patches) Rs. 8-4-0 for full set. V.P. Charges extra. Guaranteed harmless.

Dr. B. Gopal Rao, B.Sc., M.B. Bangalore:—“We have used in cases of Leucoderma and found very efficacious.”

BEHAR CHEMICAL WORKS,
SHREE GAURANGA BUILDINGS,
BHAGALPUR.

Clinically Satisfactory

ANALGESIC

PHENASCODIN
Cipla

COMPOSITION
Each tablet contains acid acetyl-salicylic & phenacetin & grs. each and codeine phosphate 1/6 gr.

INDICATIONS
HEADACHES NEURALGIA TOOTHACHE
RHEUMATISM DYSMENSTRICIA ANGINA
ANTIPYRETIC INFLUENZA COLIC

RAPID · PROLONGED · NON-TOXIC

**HEMO
DRAKSO
MALT**



MADE OF?

RELY ON *Alomatic* ALWAYS

INDICATIONS:
In convalescence especially from long and debilitating illnesses. In wasting diseases, anaemia, general weakness, malnutrition, impaired digestion etc.

ALEMBIC CHEMICAL WORKS CO. LTD.,
 BARODA.

AL 388.



STOP IT WITH

TEPIEDREX

The broncho-dilators and expectorants used in the majority of cough mixtures are not very pleasant to taste. But Alembic's Ephedrex is so prepared as to make it very soothing, palatable and effective.



INDICATIONS: Whooping Cough, Cold, Bronchitis, Influenza and other respiratory disorders. Of special value in allergic coughs and asthma.

RELY ON  ALWAYS

ALEMBIC CHEMICAL WORKS CO. LTD., BARODA

AL 550

When ordering please mention *Medico-Surgical Suggestions*.

2

[illegible]

ஒவ்வொருத்தாள்.

சே எண் : 12767 ப. எண் :

[illegible]

S.F. 259A-6-1,00,000-30-1-84.

ODA.

538



E. R. SQUIBB & SONS • NEW YORK

MANUFACTURING CHEMISTS TO THE MEDICAL PROFESSION SINCE 1858

Representatives: MARTIN & HARRIS, LTD.

CALCUTTA BOMBAY MADRAS KARACHI RANGOON DELHI LAHORE

Regd. No. M. 2853.



'PALUDRINE'
The New Antimalarial

Replaces quinine today for treatment and protection in all types of malaria because :—

- 'PALUDRINE' is free from toxic effects over a wide range of dosage; with quinine even in moderate dosage cinchonism often occurs.
- 'PALUDRINE', unlike quinine, has no action on the gravid uterus, and can safely be given during pregnancy.
- 'PALUDRINE' in a single dose controls an attack of malaria; this is not possible with quinine.
- 'PALUDRINE' in bi-weekly dosage completely protects against all forms of malaria; quinine, even in daily dosage, cannot achieve this result.

Samples and Literature will be forwarded on request.

IMPERIAL CHEMICAL INDUSTRIES (INDIA) LTD.
CALCUTTA, BOMBAY, MADRAS, NEW DELHI, KARACHI, RANGOON, COLOMBO.



P. M. 2

Edited and Published by Dr. P.R. Venkappaya, at 2/337, Mint Street, Madras.
Printed by Mr. S. Sundaresan, L.P.T., for the O.O.P. Works, Ltd., Mount Rd., Madras.

44

MEDICO-SURGICAL SUGGESTIONS

Vol. XVI.

NOVEMBER 1947.

No. II.

RADIOGRAPHIC contrast media

CHOLECYSTOGRAPHY

- * 'OPACIN' brand iodophthalein.
- * 'OPACOL' brand iodophthalein compound.
Phenitodol.

BRONCHOGRAPHY

- * 'NEO-HYDRIOL FLUID' brand iodised ethyl esters of the fatty acids of poppyseed oil.
- * 'NEO-HYDRIOL VISCOUS' brand iodised oil 40% w/w iodine.

UROGRAPHY

- * 'URIODONE' brand diiodone solution.
- * 'URIODONE FORTE' brand diiodone compound solution.
- * 'UROPAC' brand iodoxyl.
Comprehensive literature on request.

MAY & BAKER LTD.

• Trade Mark

LC 20211, 02310
N47. 16-10-12
177617

Individed by MAY & BAKER (INDIA) LTD.

LOCULA

A 10% Solution of P-aminobenzene Sulphonacetamide Sodium,
in neutral aqueous medium.

Indicated in all inflammatory processes of the eyes originating
from bacterial infections, such as
CONJUNCTIVITIS, IRITIS, TRACHOMA, OPHTHALMIA
NEONATORUM and CORNEAL ULCERS.

Supplied in phials of 10 c. c. of 10% solution.

The following adjuvants are also available :—

SULFOCID (tablets):—Tubes of 20 tablets of $7\frac{1}{2}$ gr. each of
P-aminobenzene Sulphonacetamide.

SULFOCID SODIUM:—Box of 6 ampoules of 5 c. c. containing
30% solution of P-aminobenzene
Sulphonacetamide sodium.

East India Pharmaceutical Works, Limited,
TOLLYGUNGE, CALCUTTA.

VITAPLEX

(Elixir Vit. B Complex)

A well-adjusted concentrated preparation for the treatment of
nutritional deficiency diseases.

Useful in all Vitamin B deficiency diseases.

SPECIALLY INDICATED IN

NEURITIS, ANOREXIA AND POLYNEURITIS.

AVAILABLE IN BOTTLES OF 4 OZS.

East India Pharmaceutical Works, Limited,
TOLLYGUNGE, CALCUTTA.

MEDICO-SURGICAL SUGGESTIONS

(Established 1932.)

VOL. XVI

NOVEMBER 1947

No. 11

OBSTETRIC DISASTER

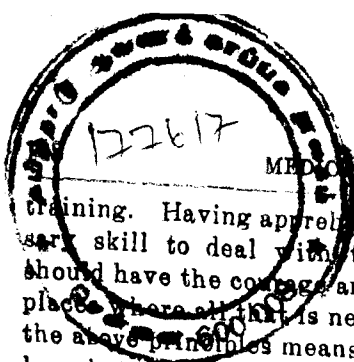
PROF. M. N. SARKAR, B.A., M.B., F.R.C.S., F.R.C.O.G.

Two patients were brought to the outpatient of a teaching Maternity Hospital in Calcutta. Both of them were young Indian girls aged between 18 and 20 years. Their general healths were excellent. Both of them had difficult labours 3 months ago. Now both of them have vesico-vaginal fistulae and recto-vaginal fistulae. In one case there is a thick bony hard ring of scar tissue in the vagina just admitting the tip of the little finger. In the other about three inches of the anterior rectal wall and the posterior vaginal wall are missing. To add to her misery a colostomy has been done on her in a local hospital. It is a poor specimen of colostomy—the wound involves at least one and half an inch of the colonic wall. Two city ambulances brought them to the out patients department and went away. They informed the officer on duty that if beds are not available the ambulance may be called again to take them away to some other hospital. The patients are indigent their relations are not to be found with them.

The account given above is not that of a rare event. It is a frequent occurrence in the out-patients' department of the big hospitals of this city. It will be the purpose of this article to discuss the various problems illustrated by these two suffering human beings.

First, let us discuss how these disasters in connection with child-birth could be prevented. Ante-natal care is of course the first necessity. The medical profession has long been conscious of the usefulness of such a care. But they have failed in two important ways to give effect to their convictions. One is that they have not been able to educate their patients and their relations about the necessity of this care. The other is those medical men who are in the administrative side as Superintendents of Hospitals have been so much handicapped for want of space in hospitals, nurses and financial conditions, that they have been more anxious to accommodate and treat patients in labour and in some cases have deliberately belittled the necessity of ante-natal care.

The next step in the prevention of these disasters is the actual care and management of the labour itself. Every medical practitioner should have sufficient obstetric knowledge to apprehend danger. If he cannot do so, the defect lies in him and the system of his



training. Having apprehended trouble, he should have the necessary skill to deal with the case or if circumstances demand he should have the courage and the facility to transport the patient to place where all that is necessary might be done. To give effect to the above principles means dealing not only with obstetrical problems but also many social and financial questions. I shall deal with the technical obstetrical problem alone. It is not always that the practitioner will be sent for in time. Supposing he is—let us see how best one can manage such cases. A further detail note of these patients will help to elucidate matters. One of the patients (*viz.*, the one with scar tissue in the vagina) had been in labour for 3 hours when the doctor was sent for. The doctor discovered that the bladder was distended. He could not make a proper abdominal palpation. He wanted to pass a catheter and make an internal examination. This was not allowed. A lady doctor was sent for. She examined the patient after drawing a good amount of blood-stained urine. Further details are not available. But it is said that on the next day without an anæsthetic the baby was pulled out of her. It will not be right to draw conclusion from such meagre details given by the patient herself. Considering her condition then most of her statements have got to be taken with a lot of reservation. Two facts come out of this history. One is that medical aid came late and the second is that medical judgment and course of action must have been inaccurate and dilatory. These are the inevitable conclusions from the second case also. In fact from most of similar cases. The remedy therefore lies in carrying on the following instructions:

(1) None but a qualified midwife should be in charge of a patient in labour. So long as we do not have sufficient midwives to go about the country, such a principle can be given effect to in the Municipalities, towns and cities.

(2) These midwives should be given definite instructions to send for a medical practitioner whenever anything goes wrong. The patient need not always pay for the doctor's fees. Where a doctor may not be available, the midwife must "hospitalize" the patient. It should be legally obligatory for the relations of the patient to help the midwife in the performance of her duties.

(3) Every hospital of whatever denomination it may be, must have in its staff—a doctor who has done at least a year as a member of the Resident House Staff in a teaching Maternity Hospital.

In view of the miserable condition of these patients so hopelessly damaged during child-birth, I do not think it is impractical to give effect to the above three principles. If obeyed, many such disasters are sure to be averted.

Now let us see what is the duty of a doctor who is called to treat a primipara for the first time when already she has been in

advanced labour. If he is thinking of abdominal section, provided the patient's condition is satisfactory, he should remove the patient to an institution where such major interference is practicable. Unfortunately in only a very few cases will such conditions be fulfilled. The practitioner will have to decide and act on his own responsibility. The more important condition to guide him will be the state of pulse, respiration and temperature. A proper study will tell the doctor as to whether he should wait or do something active. Then he should transfer his attention to the local condition. If there is the sure likelihood of immediate danger to the mother, *viz.*, threatening rupture of the uterus he must do something. In this connection I feel that the advantage of mere perforation of the head when the foetus is dead without any attempt at attraction is not well appreciated by practitioners. In cases of major disproportion the position of the head is so high up that immediate vaginal delivery may be dangerous. In such circumstances if the head is perforated and traction applied (in dead babies of course!) the rest of the labour may be over without anything untoward happening. This is the procedure we recommend under the special conditions, *viz.*, principle in long labour with major disproportion—dead foetus. No forcible traction on the collapsed head should be made to hurry labour. Breaking the skull to pieces and then to hurry labour is not safe either. Apart from the probability of injuring the vaginal walls—the big shoulders may not pass through the imperfectly dilated cervix. Any further destructive operation is bound to increase the shock of the patient. Forcible traction of the head by the Craniotomy forceps has been known to cause damage to the bladder and the rectum. In fact, it is our firm conviction that big recto-vaginal fistulae are almost all produced by forceful extraction of the presenting part with rough manipulations. Even if no destructive operation is performed a vesico-vaginal fistula does appear in consequence of pressure necrosis caused by the head in prolonged labour. Where there is a combination of vesico-vaginal fistulae and extensive recto-vaginal tear, the latter is almost always due to forceful extraction of the head. But if the head is perforated and time is taken to deliver the head—a recto-vaginal fistula can be prevented on most occasions and what is more, massive sloughing of the vaginal walls can also be prevented. If the vaginal canal remains potent and does not get constricted by massive cicatricial bands it makes the subsequent repair work easy. These contractions can be prevented by lightly packing the vaginal canal with a solution of mild antiseptic and changing the pack frequently.

The puerperium should be very carefully managed. It can be imagined in what misery the patient passes her days. The vagina becomes a veritable cesspool containing urine and stool undergoing decomposition, because of stasis and the presence of multimillions of bacteria of all sorts.

Taking the patients as they are now it is very difficult to decide what is the best treatment for them. It is never an easy matter to lay out a plan of repair. Whether the V. V. F. should be tackled first or should the R. V. F. receive the first attention, I feel the V. V. F. should be tackled first. Bladder incontinence is more troublesome than rectal.

A vesico-vaginal fistula originating after a difficult labour is not always easily repairable. Such fistulae as we have been discussing are one of the most difficult to repair. The difficulty is enhanced because of the presence of masses of fibrous tissue surrounding the fistula and the constant presence of faeces in the vagina. There are however two redeeming features. One is the excellent general health of most of these patients and the other is the temporary cessation of the periods for six to nine months after confinement. Because of the absence of anaemia and of any other debilitating diseases major surgical adventures are feasible. Because of the temporary cessation of period, operation can be undertaken at all times. These patients are often doomed to live a life of their own unless they can be made continent. Various drastic surgical measures seem justifiable undertakings if there is the prospect of curing the trouble. It seems as it were that the condition is already so bad that one cannot make it worse whatever operations are performed. But occasions do arise—when such hasty convictions and the consequent careless surgical procedures have increased the misery of many patients. One case may be cited to illustrate this:—

A young girl was brought in by a kind Missionary gentleman to a Maternity Hospital. She had a vesico-vaginal fistula admitting three fingers easily. In fact the bladder base was prolapsed and one could see the ureteral openings pumping urine into the trigone. She also had a complete recto-vaginal tear. No other abnormality was described. The surgeon carefully repaired the recto-vaginal tear and subsequently transplanted the ureters into the colon by two abdominal sections. At the end of the second operation she was still incontinent of urine and sometimes liquid faeces escaped into the vagina. It was then found that there was a small recto-vaginal fistula hidden in the vault of the vagina through which urine and liquid faeces were leaking into the vagina. This recto vaginal fistula could not be repaired.

A colostomy is often advisable as a temporary measure. The vaginal canal does not get contaminated with faeces. The bladder fistula can be repaired. When the vagina is completely dry the rectal damage can then be repaired. Closing up the colostomy wound concludes the series of operations planned to make the patient continent. Before deciding upon a colostomy, however, it is very desirable to find out whether there is a reasonable prospect

of closing up the bladder hole. If the fistula could not be repaired then the only procedure left will be the transplantation of ureters. This latter operation becomes dangerous if not impracticable and useless with a colostomy wound. Of the two cases, in one a colostomy was done. The fistula in the bladder in this case could not be repaired locally.

The two cases on whom was based the subject of discussion in this paper were in the prime of their life. They were suffering from want of care during the occurrence of a normal phenomenon in the life of any woman. We have tried to state how we can best prevent the occurrence of such tragedies which, unfortunately, are but too common in this luckless land of ours. We are in the midst of a political upheaval. When things become normal we appeal to the powers that be—that the lot of our suffering daughters and sisters will be given proper weightage in the planning of the social and economic structures of the future. Of all the public health measures, maternity and child welfare should receive first consideration. The mother produces the child and the new-born is the father of the future nation. If the nation has to grow and prosper, the mother and child should be well looked after.

(Calcutta Medical Journal, May 1947).

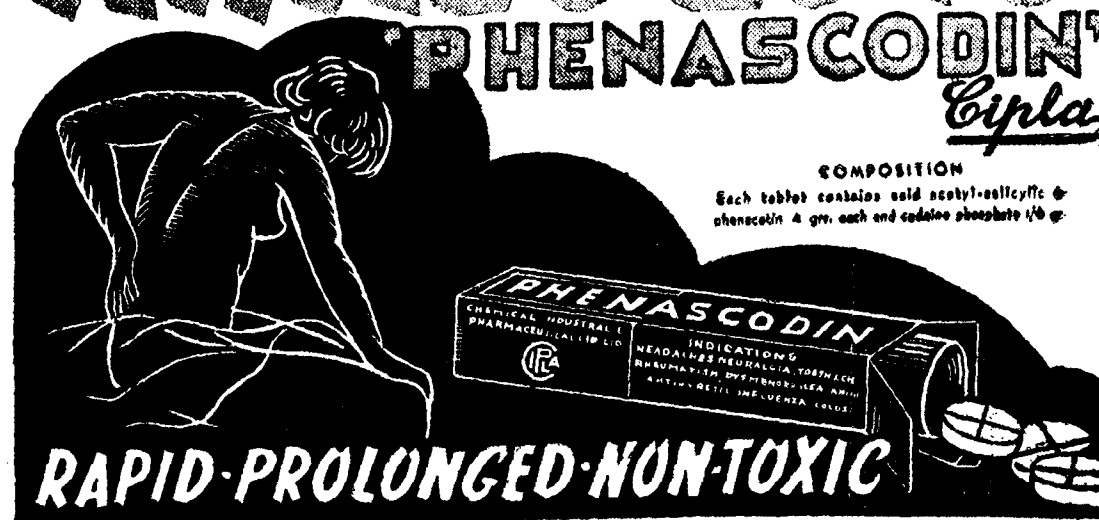
Clinically Satisfactory

ANALGESIC

PHENASCODIN[®]

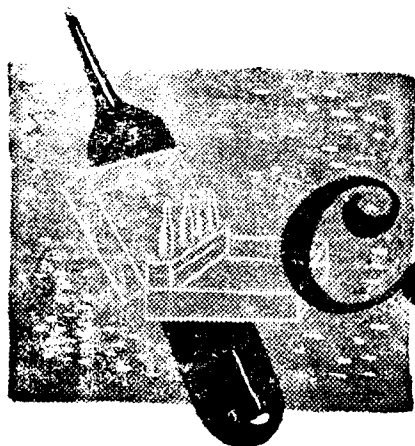
Cipla

COMPOSITION
Each tablet contains acid acetyl-salicylic & phenacetin 4 grs. each and codeine phosphate 1/8 gr.



INDICATIONS
HEADACHES, NEURALGIA, TOOTHACHE, RHEUMATISM, DYPHENTERIA, AMBLYOPIA, MIGRAINE, MENSTRUATION, INFLUENZA, COLIC.

RAPID · PROLONGED · NON-TOXIC



Calvin

INTRODUCING AN ADVANCE IN CALCIUM THERAPY

Calvin, prepared from chemically pure Calcium Levulinate, is manufactured by a special process developed in our laboratories.

Calcium Levulinate contains 50 per cent more calcium than Calcium Gluconate. It is less irritant than other calcium salts and much safer to administer.

Being more soluble than Calcium Gluconate, there is no necessity to adopt any special precautions to keep the salt from crystallising in ampoules as with solutions of gluconate which are always supersaturated.

Calvin is recommended in all cases in which Calcium by injection is indicated. Calvin is available to Physicians in two strengths,

1. 10 per cent solution for intravenous use &
2. 15 per cent solution for intramuscular use.

CONTRA INDICATION: Injections of 'Calvin' should not be given during the course of treatment with the digitalis group.

PACKINGS:

(For intravenous use) Boxes of 5, 25, and 100 ampoules of 5 cc. of 10% solution. Boxes of 5, 25, and 100 ampoules of 10 cc. of 10% solution. (For intramuscular use) Boxes of 5, 25, and 100 ampoules of 2cc. of 15% solution.

Detailed Literature on Request.

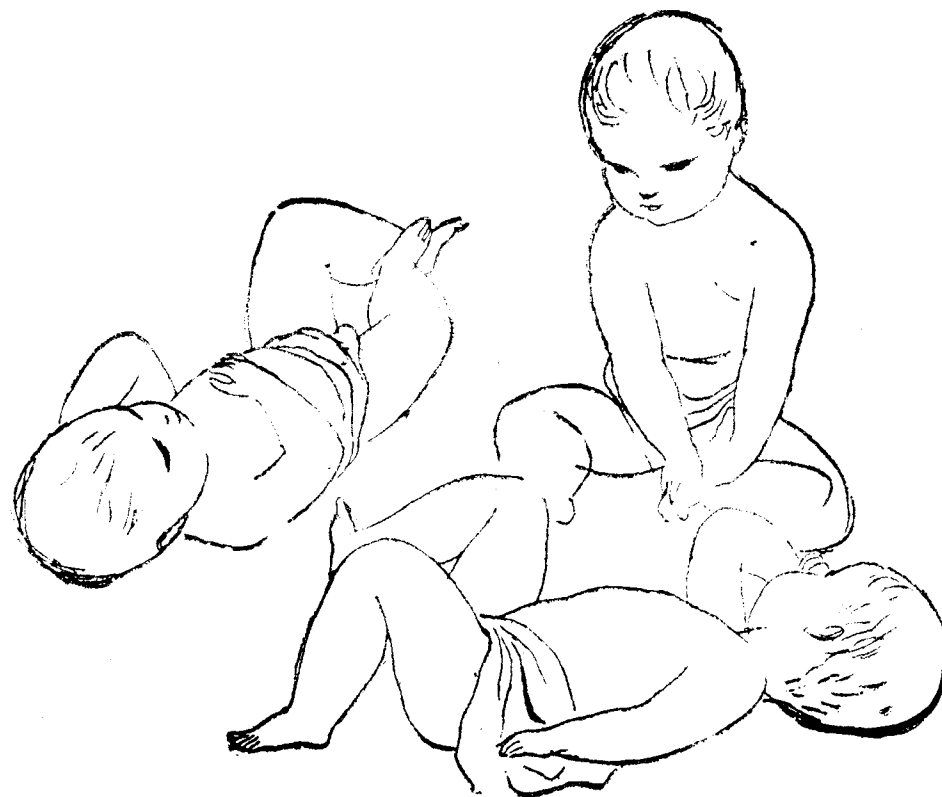
SARABHAI CHEMICALS

Bombay

Ahmedabad.

(Pharmaceutical Division)

When ordering please mention *Medico Surgical Suggestions*.



Three not thirty

Just 3 drops of Navitol, not the 5 to 30 drop dosages of less potent preparations, supplies the full basic daily requirements of both vitamins A and D.

Highly concentrated Navitol is easy to take,

well tolerated, effectively absorbed and economical. Three drops supply 5,000 U.S.P. units of vitamin A, 1,000 U.S.P. units of vitamin D—the maximum potencies as specified by U.S.P. XII.

Navitol
TRADEMARK
WITH VIOSTEROL

SQUIBB

MANUFACTURING CHEMISTS TO THE MEDICAL PROFESSION SINCE 1858

Representatives: **MARTIN & HARRIS, LTD.**

CALCUTTA BOMBAY MADRAS KARACHI RANGOON DELHI LAHORE

Sharkoferrol

A DOUBLE TONIC CONTAINING VITAMINS AND MINERALS TOGETHER.



EACH TABLESPOONFUL REPRESENTS:-

(1) Shark Liver Oil	10 mins
(2) Iron Ammonium Citrate	8 grs.
(3) Hypophosphites of Lime, Sodium and Potassium	4 grs.
(4) Vitamin A	14000 I.U.
(5) Vitamin B ₁	500 I.U.
(6) Vitamin D	4000 I.U.
(7) Tr. Cinnamon	2 mins
(8) Copper and Manganese	Traces
(9) Malt Extract rich in Vitamin B Complex	1.75 drachms

available in 1 lb. & 5 lbs. bottles

SHARKOFERROL is a well balanced preparation incorporating various nutrient ingredients like Shark Liver Oil, Vitamins A,B,D, Hypophosphites and Malt. Excellent as a roborant, recuperative and haematonic. Highly palatable and absolutely free from nauseating taste or smell.

Therapeutic Indications:-

Vitamin A Deficiency:- Xerophthalmia, Keratomalacia, Phlyctens, Night blindness, Hyperkeratosis, Retarded growth; Preventive against Respiratory, Urinary and Skin diseases.
Vitamin D Deficiency:- Rickets, Osteomalacia, Spasmophilia, Carious Teeth.

As a Reconstructive Tonic:-

Tuberculosis and Pre-tuberculosis, Scrofula, Marasmus, Debility, Malnutrition, Underdevelopment, Anaemia, Cachexia, Anorexia, Convalescence, Pregnancy and Lactation, Wasting diseases, Deficient Dietaries with its sequelae.

ALEMBIC CHEMICAL WORKS CO. LTD., BARODA

AL 184

When ordering please mention Medico-Surgical Suggestions.

THE VALUE OF DRUGS IN THE TREATMENT OF PEPTIC ULCERS.

BY W. FERGUSON ANDERSON, M.D.

The drugs used in the treatment of peptic ulcer are divided into four groups:—

1. Antacids; 2. Antispasmodics; 3. Sedatives; 4. Miscellaneous.

1. *Antacids*: The presence of free hydrochloric acid in the stomach with an ulcer results in hyperaemia and acceleration of acid secretion. Antacids are used to neutralise the free hydrochloric acid and by this means to inactivate pepsin. Antacids control acute symptoms of active ulcers associated with hyperacidity, hypersecretion, and other symptoms. The degree of neutralisation of gastric acidity for the treatment of peptic ulcer should be such at which peptic activity practically ceases—at a p. .45–5, though complete neutralisation of acid occurs at a p^H 7 (Hollander 1939).

Magnesium Trisilicate approaches the ideal antacid. It is insoluble, tasteless and non-systemic in action. In the stomach it becomes gelatinous in consistence and is an effective absorbent. It adheres to the ulcer crater and so will have a prolonged antacid action. One gram of synthetic hydrated magnesium trisilicate will neutralise 310 c.c. of 1/20 normal hydrochloric acid. It also removes pepsin from solution—a valuable property in the treatment of peptic ulcer. In therapeutic doses it does not cause diarrhoea, but in large doses it does due to formation of magnesium chloride. Large doses (6 grms.) for several days caused a decrease in serum calcium and an increase in serum magnesium levels with drowsiness. Some decrease in the absorption of protein is also noted. Therefore, the prolonged use is contraindicated. For the first 48 hours the dosage is 15 grains 2 hourly before feeds, afterwards 15 grains three times per day with a dose at bed time.

Aluminium Hydroxide: The action is mechanical one absorption of the hydrochloric acid on the colloid but slight chemical neutralisation also occurs. The colloid is effective demulcent and protective affording mechanical protection to inflamed or ulcerated areas. Some change to chloride may cause astringency resulting in constipation. Large doses may interfere with the absorption of phosphates in the intestine causing a relative phosphorus deficiency. After the healing of ulcer it should not be continued for prolonged periods as it may irritate the intestine, diminish the appetite and interfere with nutrition. In acute ulcer drii of 10 per cent solution are given hourly. Then dri—drii are given thrice a day and at bed time. The drug is contraindicated in pylorospasm complication of peptic ulcer, spastic colon, megacolon and in cases with history of previous attacks of partial bowel obstruction.

Aluminium Phosphate gel: 4 per cent solution is used. The dose is one ounce four times per day and at bed time.

Protein Hydrolystate: is a natural antacid and a rich source of nutriment. Ulcer cases are given 300—400 gms. daily in 9 divided doses. Rapid healing takes place.

Gastric Mucin: It is demulcent and antacid. It has a protective action.

Sodium Bicarbonate:—Weight for weight it has $\frac{1}{2}$ the neutralising power of magnesium oxide. It acts rapidly and relieves the symptoms of gastric ulcer rapidly but acts for a very short time. It is absorbed in the intestine; so it is a systemic antacid. After ingestion, carbondioxide is formed in the stomach and relief does result from eructation of the gas. The evidence about its increasing the acid secretion afterwards is not conclusive. Soluble alkalies are not harmful in moderate dosage in the treatment of uncomplicated ulcers in young patients. In those with renal defect impairment of salt and nitrogen may be hindered. It may cause alkalosis, prolonged use may cause the precipitation of a renal or ureteric calculus. In the treatment of ulcer, this drug will sometimes relieve pain uncontrollable by other means.

Magnesium Oxide: It is insoluble. It acts slowly but for a very long time. It is likely to cause diarrhoea. To avoid this it may be used, alternatingly with calcium salts. The dose is 30—60 grs.

Magnesium Carbonate: Its action is similar to magnesium oxide.

Magnesium Hydroxide: It also has a similar action. Mixed with colloidal aluminium hydroxide it gives a more prolonged antacid effect than colloidal aluminium hydroxide alone.

Calcium Carbonate: It is a mild non-systemic but constipating antacid. The dose of 15—60 grs.

Bismuth Salts: In therapeutic doses have a negligible effect as an antacid and do not form a protective covering for the ulcer. It is of no value for the relief of pain in the gastro duodenal disease

ANTISPASMODICS.

Belladonna or atropine. It diminishes interdigestive secretion. The dose should be at least $\frac{1}{75}$ gr. in 60 m. of water at bed time. 10 m. of a similar solution are increased daily upto the maximum the patient can tolerate without unpleasant dryness or paralysis of accommodation.

Effect on Motility: Excessive spasm or motility is not relieved by the doses commonly employed. At least $\frac{1}{50}$ gr. of atropine injected hypodermically is required for this purpose. Atropine $\frac{1}{50}$ gr. by hypodermic injection at 10 a.m. and 8 p.m. for several days will help in relieving the nocturnal pain and allow an increase in diet.

Syntropan, novatropine and trasentine have no side effects but are more expensive and do not possess the effectiveness of atropine or belladonna.

Papaverine: ($\frac{1}{2}$ —2 grs. by mouth). It may be used with belladonna for intractable pain.

Sedatives.

Phenobarbitone (1-3 grs.) is useful for worry and pain of the ulcer patient.

Miscellaneous Drugs.

1. Olive oil: It is useful at the beginning of treatment. It should be given just before the hourly feeds in half-ounce doses. It diminishes gastric secretion and acidity and is food.

2. Human Gastric Juice: Morrison (1945) gave to 10 ambulatory peptic ulcer patients $3\frac{1}{2}$ ounces of diluted sterile neutral gastric juice every hour during waking hours. 8 were symptom free in 24-48 hours. No recurrence of ulcer occurred in the 3 years following. In 2 old chronic cases there was no improvement. The diet allowed was normal.

Hormones; vitamin A, Novocain, Histidine, Bile salts and insulin are of no value.



251, Hornby Road, BOMBAY
Explanatory literature, clinical reports
and sample on request.

Available at all chemists.
A product of HIMCO Laboratories who
gave you Diabetox, Malaria, Leucol,
Tensox, Kurchina etc.

Special Measures.

If hypersecretion and night pain cannot be controlled by orthodox means continuous intragastric drip of Winkelstein may be required. Aluminium phosphate gel. 1 per cent or aluminium hydroxide 2 per cent, or milk are given by this way.

Recurrence.

Within five years of the development of a peptic ulcer 50 per cent of patients have a recurrence. To prevent this, a strict post ulcer regime must be continued for life.

(Abstracted from the Medical Press & Circular).

TREATMENT OF ACUTE GONOCOCCIC URETHRITIS WITH SINGLE SUBCUTANEOUS INJECTIONS OF PENICILLIN IN BEESWAX-PEANUT OIL

CAPTAIN DAVID FROST, FIRST LIEUTENANT MANUEL F. ALLENDE,
CAPTAIN WILLIAM M. M. KIRBY AND MAJOR HAROLD
S. GINSBERG, FORT BRAGG, N. C.

*From the Medical Service Army Service Forces Regional Station Hospital,
Fort Bragg, N. C.*

The efficacy of single intramuscular injections of penicillin in beeswax-peanut oil seems well established for the treatment of acute gonococcic urethritis. Romansky and Rittman reported 100 per cent cures in seventy-five patients treated with a single intramuscular dose of 150,000 units of a penicillin-beeswax-peanut oil mixture, and followed bacteriologically for one week. Although this high percentage of cures has not been obtained in subsequent studies, the reported results have uniformly been equal to those obtained with 100,000 or 200,000 units of penicillin in saline administered in divided doses. Of 1,060 patients treated under the auspices of the United States Public Health Service, and followed with cultures for a minimum of ten days, 91 per cent were cured by single intramuscular injections of 200,000 units of a penicillin in oil mixture. In the more recent series of Leifer and associates, cures were obtained in 91 per cent of eighty-three patients who received single intramuscular injections of 300,000 units of penicillin in various concentrations of beeswax and peanut oil, and who were followed bacteriologically for three weeks.

It has been shown recently that absorption occurs more regularly, and there is greater prolongation of bacteriostatic concentrations of penicillin in the blood stream, when penicillin-beeswax-peanut oil mixtures are administered by the subcutaneous rather than the intramuscular route. It seemed appropriate, therefore, to treat a series of patients with a single subcutaneous injection of a standard penicillin-beeswax-peanut oil mixture, and to compare the percentage of cures with those obtained with the intramuscular route.

A standard commercial penicillin-beeswax-peanut oil mixture, containing 4.8 per cent beeswax, and 300,000 units of penicillin per cubic centimeter, was used for the entire study. After warming the thick, viscid material in the incubator (37 deg. C.) for thirty to sixty minutes, 1.15 c.c. was withdrawn into a 5 c.c. Luer-Lok

syringe through a number 15 gage, needle, the extra 0.15 c.c. being added to allow for the amount lost in the needle during injection. A number 17 gage needle was used for the actual injection, which was made into the subcutaneous tissue along the outer aspect of the thigh, overlying the fascia lata.

A single subcutaneous injection of 300,000 units (1 c.c. of the mixture) was administered to 360 soldiers with acute gonococcic urethritis, in whom the diagnosis made by the history, the presence of a urethral discharge, and a positive smear and/or culture. Post-treatment observations, consisting of a careful clinical examination, smear and culture of any urethral discharge and culture of the centrifuged urine sediment, were made on the seventh, fourteenth, and twenty-first days following treatment.

TOXICITY.

Moderate soariness was noted at the site of the injection in almost every instance for from twenty-four to forty-eight hours. In approximately 10 per cent of those treated, induration and nodule formation occurred at the local site. There was mild tenderness and erythema about the nodule for a week or two, following which the tenderness subsided and the nodule gradually decreased in size over a period of several months. In three patients the nodule became fluctuant, and was treated by incision and drainage of 5 to 10 c.c. of sterile, oily material. These local reactions seemed to be associated with the depth of the injection; when the mixture was inserted superficially into the skin itself, nodules and sterile abscesses were encountered, whereas when the material was injected well down into the subcutaneous tissues, the local reaction was minimal. No instances of urticaria or angioneurotic edema were noted.

RESULTS.

Of the 260 patients treated, 200 were followed for a minimum of twenty-one days with weekly clinical and bacteriologic examinations. The other 160 were either discharged from the Army or were transferred to other posts prior to the completion of the three week follow-up period.

Of the 200 treated and followed for three weeks, 118 were white and eighty-two were Negro. Cures were obtained in 177 patients (88.5 per cent), of whom 104 were white and seventy-three Negro; twenty-three (11.5 per cent) were failures. The failures are further classified according to time of detection and race in Table I. Almost one-half of the failures were detected on the twenty-first day following treatment.

Table I. Failures Classified According to Time of Detection

Race.	No. of cases.	Day after treatment on which failure was detected.		
		7	14	21
White	... 15	6	3	6
Negro	... 8	2	1	5
Total	... 23	8	4	11

Because of the possibility that the failures were caused by penicillin resistant gonococci, the effect of a second course of treatment was observed with great interest. The results are presented in Table II. One patient was cured by penicillin in saline, of the other twenty-two, only two were definite failures following the second injection of penicillin-beeswax-peanut oil. Eleven fulfilled all the criteria of cure including a three week follow-up period, and in the other nine the period of follow-up was too short to determine whether they were cures or failures.

Table II. Results of Retreatment of the Twenty-Three Patients not Cured by the First Injection.

Method of treatment.	No. of cases. Negro. White.		Results.
Penicillin in saline, 200,000 units in 4 doses	... 1	1	Cure, three weeks observation.
Penicillin-beeswax-peanut oil 300,000 units (1 cc.)	11 2	9	" " "
	4 2	2	No relapse during 2 weeks observation.
	... 4 2	2	No follow-up possible—patients transferred.
	1 1	0	No relapse during 1 week observation.
	2 1	1	Failures (1 at 7 days, 1 at 14 days).
Total	... 23 8	15	

DISCUSSION.

The results obtained in this series of patients treated with single subcutaneous injections of penicillin in beeswax-peanut oil were comparable to those observed previously when the penicillin-beeswax-peanut oil mixtures were administered by the intramuscular route, namely approximately 90 per cent were cured, and 10 per cent were failures. It is thus apparent that the more regular absorption and greater prolongation of blood levels with the subcutaneous route are not of sufficient magnitude to alter the clinical results from the standpoint of cures and failures.

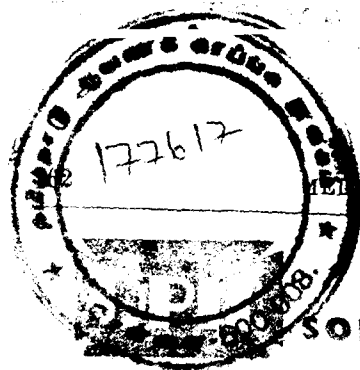
Manifestations of toxicity, especially induration, nodule formation, and sterile abscesses, occurred with sufficient frequency following subcutaneous injections to require careful precautions with this route of administration. These reactions occurred when the oily mixture was injected into the skin itself, rather than well down into the subcutaneous tissues. Otherwise, the subcutaneous route was well tolerated, and seemed to cause less discomfort at the time of injection than the intramuscular route.

One of the most important points emphasized by the present study is that although a single injection of 300,000 units of penicillin in beeswax-peanut oil is probably the simplest, most satisfactory method available at present time for the treatment of acute gonococcal urethritis, only nine out of ten patients are cured, and a careful post-treatment period of observation is necessary to determine whether cure has been effected. The fact that eleven of the twenty-three failures in the present series were detected at the end of three weeks emphasizes that careful follow-up examinations, both clinical and bacteriologic, should be continued for a minimum of at least twenty-one days.

At least two of the failures were not cured by a second injection of the penicillin-beeswax-peanut oil mixture, and in many of the others the following-up period was not of sufficient length definitely to determine the outcome, since the patients were transferred to other military installations. Whether penicillin resistance, or certain structural abnormalities were responsible for the cases which did not respond was not determined, but it is evident that some cases of acute gonococcal urethritis are refractory to penicillin, as they were to earlier forms of therapy.

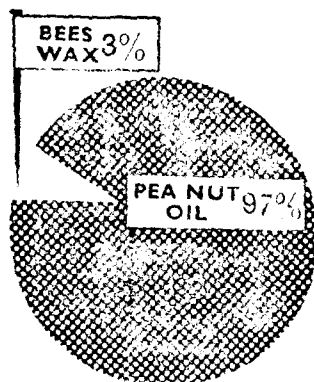
SUMMARY AND CONCLUSIONS.

1. Of 200 patients with acute gonococcal urethritis, 177 (88.5 per cent) were cured by a single subcutaneous injection of 300,000 units of penicillin in beeswax-peanut oil, and twenty-three (11.5 per



CO-SURGICAL SUGGESTIONS

SOLVENT FOR PENICILLIN



The researches of Romansky and Rittman have established that suspension of Penicillin in oil and wax has the effect of maintaining assayable blood level for 24 hours as contrasted with 4 hours in case of Penicillin in aqueous solution. It is essential that single injection of 3,00,000 units of Penicillin in the beeswax oil mixture is made for the maintenance of blood level. This mixture of oil with wax allows prolonged absorption of Penicillin from a single dose making it possible to reduce the frequency of injections.

After careful experiments and tests we have succeeded in preparing a pure solvent containing 3% beeswax and 97% peanut oil, which we are proud to present to the medical profession.

Write for literature and rates
OPIIL
ORIENTAL PHARMACEUTICAL INDUSTRIES LTD.
MAHIM, BOMBAY 16
Phone: 89195 Grams: 'OPIILWORKS'

opil 41

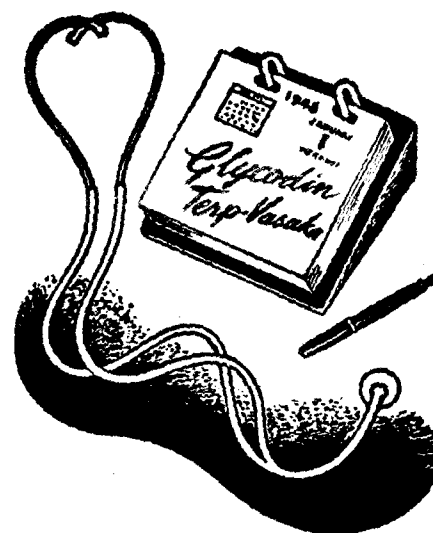
cent) were failures. These results compare favourably with those obtained previously when penicillin-beeswax mixtures were administered by the intramuscular route.

2. There was less discomfort at the time of injection with the subcutaneous than with the intramuscular route, but in a small percentage of cases, in which the material was injected too superficially, subcutaneous injections were followed by induration, nodules and sterile abscesses.

3. The detection of eleven of the twenty-three failures three weeks after treatment emphasizes the necessity of a minimum follow-up period, both clinical and bacteriologic, of at least twenty-one days.

4. Single subcutaneous or intramuscular injections of 300,000 units of penicillin-beeswax-peanut oil (1 c.c.) constitutes the simplest and most satisfactory method of treating acute gonococcal urethritis available at the present time.

*Indian Journal of Venereal
Disease and Dermatology.*
—Amer. J. Syph : XXXI :
200, '47.



Glycodin Terp-Vasaka Contains active principles of Vasaka together with Terpene Hydrate, Codeine, etc. It has been proved highly efficacious in coughs, colds, bronchitis, asthma, throat and pulmonary tuberculosis and Whooping cough.

COMPOSITION: Each fluid drachm contains —		
Antimony Tartrate		1/60 gr.
Terpene Hydrate		1/8 gr.
Codeine Phosphate		1/8 gr.
Menthol		1/24 gr.
Syrup Tolu		1/5 Min.
Syrup Vasaka		Sufficient.

RELY ON **Alembic** ALWAYS

ALEMBIC CHEMICAL WORKS CO., LTD., BARODA

AL. 308.



STOP IT WITH...

EPHEDREX

The broncho-dilators and expectorants used in the majority of cough mixtures are not very pleasant to taste. But Alembic's Ephedrex is so prepared as to make it very soothing, palatable and effective.

INDICATIONS:
Whooping Cough,
Cold, Bronchitis, In-
fluenza and other
respiratory disor-
ders. Of special
value in allergic
coughs and asthma.

RELY ON **Alembic** ALWAYS

ALEMBIC CHEMICAL WORKS CO., LTD., BARODA.

AL. 358

When ordering please mention *Medico-Surgical Suggestions*.

INJECTIONS



ALEMBIC manufacture
a wide range of paren-
teral products which are
in frequent use in medi-
cal practice. A few of
the new specialities are
described here.

Bismutal: Sterile solution of 5% Bismuth Sodium Tartrate in 25% saccharose solution for the treatment of syphilis.

Miolan: Defatted sterile milk for non-specific protein therapy. Indicated in skin diseases, arthritis and gynaecological troubles.

Miolan with Iodine: Sterile milk with 0.04% iodine. Indicated in chronic inflammatory conditions.

Sylomin: Each 5 cc. ampoule contains 30 grs. Hexamine, 12 grs. sodium salicylate and 3 grs. Caffeine Sodio-salicylate. Indicated in pyelonephritis, cystitis, urinary infections, catarrhal jaundice, encephalitis.

RELY ON



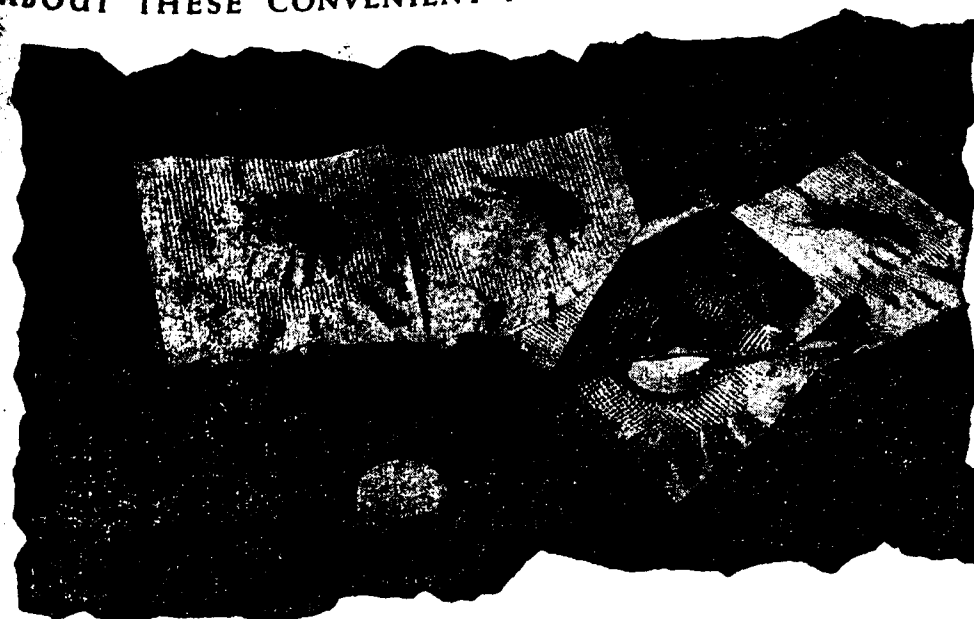
ALWAYS

ALEMBIC CHEMICAL WORKS CO. LTD., BARODA

When ordering please mention *Medico-Surgical Suggestions*.

Do you know

ABOUT THESE CONVENIENT NEW FORMS OF PENICILLIN?



TABLETS PENICILLIN CALCIUM SQUIBB are individually and hermetically sealed in aluminum foil to prevent deterioration from moisture. Hence physicians can prescribe precisely the number needed without fear of potency loss. Penicillin-destructive gastric

juices are buffered by 0.5 gm. of trisodium citrate in each tablet. Tablets Penicillin Calcium Squibb provide 50,000 units, making oral therapy feasible for many conditions which heretofore could be treated only by repeated parenteral injections.

Squibb also has available these new convenient forms of penicillin:

PENICILLIN CHEWING TROCHES

20,000 units penicillin calcium in a flavored paraffin base, each troche individually wrapped. Box of 6.

PENICILLIN OINTMENT

General purpose ointment containing 1,000 units penicillin calcium per gram in a base of petrolatum, anhydrous lanolin, beeswax and peanut oil. Tube of 14.5 Gm. (½ oz.)

PENICILLIN OINTMENT OPHTHALMIC

1,000 units penicillin calcium per gram in a base similar to general purpose ointment, but with consistency adjusted to ophthalmic use. Tube of 3.6 Gm. (⅙ oz.)

PENICILLIN IN OIL AND WAX

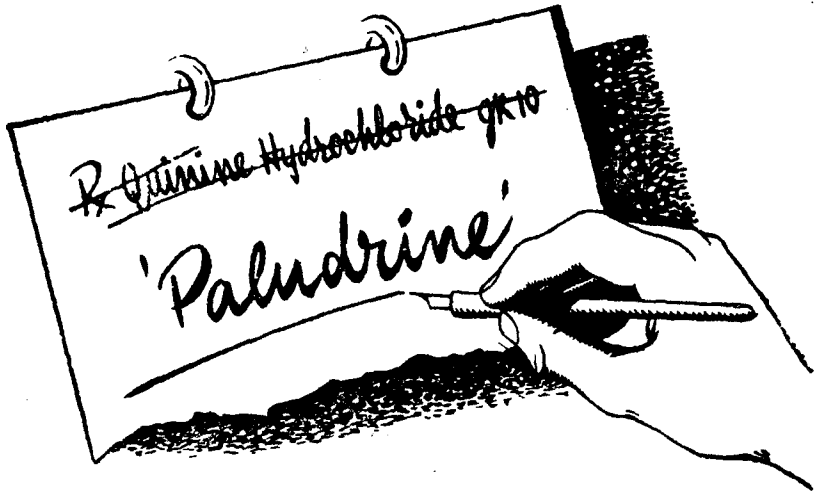
Penicillin calcium in peanut oil with beeswax, 300,000 units per cc. 1-cc. and 10-cc. vials.

SQUIBB *Penicillin Products*

MANUFACTURING CHEMISTS TO THE MEDICAL PROFESSION SINCE 1898

Representatives: **MARTIN & HARRIS, LTD.**

CALCUTTA BOMBAY MADRAS KARACHI RANGOON DELHI LAHORE



'PALUDRINE'

The New Antimalarial

Replaces quinine today for treatment and protection in all types of malaria because :-

- 'PALUDRINE' is free from toxic effects over a wide range of dosage; with quinine even in moderate dosage cinchonism often occurs.
- 'PALUDRINE', unlike quinine, has no action on the gravid uterus, and can safely be given during pregnancy.
- 'PALUDRINE' in a single dose controls an attack of malaria; this is not possible with quinine.
- 'PALUDRINE' in bi-weekly dosage completely protects against all forms of malaria; quinine, even in daily dosage, cannot achieve this result.

Samples and Literature will be forwarded on request.

IMPERIAL CHEMICAL INDUSTRIES (INDIA) LTD.
CALCUTTA, BOMBAY, MADRAS, NEW DELHI, KARACHI, RANGOON, COLOMBO



P. M. 2

Edited and Published by Dr. P.R. Venkappaya, at 2/337, Mint Street, Madras.
Printed by Mr. S. Sundaresan, L.P.T., for the C.O.P. Works, Ltd., 1/17, Mount Rd., Madras

MEDICO-SURGICAL SUGGESTIONS

Vol. XVI. DECEMBER 1947. No. 12.

RADIOGRAPHIC contrast media

CHOLECYSTOGRAPHY

- * 'OPACIN' brand iodophthalein.
- * 'OPACOL' brand iodophthalein compound, Pheniodol.

BRONCHOGRAPHY

- * 'NEO-HYDRIOL FLUID' brand iodised ethyl esters of the fatty acids of poppyseed oil.
- * 'NEO-HYDRIOL VISCOUS' brand iodised oil 40% w/w iodine.

UROGRAPHY

- * 'URIODONE' brand diodone solution.
- * 'URIODONE FORTE' brand diodone compound solution.
- * 'UROPAC' brand iodoxyl.

Comprehensive literature on request.

MAY & BAKER LTD.

Trade Mark

177617

LOCULA

A 10% Solution of P-aminobenzene Sulphonacetamide Sodium,
in neutral aqueous medium.

Indicated in all inflammatory processes of the eyes originating
from bacterial infections, such as
CONJUNCTIVITIS, IRITIS, TRACHOMA, OPHTHALMIA
NEONATORUM and CORNEAL ULCERS.

Supplied in phials of 10 c. c. of 10% solution.

The following adjuvants are also available :—

SULFOCID (tablets):—Tubes of 20 tablets of $7\frac{1}{2}$ gr. each of
P-aminobenzene Sulphonacetamide.

SULFOCID SODIUM:—Box of 6 ampoules of 5 c. c. containing
30% solution of P-aminobenzene
Sulphonacetamide sodium.

East India Pharmaceutical Works, Limited
TOLLYGUNGE, CALCUTTA.

VITAPLEX

(Elixir Vit. B Complex)

A well-adjusted concentrated preparation for the treatment of
nutritional deficiency diseases.

Useful in all Vitamin B deficiency diseases.

SPECIALLY INDICATED IN

NEURITIS, ANOREXIA AND POLYNEURITIS.

AVAILABLE IN BOTTLES OF 4 OZS.

East India Pharmaceutical Works, Limited
TOLLYGUNGE, CALCUTTA.

MEDICO-SURGICAL SUGGESTIONS

(Established 1932.)

VOL. XVI

DECEMBER 1947

No. 12

NEED FOR A STUDY OF SOCIAL COMPONENTS IN LEPROSY

BY P. SEN, M.B.

*Leprosy Officer, Bengal Branch of the British Empire Leprosy Relief
Association, Calcutta.*

INTRODUCTION.

The significances of emotional components of illness in retarding
and complicating treatment and control of leprosy have frequently
been recognised by physicians responsible for the clinical study and
care of leprosy patients; but they were almost as frequently set
aside without due consideration and treatment of the underlying
causes. The emotional disturbances did not fall within their main
objectives and were often regarded as hindrances or annoying
complications rather than as a matter for serious study, mainly
because of concentration of interest in the study of organic compo-
nent of the disease, and also perhaps because of lack of time for the
rather tedious procedure necessary for such studies.

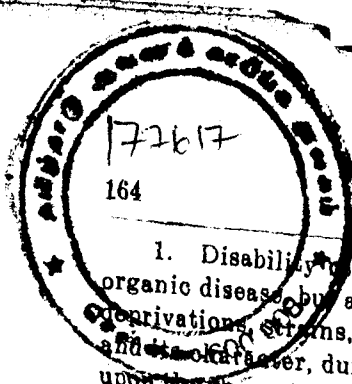
In recent years there has been a growing evidence of recogni-
tion in general medicine of the inadequacy of medical care related
only to pathological processes localised in body tissues and of the
significance of adverse social conditions and maladjustments in
producing excessive or repressive emotional reactions and strains.
Such recognition along with the inadequacy of established methods
of clinical and laboratory examinations in determining such causes
of illness have given rise to a body of concepts, methods and tech-
niques comprising what is called Social Medicine.

My plan for writing this article is a growing conviction in me
that these concepts, methods and techniques if applied in leprosy
work will not only improve the quality of our medical care but also
go a long way in the prevention and control of leprosy. I have
devoted a considerable portion of the present article to a discussion
of the general principles of social medicine to serve as a background
for a discussion of the application of these methods to leprosy. I
would admit that my knowledge on the subject is theoretical as
opportunity did not offer to study them in practice.

GENERAL PRINCIPLES OF SOCIAL MEDICINE.

Correlated studies have brought forth the following points the
validity of which is being tested in many fields concerned with
social medical work.

A paper read before the All-India Leprosy Conference, held under the auspices
of the Kasturba Memorial Fund, at Wardha, October 30, 1947.



164

MEDICO-SURGICAL SUGGESTIONS

1. Disability results not only from impairment of function by organic disease, but also from impairment of function by physical deprivations, strains, faulty habits and feeling of dissatisfactions; and the character, duration and severity are dependant not alone upon the characteristics and intelligence of the patient as an individual and upon the total situation of which he is the centre.

2. It is possible without any objective physiological tests to secure fairly accurate information about states of dissatisfaction as well as about states of physical deprivation and strain, and the conditions preventing them.

3. Measures which relieve these states are known and can be applied, thus reducing the disability they cause.

4. Disability from these states frequently complicate disability from organic disease and measures suitable for relieving both forms of disability must be applied in order to restore patients to the best of health possible for them.

A distinction between disability and disease is envisaged in the above enumeration of principles. This distinction is basic to the understanding of the significance of adverse social factors in diseased persons. Disability is a state in which some of the natural functions are disturbed resulting in deprivation of power, so that the patient cannot meet the usual requirements of life without pain or discomfort, that is a state in which the process of living produces symptoms which prevent some of the natural activities of the body from being performed freely and efficiently. Whereas, disease is an abnormal state of the body resulting from harmful effects of pathological processes, injurious substances or accidents; disease is recognised by objective examinations, either as structural changes or as abnormal conditions determined by chemical, physical or biological tests, and as such is denoted as organic disease. According to this definition disability is subjective and consists of disturbances of health recognised, described or indicated by the affected individual; while disease is objective and is recognised by a doctor.

Illness may be caused by either disease or disability or both. Disease is only one element of illness. There is no constant relationship between the degree of bodily impairment and the degree of disability. Disease like cancer and syphilis may injure the body extensively or even fatally, before causing disability. Whereas, diseases which disfigure and repel others, though not in themselves disability, may cause disability by blocking the person from engaging in activities or from enjoying associations with others.

Adverse social conditions are significant as cause of illness chiefly because of their power to disable. They act most adversely in recurrent and chronic diseases than in the acute; because in the latter cases the swiftness of onset and termination of the disease and the return to normal functioning within a short period lessens

MEDICO-SURGICAL SUGGESTIONS

165

the liability that adverse social factors will play a large part in the prevention of recovery. Recurrent and chronic diseases, on the other hand, are characterised by more prolonged disability and by need of a greater degree of adjustment requiring the patient's participation and thus adverse influences from the patient's personality and his social environment become more significant in the medical care.

This new approach is being fully utilised in the medical social case work method of study which has been evolved to meet the psychological aspects of medical care. Social case work is a way of helping individuals in social difficulties. This method of study attempts to meet those needs which are derived from interaction of the individual and his social environment and which precipitate the blocking in the individual's capacity for self-maintenance and social contribution.

THE METHOD OF STUDY.

The study of social case work is initiated by an interview. The new patients admitted to a clinic or dispensary are selected for the purpose and a brief contact is made with them. An appointment is then made for an interview at the time of their next expected visit to the clinic, and a day or so later their medical records are reviewed, and abstracted. These abstracts include the medical history, the positive objective findings, the diagnosis, and the positive treatment. The records of any previous admissions are also reviewed. By this means the symptoms and physical status of the patients are known before the patients are interviewed. The initial interviews are conducted in a private office near the clinic, where the abstracts of the medical records are at hand.

The primary objective in opening an interview with a new patient is to help him to express what the present situation means to him, both in order to assist him and to enable the doctor to understand how he may help.

The first step in conducting the interview is to place the patient at his ease, to let him feel that there was no hurry, and to establish an intimate doctor-patient relationship as effectively as possible. This is usually accomplished by explaining to the patient the purpose and possible helpfulness of the interview and by reviewing with him the medical record, in whole or in part, with emphasis on his complaints and symptoms. The patient is then encouraged to discuss freely his illness and to widen his discussion to include his daily mode of life, his work, habits, associates, family, church, or any other topics that seem to contain a problem. No set scheme is usually followed, but the interview is guided in order to bring out certain points. The symptoms of the present illness are obtained in detail, so that they can be analysed later on with the object of separating them into those apparently caused by organic disease

and those apparently of emotional or psychologic origin. Next step is to ascertain the adverse social conditions in the life of the patient and to discover the possible relations of these conditions to the production of symptoms. The background of the patient with special reference to factors determining his personality is then reviewed, and finally various assets and liabilities related to the particular physical and social status of the patient are elicited. All these points may not be covered in the first interview, as it may take a longer time to elicit the informations.

The information obtained by the first interview is then carefully considered as a guide to further study, and open the way satisfactorily for a home visit. The patients are then visited in their home as soon as convenient. Home visits give specific information regarding the status of the patient, supplying a background which serves to individualise him more clearly, and throwing new light on the problems of his illness.

Members of the patient's family are often interviewed either at home or at the clinic, and if necessary, patients are also observed at work. Information is also gathered from various social and public health organisations to which the patients are known. In some cases advice and co-operation are also sought from priests, ministers, and school teachers, but always with the consent of the patient.

Care is taken to co-operate as fully as possible with the staff physician responsible for the medical care of the patient, and questions regarding diagnosis and treatment are referred to him. No advice is given to the patient regarding medical matters until after a consultation with his physician.

In the interview emphasis is naturally placed regarding facts pertaining to the personal and social status and past experiences of the patients but descriptions of behaviours and thought are also obtained by which emotional reactions can be judged, attitudes analysed and judgment and mentality evaluated. An insight into the sentiments of the patients is often essential for an understanding of their behaviour and emotional reactions.

In the conduct of the interview, the function of being an understanding and encouraging but guiding listener must be practised, and attention has to be given not only to his statements but also to the tone of his voice, motion of his body, pauses, attitudes evasions, or anything that tends to reveal traits of personality and degrees of intelligence.

It is important to let the patient understand that his acts and sentiments are not to be taken from a moral or ethical point of view, but are to be considered as facts throwing light upon the problems which he has to deal and which the doctor is to help him solve.

The interviewer must give his undivided attention to the patient, learn to listen rather than to talk, and never interrupt with arguments. Attention must be directed towards what the patient does not want to tell and when he is not able to tell, as well as what he says.

Record keeping is a matter of primary importance in the study of the patient as a whole. It is the recorded interview that is of value, both for the study of the individual patient and for the collection and analysis of experience. Accurate recording bears the same relation to the interview as it does to the physical examination and to the laboratory data.

Detailed records have to be kept, beginning with the abstract of the clinical records and continuing with the record of interviews, home visits, statements from representatives of social and public health organisations, and any other reliable information, each entry on the record being made as soon as possible after the event. Only rough notes, which can be made without interruption are taken during an interview, usually to fix dates, time, place and definite statements of fact.

The confidential nature of the interview must be assured to the patient and be constantly guarded by the doctor.

SOCIAL COMPONENT IN LEPROSY.

Disease, all forms of disease, invariably affect the individual's social life. But no disease has ever had more dire social consequences for the patient's life than leprosy. This is a chronic affection which develops very slowly, the person living with it for many years before he finally succumbs. It is not very infectious, much less so than tuberculosis, and its infectiousness alone could not explain why society in all times of history has reacted so violently against it. There must be other reasons for it. Chief among them is probably the fact that the disease in advanced stages, disfigures and mutilates its victims in a frightful and disgusting manner; and this combined with the evil smell that develops from the ulcerating parts, makes the patient with leprosy a terrifying sight. Society always reacts very strongly to the physical appearance of a sick man. The emaciated body of a tubercular patient calls forth nothing but feelings of compassion, while skin diseases are considered disgusting. An aggravating factor in leprosy is that the disease is believed to be incurable. Apart from this social adversity, the diagnosis of leprosy affects profoundly the life of the patient in other ways. He must face immediately two problems, one related to his own welfare and the other to the welfare of those about him, particularly those most closely bound by ties of blood and affection. He must face the problem of a long period of treatment under conditions which may remove him from his home and work,

and which may require him to relinquish temporarily or permanently his responsibilities and opportunities. He must also accept the fact that he is a potential source of infection to others, particularly children and must control his habits and behaviours with this consideration ever present in his mind. These are hard facts which have a disastrous effect upon the morale and emotional stability of the patient, and also upon the successful accomplishment of the essential plans for medical care. The problem of adequate treatment and prolonged observation necessitates an understanding of the patient as an individual, so that the social, economic and occupational adjustment required by the plan of treatment may be fulfilled.

Often the emotional strain caused by leprosy has to be borne by the patient alone, without encouragement, sympathy and help of his family and associated, as the social stigma and irritational fear cut him off from the natural human support by which patients with other disease are assisted, through time of distress and worry. They show what is a common reaction in the face of a traumatic experience of this sort. They are confused, unable to accept the fact of the disease and all that it implies, helpless, incapable of acting on their own initiative. Psychoneurosis and psychosis, although unrelated to the organic component of the disease, may often complicate the medical situation, and require careful analysis for their detection. These are the specific social problems that must be considered in every case of leprosy, and the successful solution is often of paramount importance in determining the ultimate results of treatment. A worried, anxious, uncertain patient is never the one successfully treated.

CONCLUSIONS.

As indicated at the outset emotional blocking caused by adverse social factor in leprosy exacerbating the disease and hampering the progress of treatment has been recognised by a host of leprosy workers including Muir, Ryrie, Lowe and other eminent workers. This recognition, however has been of supplementary nature in the physical treatment of the disease, but these factors are now seen to be moving directly into the centre of the picture with all its beneficial results. In psychosomatic approach and social case work treatment in relation to leprosy there is an extensive field for research, full of promise, in deepening our understanding and broadcasting the medical care of LEPER—the Unknown, to whose service we have dedicated ourselves. May I commend this method to those who formulate policies for anti-leprosy campaign in India.

(*International Medical Abstracts and Reviews*, Nov. 1947).

Sharkoferrol

A DOUBLE TONIC CONTAINING VITAMINS AND MINERALS TOGETHER.



EACH TABLESPOONFUL REPRESENTS:-

- | | |
|---|--------------|
| (1) Shark Liver Oil | 10 mins. |
| (2) Iron Ammonium Citrate | 8 grs. |
| (3) Hypophosphites of Lime,
Sodium and Potassium | 4 grs. |
| (4) Vitamin A | 14000 I.U. |
| (5) Vitamin B ₁ | 500 I.U. |
| (6) Vitamin D | 4000 I.U. |
| (7) Tr. Cinnamoni | 2 mins. |
| (8) Copper and Manganese | Traces |
| (9) Malt Extract rich in
Vitamin B Complex | 1.75 drachms |

available in 1 lb. & 5 lbs. bottles

SHARKOFERROL is a well balanced preparation incorporating various nutrient ingredients like Shark Liver Oil, Vitamins A,B,D, Hypophosphites and Malt. Excellent as a roborant, recuperative and haematonic. Highly palatable and absolutely free from nauseating taste or smell.

Therapeutic Indications:-

Vitamin A Deficiency:- Xerophthalmia, Keratomalacia, Phlyctens, Night blindness, Hyperkeratosis, Retarded growth; Preventive against Respiratory, Urinary and Skin diseases.

Vitamin D Deficiency:- Rickets, Osteomalacia, Spasmophilia, Carious Teeth.

As a Reconstructive Tonic:-

Tuberculosis and Pre-tuberculosis, Scrofula, Marasmus, Debility, Malnutrition, Underdevelopment, Anaemia, Cachexia, Anorexia, Convalescence, Pregnancy and Lactation, Wasting diseases, Deficient Dietary with its sequelae.

ALEMBIC CHEMICAL WORKS CO. LTD., BARODA

AL 189

When ordering please mention *Medico-Surgical Suggestions*.

For
multivitamin
dietary
supplementation



VIGRAN
Registered Trademark

One capsule (daily dosage) supplies:



Vitamin A	5,000 I. U.
Vitamin D	500 I. U.
Thiamine Hydrochloride	2.0 mg.
Riboflavin	2.0 mg.
Pyridoxine Hydrochloride	0.5 mg.
Niacinamide	20.0 mg.
Ascorbic Acid	45.0 mg.
Pantothenic Acid	1 mg.

Available in bottles
of 25, 50, 100, 250
and 1000 capsules.

E. R. SQUIBB & SONS

Representatives: MARTIN & HARRIS, LTD.
CALCUTTA BOMBAY MADRAS KARACHI RANGOON DELHI LAHORE

Extracts.

ADVANCES IN PRACTICAL PREVENTION OF GYNAECOLOGIC CANCER

BY CROSSEN, R. J.: Am. J. Obst. & Gyn. 54: 179-187 (August) 1947.

The following is the author's summary:

1. Cancer prevention involves the removal of chronic irritation, by conization for cervicitis and vulvectomy for leucoplakic vulvitis, and the removal of involuting ovaries and uterus under suitable circumstances.

2. Periodic examinations are necessary to discover chronic irritation before malignant development starts and to discover cancer in involuting ovaries or uterus or breasts while it is still in a curable stage.

Yearly checkups were formerly considered sufficient, but owing to the difficulties of detecting early ovarian cancer that interval is too long to guard the patient against advanced malignancy. That fact was learned by bitter experience. A patient whose adnexal areas were apparently clear on examination returned seven months later with an irremovable ovarian cancer. Careful checkups at six-months intervals for the two decades, aged 40 to 60 years constitute the minimum requirement for reasonable safety from incurable malignancy.

3. In addition to the usual deep pelvic palpation and the speculum examination and the check of the breasts for beginning infiltration, the check up should include percussion of the flanks for possible ascitic fluid. A small amount of free fluid in the peritoneal cavity is often the first demonstrable sign of the chronic peritoneal irritation associated with ovarian carcinomatus infiltration.

4. Owing to the cancer-potential of the involuting ovaries and the "silent" advance to incurability of most ovarian cancers, it is advisable to remove the involuting ovaries whenever the abdomen is opened in the climacteric age (43 years and later), except where there is some definite contraindication to this additional work.

The cancer-potential of the involuting endometrium should be taken into consideration when handling nonmalignant uterine conditions requiring serious treatment. For example, a myoma

causing persistent serious symptoms in spite of palliative measures confronts us with the alternative of stopping the myoma activity by radium treatment (with curettage to exclude malignancy and conisation if cervicitis is present) or removing the growth by the major operation of hysterectomy.

This calls for careful consideration of three factors, namely, (a) the chance in that particular case of securing relief by the radiation programme, (b) the future risk of malignant development in uterus or ovaries, and (c) the immediate risk of hysterectomy and double oophorectomy. In the author's report of five hundred myoma-radiation cases, previously referred to, may be found tabulated the cases given permanent relief and those not relieved. Also, they found that though the risk of future malignant development was cut to one-third by radium treatment, there still remained a malignancy risk of 0.89 per cent. The mortality risk of hysterectomy and double oophorectomy may be reckoned at 1 to 2 per cent, depending on the condition of the patient and the skill of the operator. Giving proper weight to these various factors in the study of the individual case will insure the safest and best treatment to your patient.

In general for the good operative risk, the seriously troublesome myoma occurring in the age of involution is preferably handled by complete hysterectomy and double oophorectomy. On the other hand, for the seriously handicapped patient the radium plan in a suitable case is a lifesaving measure, in that it stops the serious myoma activity without the great risk of a major operation.

6. Leucoplackic vulvitis evantuates in cancer in a considerable proportion of the cases. In Taussig's series of 155 vulvar cancers, nearly half were preceded by leucoplackic vulvitis. Hence, the importance of prompt vulvectomy for this condition, unless there is a good response to vitamin A therapy has suggested by Hyams and Bloom (Am. J. Obsct. & Gynec. 53 : 214, 1947).

7. Delayed menopause indicates erratic endometrial and ovarian activity which increases the susceptibility to malignant development. It should be stopped by radium treatment with associate curettage to exclude endometrial malignancy, conisation if cervicitis is present, and accurate palpation of the ovarian areas under the anaesthesia, with recording of findings for future references and comparison.

S. N. GARDE.

MODERN TREATMENT OF ACUTE OTITIS MEDIA

By H. V. O'SHEA, M.D. M. Ch. D.L.O.

Acute otitis media is a very common complaint, especially among children. It is of two varieties:—

1. Acute catarrhal otitis media.
2. Acute purulent otitis media.

Infection usually occurs from the nasopharynx *via* eustachian tubes, but in the case of the suppurative variety, it may take place from without in injury of the tympanic membrane.

Sulphonamides and penicillin has changed considerably the prognosis and treatment of Acute Otitis media. It is important to bear in mind the sense of false security which may lull the patient and the doctor after sulfonamide treatment in some cases. In such cases the temperature may fall, pain may be relieved giving the impression of subsidence of the disease. But the infection still lurks, invades the mastoid and may shock the doctor by causing a rigor indicating lateral sinus thrombosis or meningitis.

Acute Catarrhal Otitis Media.

It is common in children suffering from adenoids and may occur during a simple cold or during infectious diseases attacking the respiratory passages. The tympanum contains exudation watery on viscid in varying proportion. In some cases only the eustachian orifice may be blocked. The symptoms are usually mild. Pain is not severe or may be absent. It is more marked in children especially at night. Tinnitus and deafness of varying degree occur. The head seems full and there is a dull and stupid feeling.

Otoscopic examination may reveal nothing in mild cases. The drum may be slightly congested with an accentuation of the landmarks caused by indrawing of the handle of malleus, the short process becoming prominent. Exudate may be seen through a transparent membrane. In severe cases the entire tympanic cavity may be full of the fluid. Drum may bulge and the dilated vessels may become prominent.

Treatment:—The first thing to be done is to empty the middle ear of fluid. In mild cases this can be done by inflation with the politzer bag. This is repeated every other day until the middle ear remains clear. Hearing is restored immediately and the patient

will experience immediate relief. If this fails to remove the fluid or if the tympanum is entirely filled, with the drumhead bulging, paracentesis will be necessary. After paracentesis, politzerisation is done to expell the exudate from the tympanum.

Adenoids, deflected septum, polypi etc., require surgical treatment. Repeated attacks will result in chronic adhesive process or dry middle ear catarrh.

Acute suppurative otitis media:—It is a common sequel of measles, scarlet fever, acute influenza, whooping cough and diphtheria. Streptococcus hemolyticus is the most commonly found organism. Pneumococcus comes next in importance. It is better to find the offending bacteria by examining a swab, before chemotherapy is started.

Symptoms:—Pain is the predominant symptom. It is deep seated at first and tends to spread until the entire side of the head is affected. Tenderness may be felt over the upper part of the mastoid bone. It indicates inflammation of the lining membrane of the mastoid cells. Tenderness and pain over the tip of the mastoid after the rupture of the drum or paracentesis should be regarded as due to possible mastoid involvement.

In the early stages there is slight impairment of the hearing. Deafness becomes more marked as the disease progresses. Tinnitus is sometimes present. In adults the temperature is slight in children it may reach 103°.

Otoscopic Examination:—In mild cases there is some redness along the handle of the malleus. In more severe cases the drum loses its lustre and becomes hyperaemic. The membrane shows slight bulging. If perforation is imminent a yellow spot is seen pulsating in the posterior part of the membrane.

Treatment:—The patient is put to bed, the bowels are opened, a light diet is adviseable and the patient encouraged to drink plenty of fluids. The pain is relieved by instilling a few drops of glycerine acid carbolie 2½ per cent. Dry heat is also useful but wet fomentations are avoided. Antiphlogistine may be applied. When the disease has been arrested, a course of inflation of the tubes either by Politzer's method or by Catheterisation is instituted. If otoscopic examination indicates the rupture to be likely, paracentesis should be performed at once and a swab taken for bacteriological

examination. Paracentesis should never be delayed if the pus is detected in the middle ear.

Chemotherapy:—It is indicated in fulminating cases from the start and after paracentesis in other cases.

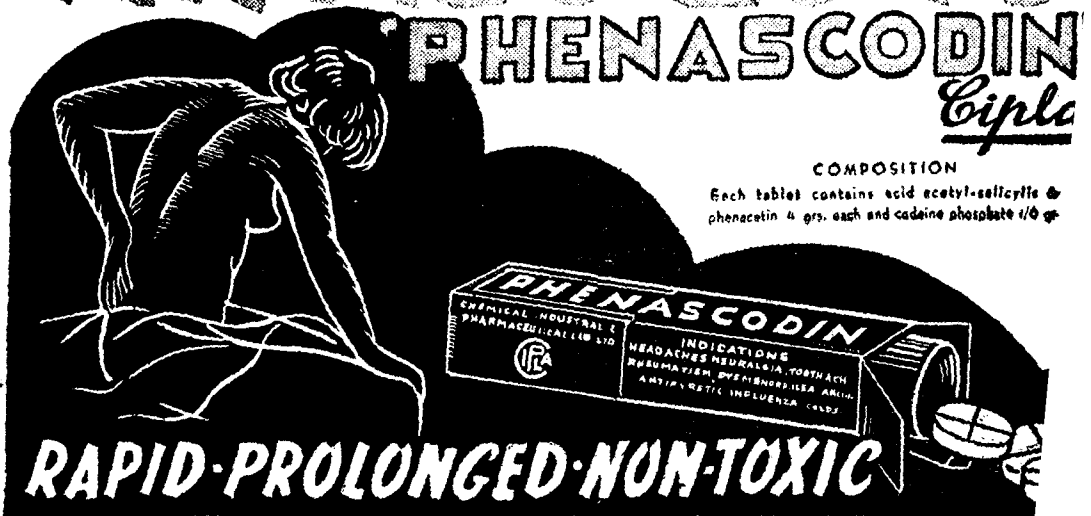
Of Sulfa drugs, sulfa merazine is the drug of choice and is given in full doses. This will bring down the temperature to normal in the course of 48 hours in an uncomplicated case. The drug should be continued until the temperature has remained normal for a few days and the condition of the ear shows signs of clearing up. Under sulfonamide treatment the infection may become subclinical and there may be danger of complications flaring up suddenly. If the sulphonamides have been given before paracentesis has been performed, careful examination of the drum must be made daily. The signs become atypical, all that is seen is dullness of the membrane accompanied by deafness. At a latter stage in the treatment with sulfonamides mastoid involvement must be looked for. This may occur insidiously when everything

Clinically Satisfactory

ANALGESIC

PHENASCODIN

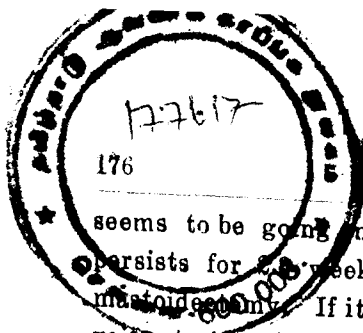
Cipla



COMPOSITION
Each tablet contains acid acetyl-salicylic & phenacetin 4 grs. each and codeine phosphate 1/4 gr.

INDICATIONS
HEADACHES NEURALGIA TOOTHACHE
RHEUMATISM DYSPNOEIA ANGINA
ANTIPYRETIC INFLUENZA COLIC

RAPID · PROLONGED · NON-TOXIC



MEDICO-SURGICAL SUGGESTIONS

seems to be going on quite well. If the discharge and deafness persists for 4-6 weeks the mastoiditis is certain. This calls for mastoidectomy. If it is realised that sulfonamide treatment is not going to be effective, no time should be lost in starting penicillin therapy.

When acute otitis media occurs in an ear in which there is an old perforation, the result of a previous attack, chemotherapy should be undertaken at once.

Nose, sinuses, throat etc., must receive attention. If the conservative treatment fails and the discharge persists, the mastoid must be opened and drained. Other indications for operation are a swinging temperature, increased pulse rate, deterioration in the patient's general health. The presence of pain, tenderness with edema over the mastoid, bulging of the drum and meatal wall are signs that no time must be lost in opening the mastoid. Symptoms of intracranial complications demand immediate operation.

Medical Press, July 23, 1947.

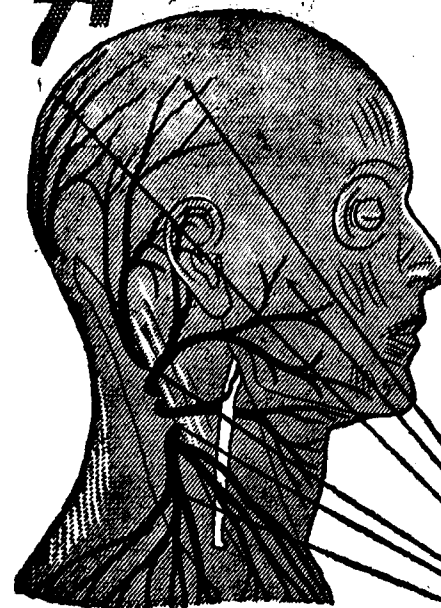
COMMON ERRORS IN BURN TREATMENT

BY H. L. ROMENCE; *Am. J. Surg*; 1947.

Burned patients should have their first treatment in the operating room where proper asepsis can be practised. Any second or third degree burn involving 10 per cent of the body surface should be hospitalized. A sketch of the burned area is of great assistance, and the dry pallid areas of third degree burns should be noted.

There is no ideal burn remedy. Tannic acid and sulfonamides are toxic; petroleum jelly is softening. Sterile gauze, mechanics' waste and elastic bandages make a good pressure dressing. Burns are often cleansed too extensively and vigorously. Gentle washing and debridement are indicated in grossly soiled burns only. These dressings should be changed only once in four to seven days since infection is merely spread by frequent dressings and the pain and bleeding at each dressing are very hard on the patient's morale.

A PRIZED FORMULA



Consisting of Calcium Glycero-phosphate, Sodium, Potassium, Manganese, Iron and Strychnine in exactly right proportions.



NERVITONE

THE MOST EFFECTIVE NERVE TONIC

Calcium, Potassium and Sodium in combination with Glycero-phosphates supply the mineral constituents so often found deficient in our daily diet, or depleted by wasting diseases. Iron and Manganese supply the blood-forming constituents when there is anaemia and loss of blood, and Strychnine provides the initial bucking up.

INDICATIONS: Most effective in cases of nervous and sexual debility, low vitality, muscular fatigue and mental or physical exhaustion during convalescence from any illness.

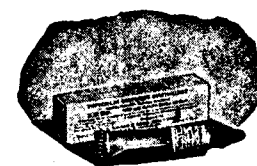
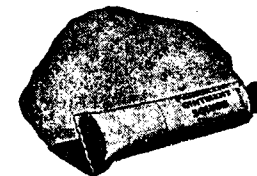
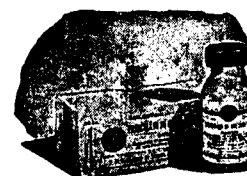
ALEMBIC CHEMICAL WORKS COMPANY, LIMITED, BARODA.

When ordering please mention *Medico-Surgical Suggestions*.

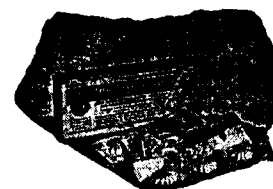
தவணைத்தாள்.
சே. எண் : 177617 ப. எண் :

[illegible]

A Complete History



SQUIBB
PENICILLIN PRODUCTS



THE FUTURE OF THE OIL INDUSTRY

Penicillin, calcium in peanut oil and 4.8% beeswax (Romansky formula). Therapeutic effect prolonged over about 24 hours after single intramuscular injection of 300,000 units. Does not require refrigeration. 1 cc. for 10 cewals (300,000 units per cc.) and 1 cc. double cell permanent cartridge syringe.

Penicillin Ointment

General-purpose ointment containing 1,000 units penicillin G calcium per gram, consisting of beeswax, lanolin, petrolatum, and undecylenol lanolin. Tube of 1.5 cm.

Penicillin Ointment Ophthalmic

Penicillin calcium in a stable and non-irritating ointment base with a potency of 400 units per gram. (100 mg./100 Gm.)

Penicillin Calcium Tablets

Buffed with 0.5 Gm. trisodium citrate. Each tablet individually and geometrically sealed in aluminum foil to protect against moisture. 25,000-unit tablets in boxes of 25. 50,000-unit tablets in boxes of 12 and 24. No refrigeration required.

Penicillin Chewing Troches

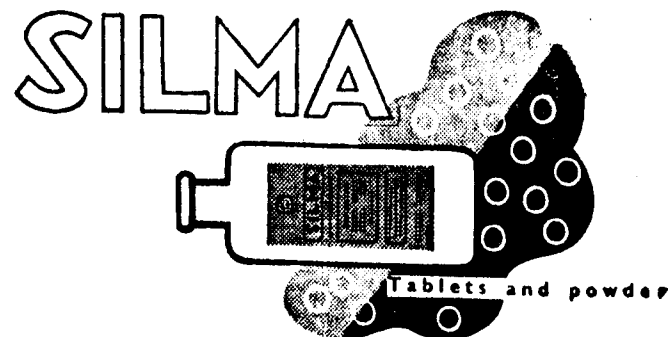
20,000 units penicillin each and in a flavored paraffin base, chewing slowly releases penicillin contents producing a high and continuous concentration in the saliva. Each is individually wrapped. Box of 6.

Penicillin Sodium

For equine patients administered intramuscularly or by continuous intravenous infusion, doses of 100, 200, 000 & 500,000 u.

Representatives: **MARTIN & HARRIS, LTD.**
CALCUTTA BOMBAY MADRAS KARACHI RANGOON DELHI LAHORE

Regd. No. M. 2853.



Magnesium Trisilicate Sara, a valuable antacid, is the principal ingredient of Silma. Its strong antiseptic powers protect ulcer bases from destructive digestion. It does not render stomach contents alkaline and no gastro-intestinal symptoms are ever produced by it. It does not cause constipation and diarrhoea.

Indications: Silma effectively cures indigestion, toning up the digestive system. It is recommended in all cases of hyperacidity and is specially indicated for the relief of pain in gastric and duodenal ulcers.

Dosage: Two to four tablets or two to four grams of the powder at bedtime.

Detailed Literature and Free Samples on request.

The magnesium trisilicate Sara used in Silma conforms to the standards of the U.S.P. and British Pharmacopoeia Addendum and is manufactured in India by Sarabhai Chemicals (Fine Chemicals Division.)



SARABHAI CHEMICALS
(Pharmaceutical Division)

Baroda

Ahmedabad

SC (Mod) B

Edited and Published by Dr. P.R. Venkappaya, at 3/337, Mint Street, Madras.
Printed by Mr. S. Sundaresan, L.P.T., for the O.C.P. Works, Ltd., 1/17, Mount Rd., Madras.