

MEDICO-SURGICAL SUGGESTIONS

Vol. VIII.

DECEMBER 1939.

No. 12.

ECONOMICAL · EFFECTIVE · CONVENIENT · SAFE
CLINESTROL RENDERS NATURAL OESTRINS OBSOLETE

Recently reported clinical trials* conducted on behalf of the Therapeutic Trials Committee of the Medical Research Council demonstrate that oral treatment with Stilboestrol faithfully duplicates the results of injection by natural oestrin. The cost of treatment with Clinestrol (Stilboestrol 'Glaxo') is estimated to be about one-third that of the natural substance. The initial price is very low and small dosage is further added to economical treatment. Clinestrol is safe in use. Doses far exceeding the average have been given without producing toxic symptoms. Available in tablets, and when the parenteral route is preferred, in ampoules of Stilboestrol dipropionate.

PRODUCT OF THE
GLAXO LABORATORIES

CLINESTROL
STILBOESTROL "Glaxo"

Representatives in India:

H. J. FOSTER & CO., LIMITED.

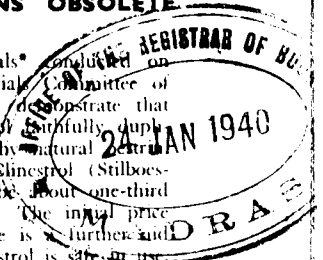
P. O. Box 202, Bombay.

P. O. Box 2257, Calcutta.

P. O. Box 108, Madras.

P. O. Box 244, Lahore.

*Bishop, P. M. F., Boycott, M., and Zuckerman, S.
(1939) *Lancet*, 1, 5, and Winterton, W. R., and
MacGregor, T. S., (1939) *British Medical
Journal*, 1, 10.



MEDICO-SURGICAL SUGGESTIONS

A MONTHLY JOURNAL OF PRACTICAL MEDICINE & SURGERY
Editor: Dr. P. R. Venkappaya.

VOL. VIII

DECEMBER 1939

NO. 12

CONTENTS

ORIGINAL ARTICLE—	PAGE.
"Coitus During Pregnancy"—By Dr. S. K. Gupta, B.D. Sc., B.O., (PB.)	409
ARTICLES—	
Radiologic Aids in the Diagnosis of Heart Disease in Children—A Review—By Edmund G. Lawler, M.D., and George A. Hellmuth, M.D.	411
Cervical Fasciae and Infections about the neck By R. W. Kerwin, M.D.,	418
Some Practical Points in Meeting Poor Surgical and Anesthetic Risk in Surgical Diseases—By Thomas J. Collier, M.D.	423
Influenza—By Manghanmal Sadhumal	426
EXTRACTS	431
MEDICAL NEWS AND NOTES	438

Annual Subscription: Rs. 5; foreign: 10 sh.; Single Copy: As. 8

Sample Copy for 4 As. Stamps.

Office of the Editor & Publisher: 179, Mint Street, Madras, India.

NOTICE

Original articles, case reports, and other topics of medical interest are cordially invited, and are accepted only with the distinct understanding that they are contributed exclusively to *Medico-Surgical Suggestions*. Manuscripts should be type-written. All communications in regard to editorial business, books and journals for review and exchange, samples of drugs and instruments, etc., should be addressed to the Editor. The Editor accepts no responsibility for views expressed by contributors.

All business communications should be addressed to the Manager, *Medico-Surgical Suggestions*. Only approved advertisements will be admitted, and the Manager reserves the right to exclude any advertisement which is against medical ethics.

324

Rx

OFFICE OF THE REGISTRAR
24 JAN 1940

Chinofer

A Valuable Hoematinic



ACTION: Improves and builds fresh blood.

- : increases amount of Hoemoglobin.
- : diminishes oxidation of tissues and increases muscular tone.
- : promotes appetite and aids digestion.
- : supports the flow of Menstruation.
- : restores nerves to normal condition.

INDICATIONS: Anæmia, primary and secondary, convalescent after Malaria, Pneumonia, Enteric, kala-azar, Syphilis, Ankylostomiasis, Amenorrhœa, nervous prostration etc.



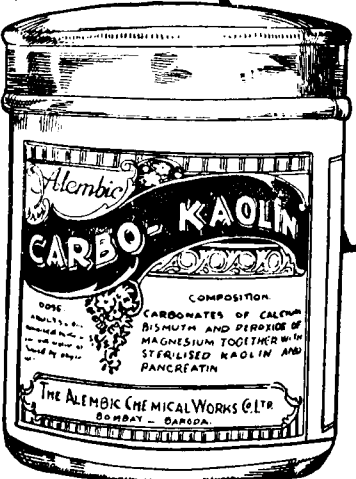
AD. MEYER

11-2 STEPHEN HOUSE || 247 ANGAPPA NAICK ST.
CALCUTTA MADRAS
MADE IN SWITZERLAND BY CHEMICAL WORKS ST MARGRETHEN

When ordering please mention *Medico-Surgical Suggestions*.

**IN CASE OF OVERACIDITY
AND STOMACH TROUBLES**

A balanced combination in Alembic's Karbo-kaolin of Carbonates of Calcium, Magnesium, and Bismuth with peroxide and Pancreatin in a soothing and absorptive Kaolin base serves as a unique valuable antacid highly useful in overacidity, dyspepsia, indigestion, irritation and ulceration of the stomach, nausea and pain after food, intestinal fermentation and putrefaction etc.



CARBO-KAOLIN

WITH AND WITHOUT BELLADONNA

ALEMBIC CHEMICAL WORKS CO. LTD.
BOMBAY. BARODA. MADRAS. CALCUTTA.

When ordering please mention *Medico-Surgical Suggestions*.

OFFICE OF THE REGISTRAR
24 JAN 1940
MADRAS

**TREATMENT
OF A HABIT**

Physicians usually consider the dietetic habits of their patients when prescribing tonics, and in districts where Prohibition has been introduced, these habits may have been radically altered. Those who have acquired the habit of taking alcohol cannot give it up without suffering an immediate deficiency. Even if the diet is adjusted to compensate physically for the missing liquor, psychological effects remain.

Patients who are by no means alcoholics may reasonably desire to avoid sudden discontinuance. Hall's Wine makes a very suitable prescription in all such cases. Its thermal-energy value is much higher than non-medicated wines and spirits, and its immediate stimulus is followed by a rapid reconstruction of the haemoglobin content of the blood.

Hall's Wine assists metabolism and as its grape sugar and alcohol require no activity of the digestive system, it is ideally suitable for convalescents.

When a general tonic is indicated Hall's Wine may be prescribed with perfect confidence.

HALL'S WINE
Tonic Restorative



Distributors: J. HALLEY & CO., LTD.

P. O. Box 133, Calcutta P. O. Box 84, Lahore P. O. Box 34, Karachi P. O. Box 466, Bombay

HW 76

When ordering please mention *Medico-Surgical Suggestions*.

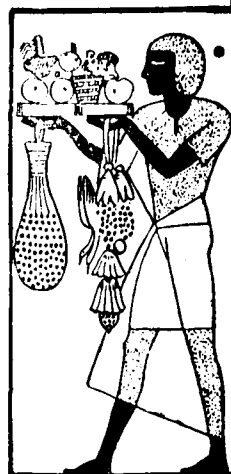
During the Age of Growth

At no time, throughout the span of life, is the proper and orderly balance of calcium, phosphorus and iron, vitamins and other highly important food elements more readily disturbed than during the period of active growth and development.

The food supply of every child should, therefore, contain an adequate proportion of these important substances, if normal progress is to be maintained. The construction of an entirely correct dietary, to suit the varying requirements of each individual is, however, beyond the possibility of realization in ordinary practice.

Many physicians ensure that the ordinary dietary of the young patient is safe and adequate by advocating the daily addition of 'Ovaltine.' This is a complete, well-balanced food, rich in natural vitamins and in readily assimilable calcium, phosphorus and iron

'Ovaltine' is composed of full-cream milk and malt extract. Its sugar content is chiefly in the form of maltose, a very readily available source of energy. No cane sugar or chocolate is added to give bulk or to cheapen the cost. 'Ovaltine' is delightful to the taste and readily assimilable even by digestions impaired by disease.



OVALTINE

A liberal supply for clinical trial sent free on request:

JAMES WRIGHT LTD.

CALCUTTA, BOMBAY
MADRAS & KARACHI

Servants of High Official bearing offerings to the Tomb

M. 287

When orderi g please mention *Medico-Surgical Suggestions.*

DIABETES VITALITY & ASTHMA

I am to-day conducting the largest individual, Diabetes Vitality & Asthma practice in the whole of India. I am prepared to work in co-operation with qualified medical men.

Literature . Posted Free.

DR. JEAN F. STRANDGARD,
SPECIALIST, BANGALORE.
Late of BERLIN and VIENNA.

Reach the
Medical
Profession
EVERY MONTH
By Advertising
IN
Medico-Surgical
Suggestions.

THE MOST RECENT ADVANCE IN THE
TREATMENT OF SYPHILIS

THIO-SARMINE

Di-sodium-dioxy-diamino-arsenobenzene-methylene
sulphonate B. R. I.

Purest Sulpharsenobenzene Compound
Prepared for the first time in India

LOW TOXICITY

CHEAPEST IN PRICE

POWERFUL SPECIFIC

In the Treatment of Syphilis

In all stages of the Disease

WITHIN THE SHORTEST TIME

Details about its use and reports
of cases treated successfully with
the drug are sent free on appli-
cation to :—

THE
Brahmachari Research Institute
82 3, Cornwallis St., P. O. Shambazar,
CALCUTTA.

TONSINOL

(Registered).

Pills and Solution

The only radical cure for en-
larged and inflamed Tonsils
without operation. Established
after five years clinical trial in
more than 2000 cases. Tested
and found effective by eminent
doctors.

Call at or write to :—

TONSINOL LABORATORY,
No. 53, Govindappa Naick Street,
G. T. MADRAS.

Available at all leading chemists.

When ordering please menti on *Medico-Surgical Suggestions.*



EFFECTIVE D.B.L. AMPOULES

HYPON BRAND

BESIDES NOV-ARSON AND BISMOLIN THE INDIAN CHEMOTHERAPEUTIC PREPARATIONS—ALL OTHER QUININE, GLUCOSE, PITUITARY PREPARATIONS, AUTO, PLAIN AND MIXED VACCINES ARE CAREFULLY MADE

ALWAYS SPECIFY D.B.L. BRAND.

Dr. BOSE'S LABORATORY LIMITED. :: CALCUTTA.
BRANCHES & AGENCIES THROUGHOUT INDIA & BURMA.

When ordering please mention *Medico-Surgical Suggestions*.

Calcutta Medical Journal

Journal of the
Calcutta Medical Club

A MONTHLY RECORD OF THE
MEDICAL SCIENCES AS
APPLIED TO THE TROPICS

Annual Subscription :

In India : Rs. 9. (For Junior Practitioners Rs. 5.) Foreign 18 shillings,
\$ 4 00 R. M. 12

THE BEST MEDIUM FOR
ADVERTISEMENTS

Specimen Copy and Contract
Rates on Application.

Editorial & Publishing Offices at
91, Chittaranjan Avenue,
Calcutta, INDIA.

THE PATNA JOURNAL OF MEDICINE

Published under the auspices of the
PATNA MEDICAL ASSOCIATION

Editor: Mr. M. Husnain,
M.B. (Cal.), D.L.O. (Lond.), D.O.M.S.
(Lond.), F.R.C.S. (Edin.)

Associate Editor: B. Narayana,
M. Sc., M.B. (Cal.), Ph. D. (Edin.),
F.R.S.E.

With an Editorial Board Consisting
of Eminent Members of the
Profession

Circulated in all parts of the World.
Subscription rates inclusive of postage

INLAND. FOREIGN.

Per Copy Re. 1-0-0. sh. 1/6.

Annual Rs. 3-0-0. sh. 4/6.

Best Medium of Advertisement for
Medical, Surgical & Scientific Products,
Instruments and appliances,
etc., etc.,

For further particulars apply to :

THE MANAGER,

Patna Journal of Medicine
P. O. Bankipur, Patna.

TWO SOVEREIGN AYURVEDIC REMEDIES.

For Combatting Leucorrhoea and Gonorrhoea.

ASHOKARISTA.

Liquid Extract of Ashoka etc.

This wonderful Arista containing the active principles of Ashoka bark and other powerful drugs is the well-known remedy in all cases of female disease, such as painful menstruation, excessive flow of blood, sterility, deficient growth in females, late appearance of the menopause, and such other concomittant symptoms, commonly known as "female ills." It is a very reliable tonic for administration to the ladies after child birth, as it improves appetite and the bowels, brings the generative organs to their normal conditions, induces healthy secretion of milk and brightens up the health. Price 8 oz. bottle, Rs. 1-8. 12 bottles, Rs. 15. Postage and Packing extra.

CHANDANASAVA.

It is a preparation of Chandana or Sandalwood along with various other drugs useful in urinary complaints. In acute or chronic Gonorrhoea, with its attendant symptoms, such as chrodee, gleet, stricture, etc., in all its stages, it can safely and effectively be administered and has a powerful curative virtue. It cools the brain, improves the condition of the vital fluid induces refreshing sleep and is a very ready weapon in the hands of medical men to effectively fight diseases of the urethral canal. Price 8 oz. bottle, Rs. 2. 12 bottles, Rs. 18. Postage Packing extra.

To be had of:—

Phone:—1090.
Calcutta.

Bisharad's Ayurvedic Laboratory,
14 Taltola Avenue, CALCUTTA.

When ordering please mention *Medico Surgical Suggestions*.

For any kind of Catract always use world's renowned

"CATRACTOL"

(Registered).

A Specific cure for any kind of Catract without any operation. The only medicine hitherto successful. The highest authorities in the Medical Profession recognise that this product has no equal. Claims Miraculous results behind its efficacy without giving any harm at all to the eyes. Thousands are radically cured.

Price: Single Phial Rs. 5/- (Packing & Postage extra).

Sample Phial against Rs. 2-8-0 by M.O.

Dr. GUPTA'S CLINICAL LABORATORIES

(REGD).

13, Kucheri Road, PASRUR. (N.W.R.)

FILARIASIS

SPECIFIC CURE BY ROSBAY TREATMENT

(oral or injections)

of elephantiasis, lymph scrotum, chyluria, orchites, filarial fever etc., even of long duration. The only medicine hitherto successful. It does not contain antimony, arsenic or any vaccine except Tr. Rosebay and a rare element (radio-activity). Absolutely harmless. Thousands radically cured.

Apply for free literature to:—

THE ROSBAY CLINIC,

271, Chittaranjan Avenue (North), CALCUTTA.

THE INDIAN & EASTERN CHEMIST

The only Journal catering exclusively for the Drug and Allied Trades in Eastern Markets.

5, MISSION ROW,
P. O. Box, 2349, Calcutta.

Subscription 7/6 (Rs. 5) per annum post free. Specimen copy free on application.

Advertisement rates sent on request.

Indian & Eastern Chemist

Published by

LEONARD HILL LIMITED

17, Stratford Place, London W. 1.
ENGLAND

Calcutta Medical Review

A Record of Medicine Surgery,
Public Health and Medical News
Indian & Foreign.

Edited under a strong Editorial Board

Annual Subscription:—

Inland Rs. 5-0-0 Foreign 12 sh.
The most widely circulated monthly
Medical Journal in India, Burma,
Ceylon & Abroad.

**Best Medium for Advertisement of
Medical and Scientific Articles**

Sample copy sent on request free of charge.

For rates etc., Apply to:

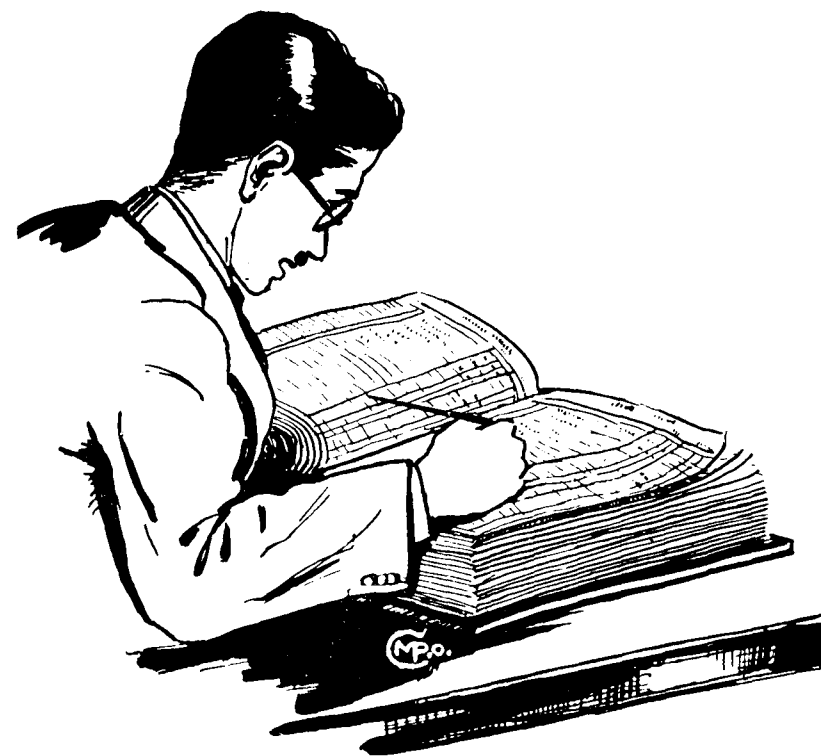
The Manager,

CALCUTTA MEDICAL REVIEW,

226-C, Bowbazaar St., Calcutta.

Phone B. B. 3332.

When ordering please mention *Medico-Surgical Suggestions*.



CONCENTRATION

The essence of success is the power that results from a perfectly healthy and balanced constitution in which every part is cent per cent. efficient and alert. To obtain this desirable state, a course of

JEEVAMRUTHAM

is a great help. It is to-day's Tonic for health and strength.

Manufacturers:

**AYURVEDASRAMAM
MADRAS.**

When ordering please mention *Medico-Surgical Suggestions*.

SUPER D COD LIVER OIL

A palatable cod liver oil of the highest grade obtainable, standardized to contain fully adequate dosage of both the fat soluble vitamins A and D.

Each teaspoonful of Super D furnishes not less than 5760 U.S.P. units of vitamin D and 400 units of vitamin A.

INDICATIONS: Growth promotion, increased resistance to infection, control of bone and tooth development during early life. Cure and prevention of rickets in infants, pregnancy and lactation periods, conditions associated with undernourishment, emaciation and debility.

DOSAGE: INFANTS AND CHILDREN: $\frac{1}{2}$ teaspoonful to 1 teaspoonful three times daily. **ADULTS:** 1 teaspoonful or more three times a day.

PACKINGS: Available in 3, 10, 24 and 128 ounce bottles.

SUPER D CONCENTRATE.

An assayed solution of natural vitamins A and D concentrated from Super D cod liver oil.

Super D Concentrate is indicated in any condition where difficulty of dosage with cod liver oil arises. It is particularly useful in feeding premature infants, in severe rickets, osteomalacia, tetany and during pregnancy and lactation where the mother may not tolerate fat or cod liver oil.

DOSAGE: Three to six (3 to 6) drops three times a day.

PACKINGS: Available in 5, 10 and 30 cc. bottles.

SUPER D CONCENTRATE PERLES

Each perle contain 8206 U.S.P. Units of natural vitamin D.

Super D concentrate perles are tasteless and make possible the administration of adequate amounts of natural vitamins of cod liver oil to these who object to the oil itself.

DOSAGE: 1 to 2 perles a day

PACKINGS: Available in bottles of 30, 100 and 250 perles.

SUPER D WITH MALT

Super D with Malt contains 25 per cent by volume of Super D cod liver oil. Each ounce of Super D with Malt presents not less than 772 U.S.P. units of vitamin D and 10, 940 U.S.P. units of vitamin A.

The cod liver oil together with the malt extract in this preparation gives a total caloric value of 150 calories to the ounce.

Dosage: Children: 1 to 2 teaspoonfuls three times a day.

Adults: 1 to 2 dessertspoonfuls three times a day.

PACKINGS: Available in bottles of 8 and 16 ounces.

Manufactured by:
THE UPJOHN COMPANY,
Kalamazoo-Michigan,
U. S. A.



Sole Agents:
T. M. THAKORE & CO.,
5, Sunkurama Chetty, St.
Madras.

Head Office:

43, Churchgate Street, Fort, Bombay.

Branches:

CALCUTTA, KARACHI, LAHORE, RANGOON, NOVA-GOA.

When ordering please mention *Medico-Surgical Suggestions*.

MEDICO-SURGICAL SUGGESTIONS

VOL. VIII

DECEMBER 1939

NO. 12

Original Article.

"COITUS DURING PREGNANCY."

BY DR. S. K. GUPTA, B.D.S.C., B.O. (PB.)

Laboratory Clinic.

PASRUR District, Sialkote.

Should sexual intercourse continue during pregnancy? This is a vital problem in married life and on it rests, in most cases, the conjugal happiness of couples.

Tradition is strictly against it while latest medical and psychological opinion see no harm in moderate and mild love-making during pregnancy.

To the scientist the matter of cohabitation with a woman who is pregnant must be divided into two fields. The medical profession looks upon the question with a consideration of the possible injury which may occur to mother or to child as a result of infection or of muscular or nervous strain. The entrances to the protective chamber which nature so marvellously provides for the growing child are protected by glandular secretions against the inroads of infection. Yet these passages are lined with very tender mucous membrane, a lining which we teach the woman to protect at all times.

However, the somewhat stern antiseptic measures the gynecologist so often recommend for marriage hygiene are not for use by the prospective mother. The introduction of any foreign matter into the new tender canals is to be avoided. Therefore, it is most universal for the physician to recommend the women who are as such as six months pregnant and many physicians extend this advice to cover the entire period of pregnancy—should forego the usual marital relation.

The two principal arguments which are advanced against the advisability of continuing the sex relation with a pregnant woman are one medical and one psychological. The first is that sexual congress during the early months of pregnancy will result in miscarriage and that, in the latter months, it is a cause of child-bed fevers. The second, the argument with which we are more directly

concerned as psychologist, is that the woman who is pregnant does not desire sexual intercourse; that if she permits it she is yielding to the passions of her husband.

Regarding the purely medical problem, I have not known any competent medical authority who would give it as his experience that in any large number of cases injury to either mother or child had resulted from the normal marital relation, if it were not indulged into excess. In other words, sexual intercourse during pregnancy is generally quite a harmless procedure—except of course in those few cases where deterring conditions may exist.

These can be easily detected by a competent obstetrician. When a woman becomes pregnant, she should decide on the doctor who is going to see her through, and ask him whether she is one of the few people who must consider other matters besides general comfort and desire.

From the standpoint of the psychologist, the second argument is not only unimportant, but is decidedly untrue. Where there is any distinct pleasure to the male, the woman can certainly do no harm by permitting the marital relation if it is not repugnant to her. I have heard the stories, from one side or other, of many married couples. Almost never has the woman described the sex relation as repugnant while she was pregnant.

The exceptions have been those tragic cases where the marital relationship had been poorly adjusted from the beginning. Indeed, the evidence of our physiological knowledge is to the contrary. Those very glands and organs which are concerned with reproduction are those which serve as stimuli to the sex desire. Pregnancy in the woman stimulates the activity of all the machinery concerned with reproduction and would be expected to stimulate the sexual desire. This is precisely what the studies of many married couples would indicate as true.

As for the man, there is no physiological change in him. The strain, physical and moral, of total abstinence is one which must concern the psychologist. The man may suffer in health or temper or he may turn to other sources of satisfaction, which he will not necessarily give up at the end of his wife's period of quarantine. Also, there is ever present possibility of contracting diseases when one goes adventuring.

This much is true of the average man and woman. As we have noticed, for some women there is a physical hazard attached to intercourse at such a time of pregnancy. There is also a mental hazard the aesthetic distaste for intercourse during pregnancy, or the fear of injuring the child or the mother, which arises from the ignorance of the facts. These fears may be dispelled by information as to the true state of affairs, but on the other hand, the idea may be

so ingrained, as to resist an intellectual attack. Ideas which we acquire in our youth, die hard.

In such cases, it is perhaps better to yield to this feeling however irrational, since intercourse where one of the partners is resistant, is both impractical and disagreeable.

It must always be remembered that during the last two months of pregnancy, precautions be taken not to press on the developing embryo, or on the neck of the womb.

In conclusion, we may say that the average pair need not refrain from intercourse during pregnancy and provided that in the later months, care is taken to avoid injuring the fetus, (instructions as to this care may be obtained from your own physician,) we can assert that intercourse during pregnancy is natural, necessary and unavoidable. One prominent psychiatrist considers that there is a social as well as a physical value involved, in that it promotes desirable family unity. Its physical value is obvious, since it offers an adequate release for periodically recurring tensions.

RADIOLOGIC AIDS IN THE DIAGNOSIS OF HEART DISEASE IN CHILDREN—A REVIEW

EDMUND G. LAWLER, M. D., and GEORGE A. HELLMUTH, M. D.

Chicago.

The modern roentgenologic examination of the heart in children is of unquestionable aid in the diagnosis of cardiac disorders. In general, the same radiologic methods are used as in the adult. The fluoroscopic examination and the teleoroentgenogram or two-metre plate of the heart are the principal methods used in children. The fluoroscopic study approaches a more physiological examination while the teleoroentgenogram is a permanent objective record and demonstrates fairly accurately cardiac shape and size. In infants a teleoroentgenogram at 60 cm. distance may be used without error. The teleoradioscopic projection of the heart shadow is a fluoroscopic examination with the tube at a distance of 200 cm. It is not used generally because a tube of greater energy output is necessary. The orthodiagram is a direct tracing, made by the observer, with a movable tube connected to a writing arm, in which only the central parallel rays are used. It is an accurate simple, and inexpensive method and well adapted to older children. Infants are best examined under the fluoroscope. The roentgenokymographic tracing of the heart silhouette has been shown to be of value in adult cardiac examination, whereas in pediatrics, it has been rarely used and

must await further study before an evaluation of the method can be made.

In infancy and early childhood the value of the radiologic examination is considerably overshadowed by that of the child after five years of age. This is due to anatomical changes as well as etiological factors. The cardiac silhouette of infancy is less differentiated because the auricles are proportionately larger, the ventricles approach each other in size and the thymus causes the heart to assume a more transverse position. The infant's heart is considerably larger in comparison to the body weight than that of an older child, and its superior inferior diameter decreased. Etiologically, the heart shadow shows few characteristic changes of radiologic value besides congenital lesions. This is obviously due to the rarity of rheumatic fever in infancy and early childhood.

A fundamental understanding of the normal anatomy of the heart is imperative for proper interpretation of cardiopathological change. The anatomical borders of the heart are best studied in the postanterior, right and left anterior oblique positions. The right cardiac border in the post-anterior view is composed of three parts. The upper portion is formed by the superior vena cava and is prominent and relatively larger in young children. The middle right heart border is formed by the ascending aorta and is not seen until after the age of six to eight years. It is usually small and indistinct and during infancy may not be seen. The third and lower portion is a large distinct bulge of the right auricle, proportionately greater and well to the right of the sternum in young children. In infancy and early childhood the right heart silhouette is distinctly convex, longer and bulges more than in the older child's heart. The left border of the cardiac shadow is somewhat longer than the right border in young children, but almost equal in length during infancy, and definitely longer in older children. The aortic knob or uppermost part of the left heart shadow is not normally present in infancy and childhood until after the age of six to eight years. The pulmonary conus is the next lower border and is composed of the upper right ventricular infundibulum and pulmonary artery. This shadow like the aortic knob is not seen in early childhood. The left auricular appendage shadow lies immediately below the pulmonary conus and forms a long border in early infancy and a very small straight or slightly convex border in childhood. The left ventricular shadow composes the lower two-thirds of the left heart border, from the left auricular border to the diaphragmatic leaflet. Often in infancy and early childhood the entire caudal border of the heart is visible. The oblique projection of the heart shadow is of little value in infancy and early childhood, but after the age of three or four these views are increasingly important. The right anterior oblique position is invaluable in studying the size of the auricles, especially the left in

relationship to the barium filled esophagus. The left anterior oblique position is imperative in all heart examinations because of the clear visibility of the course and position of the aorta and size of the ventricles.

The diagnosis of general cardiac enlargement by the roentgen ray has become an important procedure in pediatrics. A murmur of dubious origin may be interpreted more intelligently; serial plates or tracings may indicate early enlargement, improvement, or regression of an active rheumatic cardiac involvement.

During infancy and early childhood the transverse diameter of the heart is generally conceded to be inaccurately correlated to body build, weight, height or width of the thorax. A more significant relationship is found in children after the age of four to five years, and the size of the heart shadow can be interpreted with more assurance. The most popular method used today to indicate cardiac size is the study of the cardiothoracic index. To determine the size relationship of the heart to the chest by this method the cardiac shadow must be measured in its widest diameter in the postanterior view. This is commonly drawn and measured on the screen or flat plate. A vertical line is made in the midline of the chest corresponding to the dorsal spines. The lateral shadows of the heart at their widest diameter are now drawn. The left horizontal diameter is made from the midline to the widest area of the left heart border. The right horizontal diameter is drawn from the midline to the right heart border in its widest diameter. The combined measured distance from the left border to the midline in its maximal width is called the transverse diameter of the heart and from the right border to the midline. The internal diameter of the chest is a transverse line drawn between the widest points of the chest immediately above the lateral diaphragmatic attachment. The relationship of the transverse diameter of the heart to the internal diameter of the chest is called the cardiothoracic index. The normal transverse heart diameter is generally agreed not to exceed 50-60 per cent of the internal diameter of the chest. Some pediatricians feel, however, that 50 per cent or more constitutes an abnormally enlarged heart. There is evidence also to indicate that 25 of 100 normal children may have a cardiothoracic index over 50 per cent. A heart is rarely normal if it exceeds 57 to 60 per cent of the internal diameter of the chest and therefore is the form of choice in determining enlargement by the cardiothoracic index. These measurements show an error when the pulmonary conus is enlarged, and therefore, other diameters are necessary. Cardiac enlargement may be detected by known standard normal measurements with tables for various types of body build according to age, length and weight, or accurately from calculations with formulas

and expressed as frontal area in square centimeters. Volume determinations are not generally used but are the most exact expression of cardiac size. The heart size determined by measurements of the cardiac shadow should be generally interpreted freely and are perhaps better than no measurements. It is difficult especially in the young child to rely upon so-called normal standards and sometimes general impressions are more reliable than cardiac measurements.

Individual and multiple valvular lesions of the heart produce characteristic cardiac chamber enlargement which may often be suspected or diagnosed from the cardiac silhouette. It is well known, however that severe rheumatic carditis especially in its initial phase or advanced decompensated and dilated hearts may obscure all characteristic chamber enlargements in children regardless of high grade valvular lesions. In these conditions cardiac enlargement may be obvious but the valvular chamber enlargements are obscured. The true value of the radiologic examination is in cases of valvular lesions of the mildly active rheumatic involvement or inactive rheumatic heart disease with or without mild or moderate congestive failure. Pure aortic valvular lesions from rheumatic fever, especially with free aortic regurgitation or high-grade aortic stenosis produces a left ventricular enlargement. In the presence of aortic stenosis, the postanterior view of the lower cardiac border is rounded and enlarged usually slightly to the left; nothing of note is seen in the aortic area. Free regurgitation of the aorta and hypertension produces a more marked enlargement of the left lower cardiac border downward and to the left producing the "boot shape" heart. The aortic knob in the former may be prominent and wide fluctuations noted along the aortic course and left ventricular border. The oblique views, especially the left anterior oblique, confirms these findings.

Mitral regurgitation is the common valvular lesion of childhood. The cardiac silhouette shows mild enlargement of the left ventricle and the right ventricular enlargement causes some fullness of the pulmonary conus. The left cardiac border is therefore straighter than the concave border of the normal heart. The left auricle is only slightly enlarged and usually does not produce a deviation of the barium filled esophagus in the right anterior oblique position.

Mitral stenosis, however, produces a more typical configuration. The left ventricle is not enlarged and the right ventricular enlargement pushes the non-resistant left ventricle to the left. The aortic knob is seen poorly, or not at all, but the pulmonary conus becomes prominent in the postanterior view causing the middle portion of the left cardiac border to become straight or convex producing mitralization or the so-called egg-shaped heart of mitral stenosis. The marked dilatation of the left auricle from high grade stenosis is usually not

seen in postanterior view; but in the right anterior oblique position can be well seen encroaching upon the retrocardial space and deviating the barium filled esophagus in a definite posterior curve. The esophagus may be displaced slightly to the right in the postanterior view. The roentgenologic evidence of mitral stenosis may be the only immediate means to differentiate causative factors producing a diastolic murmur at the apex.

Late congenital syphilis with simple or complicated aortitis is a pathological curiosity in children. A widening of the aorta with free pulsations must not be taken lightly as a syphilitic aortitis. Rheumatic aortic regurgitation, hypertension, and coarctation of the aorta must be excluded before luetic aortitis can be considered in the diagnosis.

The heart shadow is influenced by vitamin deficiency diseases and the roentgenogram is of considerable aid in the diagnosis of nutritional cardiac conditions of infancy and childhood. Beriberi may produce a bulge of the pulmonary conus and right lower cardiac border. Infantile scurvy, according to Hess produced cardiac enlargement more especially of the right ventricle and broadening of the base of the cardiac shadow by the roentgen rays. Vitamin D deficiency apparently causes cardiac enlargement of one or both ventricular chambers probably from thoracic deformity.

The heart in the hypothyroid state during childhood may be generally enlarged, and the radiosopic examination may simulate a pericardial effusion. Very little is known, however, of the heart in hypothyroidism and cretinism during childhood and other conditions producing cardiac enlargement to the right and left must be eliminated before such diagnosis attempted.

Deformities of the chest and spine produce cardiac displacements and sometimes cardiac embarrassment. Deep funnel chest from acquired or congenital causes usually displaces the heart into the left chest and may also produce right or left, or combined, ventricular enlargement. Kyphoscoliosis also displaces the heart; right convexity causes left displacement, the heart having a mitralization silhouette; left convexity, a right displacement and wide aortic configuration.

Pericardial disease has assumed an important position in pediatric and the roentgenological examination may often be the only means of detecting the lesion. Moderate or large free effusions of the pericardium are demonstrated by absent or decreased cardiac pulsation, characteristic rounding of the silhouette, i.e., "water bottle shape" and shortening of the vascular shadow. Advanced cardiac dilatation often presents a similar contour to pericardial effusion, and may be indistinguishable. Small effusions are difficult or impossible to detect in young children but in older children may be suspected by observing a collection of fluid at the level of the inferior vena cava in the inferior posterior recess or sinus of the pericardial cavity.

Chronic pericarditis occurs pathologically in two types: first, pericardial thickening with adhesions to the mediastinum and surrounding structures producing a mediastinopericarditis. The cardiac silhouette is usually enlarged and fixed; tent-like shadows occur along the margins and there may be mitralization of the left cardiac border. It should be noted, however, that the heart is subject to various changes in shape and size due to the underlying disease associated with the pericardial involvement. The second and more important chronic pericardial disease is the so called Pick's disease or chronic constrictive pericarditis. The heart pathologically is encased in a fibrous or callous-thickened pericardial sac producing a marked constriction of the heart and causing an "inflow stasis" simulating a right ventricular congestive failure. The thick pericardium covers the right auricle and great veins, while the cardiac apex may be relatively free. The surgical resection of the thickened pericardium has amazingly relieved some patients having this condition. The x-ray and electrocardiogram are of aid in diagnosing this condition. The heart shadow is ordinarily not enlarged or only slightly so. Cardiac pulsation may be free at the apex with no pulsation at the right border. Commonly and especially with cardiac congestion, the supracardiac shadow is wide. Pericardial calcification is an important sign, but often is absent and may occur in other chronic pericardial diseases.

Congenital cardiovascular malformations are difficult to diagnose clinically as well as by roentgenologic observations. The information gained from the radiosopic examination is rarely diagnostic, nevertheless, with the modern trend to determine specific defects it is of real value in all congenital cardiovascular malformations. After the history and physical examination the x-ray is of great importance and is of superior value to the electrocardiogram. In a consideration of an acquired or congenital lesion in any suspected child the disposition of the case cannot be complete without the use of the x-ray. Congenital defects may be present however, without any change or may give only vague information as to the causative factors of cardiac enlargement. The decreasing incidence of multiple complex congenital lesions and the increasing differentiation of the cardiac silhouette after infancy greatly enhance the value of the radiosopic examination.

Dextrocardia is the most important congenital malposition to recognize. The true or so-called "mirror type" shows complete transposition of the chambers, i. e., the left cardiac chambers on the right side, and is almost always associated with visceral transposition. The usual absence of other intrinsic congenital cardiac defects precludes a good prognosis. The isolated or false type anatomically has no true transposition; the heart is merely lying in the right chest with the left chambers to the left. It may sometimes be

recognized by the left course of the aorta. Usually there are present associated cardiac congenital defects to alter the form of the heart and make the prognosis less favorable.

Abnormalities of the cardiac chambers with septal defects are the most common congenital lesions. Patency of the foramen ovale is of little import and the common small "anatomically open, functionally closed" defect discloses no roentgenological signs. If the interauricular septal defect is large and associated with other congenital lesions, or acquired valvular disease such as mitral stenosis, the heart is of enormous size. The pulmonary conus may be enlarged with a sharp definition of its branches in the lung fields. The heart may be globular with enlargement of the right auricular shadow and the aortic knob may be hypoplastic. Interventricular septal defect also commonly show no characteristic cardiac shadow. This lesion usually accompanies other congenital defects and if the heart silhouette is not entirely normal there may be a slight globular shape of the heart with enlargement of one or both ventricles or mild fullness of the pulmonary conus.

Patency of the ductus arteriosus produces no unequivocal diagnostic shadows, and in young children with a left basal systolic murmur, the roentgen-ray may disclose only a slight or no pulmonary conus bulge. Later in childhood and when the murmur becomes more marked in intensity, or continuous in time, a characteristic shadow may be produced. The pulmonary arch pulsates, the conus bulges and the heart chambers are slightly enlarged. Occasionally in older children with wide patency one sees an area of density or pulsation under the aortic arch in the left anterior oblique view.

Pulmonary stenosis rarely occurs alone, and may show no characteristic shadow. Occasionally the pulmonary conus is dilated but may be normal or hypoplastic. Complicated pulmonary stenosis is usually associated with interventricular septal defect and right ventricular hypertrophy. The combined lesions with dextro-position of the aorta represents the most common multiple congenital defect and is known as the tetralogy of Fallot. This condition may be suspected roentgenologically by a cardiac contour simulating a wooden shoe or so-called *coeur en sabot*. The characteristic finding is a blunt and almost straight apical border forming an acute angle with the left diaphragmatic leaflet. This border is caused by the enlarged right ventricle displacing the left ventricle posteriorly and superiorly. The base of the heart is not full and shows usually a concave depression.

Coarctation of the aorta may produce mild left ventricular enlargement and pulsations of some degree of the ascending aorta. The erosion of the posterior and lower margins of the ribs is rarely seen in children, but in the older age group one may find this diagnostic sign. It is generally difficult to outline the aorta in the

left anterior oblique position in young children and therefore the narrowing of the aortic arch may only be demonstrated in older children.

Congenital idiopathic hypertrophy of the heart is a very infrequent condition occurring during infancy, and is considered by some as a dubious entity. The radiological examination sometimes discloses an unsuspected cardiac enlargement. The silhouette is one of general cardiac enlargement with preponderant hypertrophy of the left ventricle and may be of such huge proportions as to almost completely fill the left lower chest.

In conclusion, the visualization of the cardiac silhouette by the roentgen-ray, although not new, is now just beginning to be generally recognized as an important aid in the diagnosis of heart disease in children. The radiologic examination usually gives but confirmatory evidence of heart disease, but may add useful and interesting information in the diagnosis, prognosis and management of the child with heart disease.

(*Illinois Medical Journal Jan. 1939.*)

CERVICAL FASCIAE AND INFECTIONS ABOUT THE NECK

R. W. KERWIN, M. D.

Chicago.

This paper merely attempts a brief review of the anatomy of the neck with especial regard to the progress of suppurative processes as affected thereby. Much has been written in this field and on this subject and it is in the belief that repetition is one of the surer paths to true knowledge that this topic is given. The varied anatomical descriptions given the fasciae of the neck and their multiple classifications is evidence of their rather complicated structure. The fact that one of the most difficult cases to diagnose and handle is pus in the neck; that fatalities still occur, that the neck is an admittedly difficult surgical area—all serve to make this a problem of never-ending interest. Quotations are not used, since, many of the authors mentioned have borrowed from one another. Some of this work is original in that the drawings shown are freehand taken from specimens of horizontal serial sections of the neck and head in the anatomy laboratory of Loyola University.

If one does not overburden himself with pseudodescriptive terms and too-detailed an inquisition into the fasciae and compartments of the neck, a clinical understanding and application is easily made out. This is readily seen if, in our primary division, we divide the neck

into an anterior or visceral half and a posterior or muscular half. This is best viewed in the section through the fourth and fifth cervical vertebrae, which almost every text book shows in describing the cervical fascia, and which most of you are familiar with.

It will be seen here that the so-called prevertebral fascia binds together the muscles immediately about the cervical spine, and at this level separates them from the inferior constrictor muscle; this creates a potential space.

The Retropharyngeal Space. The extent of this space and the avenue it presents for the spread of infection may be seen if one carefully disarticulates the head from behind and carries the section forward through the prevertebral fascia to the retropharyngeal space, when the head will topple forward and downward, carrying with it the anterior or visceral half. This space extends directly downward into the mediastinum and is filled with loose areolar tissue in which are embedded the retropharyngeal lymph glands which, in children at least, are so prone to break down with the production of an abscess. Since this is separated from the pharynx only by mucous membrane and the constrictors, spontaneous perforation is frequent; or the examining finger, in palpating the posterior pharyngeal wall for fluctuation and diagnosis, ruptures the abscess. If incision in the posterior pharyngeal wall is required it is performed without anesthesia—the child merely being wrapped in a sheet and inverted immediately after incision to prevent aspiration of the pus, although use of a mechanical aspirator will obviate the need of this procedure. An external approach into the retropharyngeal space may be had through its side, where the carotid sheath, together with a prolongation of fascia anteriorly, called the *alar fascia* definitely walls off any lateral extension of pus confined in this area.

This approach calls for an incision along the anterior border of the sternocleidomastoid muscle, below the level of the hyoid bone, and extending a sufficient distance downward (usually to about the level of the cricoid). The sternocleidomastoid muscle and carotid sheath are retracted laterally putting the alar fascia on the stretch, which in this area, *i. e.*, below the hyoid, is practically devoid of vessels. Blunt dissection through this fascial sheet introduces one immediately into the retropharyngeal space.

This same approach, with the incision extended further downward, and with division of the posterior belly of the omohyoid, may be used in inspection as low as the third thoracic vertebra or for example for delivering foreign bodies impacted in the esophagus. From the previous slide it will be seen that pus from a cervical caries or Pott's disease is not located in the retropharyngeal space, though it may penetrate the prevertebral fascia and be evacuated, as described above, for true retropharyngeal abscess. It may, however, burrow downward in the midline, keeping beneath the

3L
L. 4: 7/22/40 N. 1. 8. 12

prevertebral fascia, until it becomes mediastinal in location or, as is quite frequently the case and explained by this next slide, follow the lateral extensions of the prevertebral fascia over the scalene muscles, and present a bulging in the posterior triangle of the neck which may be incised and drained to advantage in this region, since secondary contaminating organisms are more easily controlled than is the case in an incision in the pharynx.

Since the attachment of the prevertebral fascia superiorly is to the occipital bone (about the insertion of the longus capitis), it follows that the pointing of an abscess from the petrous apex into the pharynx would be anterior to the prevertebral fascia or in the retro-pharyngeal space.

The carotid sheath is a condensation of connective tissue about the great vessels in the neck and represents a line of fusion of the three major fascial layers of the neck. It is often depicted as the stem of a trifolium in which the leaves are the potential spaces which so frequently are the sites for the accumulation of pus in cervical infections. This is not entirely true, for the carotid sheath cannot be likened to a hollow stem or tube, though pus under great pressure in the above-mentioned spaces may, by perivenous extension, extend to and down the internal jugular vein.

The parapharyngeal, lateral pharyngeal, or pharyngo-maxillary space, as it is variously called, is the most commonly found infected of this group. Etiologically, local tonsillectomies are often concerned, since parapharyngeal space abscess is the most frequent complication of its class following this popular surgical procedure. This space is bounded.

Internally, or medially, by the superior constrictor muscle, of the pharynx and its associated buccopharyngeal fascia.

Externally, or laterally, by the internal pterygoid muscle, the parotid gland, and the ascending ramus of the mandible;

Anteriorly the sub-maxillary gland;

Posteriorly the stylopharyngeus muscle and fascia covering the great vessels and nerves;

Superiorly the floor of the skull; and

Inferiorly it diminishes in size to a point or apex continuous in the carotid sheath at the level of the greater cornu of the hyoid bone.

Descriptions of the space vary; some including the great vessels in the compartment, but dividing it into two halves—an anterior in which the pus is found, and a posterior separated from the anterior by the styloid process and attached muscles and ligaments, and containing the great vessels. Of clinical importance is the fact that it lies at the level of the tonsil and so, besides causing external swelling behind and below the angle of the jaw, usually displaces the tonsillar fossa, pillars, uvula, etc., medianward, much in the same fashion as a

peritonsillar abscess. Relief by surgical drainage may be accomplished by.

Internal drainage—usually effected by thrusting a curved blunt hemostat through the tonsillar fossa. The advantages over external drainage are cosmetic, but are often outweighed by; the patient's inability to open the mouth due to trismus produced by direct irritation of the internal pterygoid by the abscessed space; the difficulty or impossibility of controlling hemorrhage, great or slight; the tendency of the opening to close before drainage is complete.

External drainage may be effected by a skin incision over the greatest point of swelling; location of the abscess by an aspirating needle; and then blind, blunt dissection until pus is reached, when a tube may be inserted. Other techniques include an incision just below the border of the mandible, ligation of anterior facial vein to permit rolling the submaxillary gland up out of the way on the mandible, and blunt dissection medialward into the parapharyngeal space. Another mode of access is through an incision along the anterior border of the sternocleidomastoid muscle which, on lateral retraction, exposes the carotid sheath. A gloved finger carried up the sheath will find the abscessed parapharyngeal space.

The other two spaces depicted by the trifolium are the

Submaxillary space and the

Parotid space—both of which are formed by a splitting of the outer investing or vaginal layer of the deep cervical fascia, which also splits to enclose the sternocleidomastoid and trapezius muscles.

The submaxillary space is complete, and when found to be housing pus, usually represents an abscess of the salivary gland itself and may be demonstrated by milking pus through the duct opening in the floor of the mouth. Relief is found only in total extirpation.

The Parotid space besides containing the salivary gland also includes some superficial or preauricular, and some deep lymph nodes. The medial or internal layer of its fascial layer is incomplete superiorly and permits communication with the parapharyngeal space, but inferiorly reinforcement presents a strong band known as the stylomandibular ligament which very effectively separates the parotid from the submaxillary space.

From the above it is readily seen how an exposure of the carotid sheath, through an incision along the anterior border of the sternocleidomastoid at the level of the hyoid bone, serves a double purpose i.e., it allows easy and almost blind access to the three spaces and at the same time permits inspection of the internal jugular vein which may be thought to be thrombosed.

An additional space—the *Suprasternal space*, or space of Burns, is found low in the neck as a communication between the space on either side formed by the splitting of the investing layer of fascia about the sternocleidomastoids.

It is of little surgical importance, containing the terminations of some smaller cervical veins, viz., the anterior jugulars, external jugulars, transverse cervical, etc.

A space of more importance is the so-called *Subvaginal space*, found directly beneath the investing layer in the posterior triangle, and beneath the sternocleidomastoid muscle in the lower part of the neck. It does not extend into the anterior triangle, nor do the two spaces communicate across the midline. They communicate, across the midline. They communicate, in pressure experiments, behind the carotid sheath with the retropharyngeal space. The importance of this space lies in the large number of lymphatic glands it contains.

The *parapharyngeal*, lateral pharyngeal, or fascia is a rather ill-defined layer which at its middle, is attached to the hyoid bone and an oblique line on the thyroid cartilage. Superiorly it covers the muscles forming the floor of the submaxillary triangle, and so gains attachment to the mylohyoid ridge. Inferiorly it is continued over the infra hyoid group of muscles, the trachea, esophagus and thyroid down into the mediastinum. That portion covering the infrahyoid musculature is attached anteriorly to the manubrium sterni, and laterally it is continued over the posterior belly of the omohyoid to the attachment of that muscle on the superior border of the scapula. The space formed between it and the outer investing layer is demonstrable for the most part above the hyoid only where it contains the submaxillary and submental groups of nodes. This explains too, cases of so-called Ludwigs angina, or abscesses about the base of the tongue originating above the mylohyoid line which, spreading downward, involve the mediastinum if they succeed in passing the general partition which the hyoid bone, together with its muscular and fascial attachments makes, separating the neck into upper and lower halves. It may be pointed out here that the hyoid bone is the agent by which the visceral structures are slung between the styloid process and mandible above, and the sternum below, by virtue of the supra and infrahyoid strap muscles.

External to the investing layer of deep fascia is the superficial fascia containing the platysma, the external jugular veins, and a quantity of fat and lymph nodes. Pus here reaches the surface with ease, and is represented principally by the suppurative lymph adenitis found especially in childhood and observed but rarely in adults. Posteriorly, numerous fibrous septa so divide and fix securely this subcutaneous element that it is a favorite site for carbuncles when solitary localization, relieved by a small single opening, is entirely inadequate.

(*Illinois Medical Journal*, Jan. 1939.)

SOME PRACTICAL POINTS IN MEETING POOR SURGICAL AND ANESTHETIC RISK IN SURGICAL DISEASES.

THOMAS J. COLLIER, M.D.,
Atlanta.

The honour of introducing general anesthesia for the alleviation of pain during surgical procedures and other conditions such as childbirth, belongs to Dr. Crawford W. Long, of Jefferson, who in 1842 gave his knowledge to the world so that all people could enjoy its benefits.

Recent advances in surgery, dentistry and other special fields have greatly broadened the field of the operator. Accordingly these advances have required that an unusually large proportion of the poor risk cases should be handled by an expert medical anesthetist. Hence it is not surprising that anesthetic deaths occur even in the practice of the most expert. However, it has been reported that one third of the postoperative deaths in chronic surgical conditions are due to lack of preoperative diagnostic skill to ascertain the reserve power of other organs, or the extent of primary disease, or the number and influence of concomitant diseases.

The actual anesthetic risk will depend upon anesthetic tolerance on the one hand, and upon the nature of the proposed operation on the other. Patients who present a good risk will come through with their lives regardless of the anesthetic used or by whom it is given. For patients who present a substandard risk the ability of the anesthetist may mean the difference between life and death.

The anesthetist should apply certain critical tests which have been adopted as a result of experience, as for example, Moot's index. This formula provides an approximate index to the cardiac reserve. It is obtained by multiplying the pulse pressure by 100 and dividing this by the diastolic pressure. The answer is approximately fifty in the normal subject. For example: take the normal pulse pressure at 40; and 40 times 100 divided by 80 diastolic pressure gives 50 per cent. Patients presenting an index between 40 and 60 per cent show ample cardiac reserve. If the index is below 25 or above 75 per cent, the risk is too great.

The simplest, and probably the most reliable, of these tests is Henderson's breath-holding test. This is exploited as being capable of giving warning in such conditions as a state of acidosis, cardiac, respiratory or blood diseases. The test is performed when the patient has been in the reclining position for at least fifteen minutes. After observing several normal respirations one pinches the nose of the patient at the end of a normal expiration and instructs him to keep his mouth closed until it becomes absolutely necessary to breathe. Pinching the nose of the patient aids will power, prevents involuntary breathing and so yields a more accurate result. During

the apneic pause the patient is being reassured that no harm will result from the test, and to exercise all his determination to hold his breath for the longest possible period. The normal period is 25 to 30 seconds. Severe acidosis may be expected when only a 5 to 10 second period is possible.

Oxygen starvation which precipitates even the slightest anoxemia or acidema is dangerous in patients suffering from hemoglobine-mia, shock, cachexia, oxygen starvation, cardiorenal, pulmonary lesions and goiter or other conditions of disturbed metabolism in which there are frequently excess acid products and a consequent tendency to acidema.

It is important to realize that assessment of anesthetic tolerance must not depend upon one test or index, but should be deduced from the maximum of information obtainable by the anesthetist. By consideration of such information it should be possible to classify patients into three groups, those who present good anesthetic tolerance, those whose anesthetic tolerance is probably adequate, and those in whom anesthetic tolerance is gravely inadequate.

From the above tests the anesthetist is in a position to choose the agent or agents best suited, the route of its administration and to some extent the course of anesthesia which will give the greatest amount of relaxation, for the condition at hand, with the least toxic effect upon the patient. Complete co-operation between surgeon and anesthetist is of the utmost importance at all times.

I heartily agree with Hussy who states, "The choice of a competent anesthetist is far more important than the choice of the anesthetic and the greater the degree of risk the more important this choice becomes. The risk of anesthesia can be lowered by the use of a medically trained anesthetist who has an intimate knowledge of the physiologic action of the anesthetic agents at his command together with skill and experience in administration."

The selection of the agent or agents and the technic of their administration should only be determined after careful physical examination of the patient and assessment of the anesthetic tolerance as described above. It sometimes happens that the most convenient agent is not the safest; whenever safety conflicts with convenience the latter must be sacrificed.

The choice of an anesthetic agent or agents or technic involves a balancing of four factors:

1. The anesthetic risk presented by the patient.
2. The toxicity of the drug.
3. The convenience of the surgeon.
4. The psychic reaction of the patient.

Anesthetic risk. Broadly, this depends upon the state of the circulatory and respiratory systems, the age of the patient and the nature of operation proposed.

The toxicity of the drug. In poor risk patients the least toxic anesthetic available should be selected. Of the inhalant anesthetics ethyl chloride and chloroform are the most toxic. The toxicity of ether is less and the anesthetic gases least of all. Local anesthetics, though not free from toxicity, carry the minimum of damage. Spinal anesthetics, however, involve circulatory depression rendering their value questionable in poor risk patients; they should never be used simply as a convenience at the risk of the patient's life.

The convenience of the surgeon. Usually in normal subjects some concessions may be made to the convenience of the surgeon, but in poor risk patients convenience must be subordinated to consideration of safety.

The psychic reaction of the patient. Local and regional anesthetics are undesirable in highly nervous patients.

Shock and hemorrhage. When possible the patient should have a direct blood transfusion; otherwise saline with glucose intravenously before the anesthetic is started or at the same time. Local infiltration with novocain will require a less profound inhalant anesthetic and produce less toxic effect upon the patient.

Grave sepsis. This should receive about the same preoperative treatment and anesthetic.

Local anesthetic. It has been shown in animal experimental work when the animals are narcotized with some of the barbiturates they will tolerate increased dosage of cocain or novocain without fatal consequences, therefore it would seem to be wise to resort to some of the barbiturates before administering spinal or regional anesthesia.

When patients have gone into a depression following an initial spinal anesthetic I have noted a remarkable improvement after administering a mixture of one of the gaseous agents with high oxygen concentration, and carbon dioxide for a few minutes.

I have also observed, as have others, that in some instances there is a sudden rise in blood pressure and an increased pulse without apparent cause. This may be due to two causes other than the sudden loss of blood or marked trauma, etc. First the patient may have an obstructed air way; the sudden rise in blood pressure and increased pulse rate will usually return to or approach normal when an adequate air way is restored. Secondly, when the filtration method is being used we may get about the same symptoms as above. By changing the soda lime these readings will also return to or approach normal.

The untrained medical anesthetists are handicapped in their work because they have not been taught either to recognize or to interpret the reaction to anesthetic agents of the human machine in health and disease.

From the American College of Surgeons Hospital Standardization report for the year 1934, I quote, "No department of anesthesia should function without the supervision of a competent medical director, a specialist in anesthesia who has a profound knowledge of his specialty. He must know how to evaluate the risk involved, and how to treat them. In fact, he must be as well equipped with medical knowledge as any clinician in the hospital; otherwise it is impossible for the surgeon and the internist to place complete confidence in his judgment. Through the efforts of an efficient anesthetist it is possible for the incidence of postoperative mortality and morbidity to be reduced considerably and the end results improved. Anesthesia is an important service in the hospital in as much as it is known to be an influential factor in the end results of treatment. Because of its extensive ramifications and its significant effects it has become a specialty in itself, necessitating specially trained and qualified personnel for its administration. Unfortunately the administration of anesthesia in some hospital today leave much to be desired. Considerable improvement can be made, however, by employing only experienced anesthetists."

In closing may I urge greater co-operation between surgeon and anesthetist, thereby converting many fatalities into successes, and promoting closer fellowship.

(The Journal of the Medical Association of Georgia Jan. 1939).

INFLUENZA.

MANGHANMAL SADHUMAL,
Hyderabad (Sind).

Influenza is an acute epidemic disease characterised by fever, pains, prostration and a strong tendency to pulmonary complications.

AETIOLOGY.

The history of the disease clearly shows that it tends to occur in pandemics; it swept over Europe in the winter of 1847-8. There was minor epidemics until winter of 1889-90 when it invaded Europe again, and in addition Asia, U. S. A. Once again the wave subsided and influenza persisted in its mildest form giving rise to but little more anxiety than that caused by a common cold. It swept the world again during the Great War, the wave started early in 1918, spreading all over the world during 1918-19 killing fifteen millions, exceeding in fact the total casualties of the European conflict. It spared no one, but it was found that healthy young men and women succumbed to it more readily than the very young or the very old.

In the last two pandemics three definite waves of influenza were observed. The first out-break appeared to be subsiding when a fresh wave with increased virulence mowed down thousands with lightning rapidity. This again subsided but a third and even worse invasion occurred. Since 1919, there have been several winter epidemics of influenza, though never of the severity of pandemics. For the last few years upto 1937, the disease has become milder and it may be expected to persist in an attenuated form for another thirty years. (Judging from the interval of duration between the two pandemics.)

BACTERIOLOGY.

The bacillus of influenza was discovered by Pfeiffer in 1892. It is the consensus of opinion among bacteriologists and the public health workers that the Pfeiffer bacillus is the organism responsible for influenza. A filterable virus has been assumed by some to be the incriminating agent of the disease. The most typical influenza lesion is found in trachea and bronchi, where the mucus membrane is deeply congested and often covered with purulent exudate. When this is wiped off scattered hæmorrhage may be seen. The lower trachea and bronchial mucosa is so often extensively denuded of epithelium that the loss of protective ciliated cells must be an important factor in furthering the passage of the microorganism in the lower respiratory tract. The bronchials are likewise inflamed and their muscular layers becomes damaged—a fact to be remembered in relation to post-influenza bronchiectasis. Other commoner findings comprise mucosal congestion of the nasopharynx, sphenoidal, and frontal sinuses. In the lungs the trouble consists of homogeneous structureless non-cellular exudate filling the bronchioles and invading the peribronchiolar tissues and scattered patches of broncho-pneumonia, patchy or extensive intrapulmonary hæmorrhagic œdema, interstitial emphysema, infarcts and pleurisy. Confluent broncho-pneumonia suggesting lobar pneumonia was seen. The lungs are highly œdematous and the alveoli filled with watery blood-stained fluid. The bronchioles are choked with mucus causing extensive areas of collapse. Pleurisy and empyema are likewise common. Petechial hæmorrhages in gastric and iliac mucosa and inflammation of kidneys are observed.

SYMPTOMS.

The symptoms vary according to the severity of the prevailing epidemic. The suddenness of onset is very characteristic. A person may have started the day in perfect health and is struck within few hours with fever, thirst, extreme lassitude, pain behind eyes and severe pain in limbs. The pain in limbs and tenderness may overshadow all other symptoms. There is pain in the back. Sleeplessness is troublesome. Pain on swallowing, difficulty in breathing and tightness of chest are also present. The patient sits in front of a

window and has the doors and windows open to admit air for him to breathe. Within a few days there is a dry unproductive cough which may last for even weeks and is a very troublesome symptom, not easily controlled.

PHYSICAL SIGNS.

Objective signs of influenza are very scanty unless accompanied by complications. As a rule, the conjunctiva are red—the tongue is covered with thick greyish coat. The temperature varies between 100–104°. Occasionally it is raised as in typhoid, usually remittent and falls within three to five days. This may be followed by a second rise, if the patient leaves his bed too soon. The urine is loaded with urates. There may be albumen in some cases. Few cases show herpes. The mucosa of the nose and pharynx is dry.

In the gastrointestinal type of influenza nausea, vomiting and pain in the abdomen are the marked symptoms. A burning sensation in abdomen is often time so great and distressing that the patient rolls over the abdomen. There may be constipation or diarrhoea and there may be blood in stools.

COMPLICATIONS.

Broncho-pneumonia: Scattered rhonchi are to be found anteriorly with rales and posteriorly at the bases of lower lobes. Consolidation is as a rule very rare. Dry unproductive cough in some cases purulent or muco-purulent expectoration in others. Hæmorrhage in expectoration was also found in some cases. In the pandemic of 1918-19 was observed a peculiar kind of cyanosis with great dyspnoea a condition associated with grave prognosis. There was usually uniform discoloration of face and ears although often the lips and ears were affected. The term heliotrope cyanosis has been applied to this condition. (It is associated with deficiency of oxygen in arterial blood produced by the flooding of the lungs.) Sometimes ropes of tenacious mucus have to be digitally removed from the mouth. A serious pleural effusion or purulent collection is a common complication. Otitis media, conjunctivitis, sinusitis, laryngitis, and tonsillitis. Complications under digestive tract are chronic gastritis, colitis, jaundice. The latter in influenza is of grave prognosis.

Under nervous system the complications are delirium; meningoencephalitis, polyneuritis. Under skin, eruptions of different kinds, alopecia. Under cardiovascular system, endocarditis and phlebitis.

SEQUELAE.

Asthenia, mental depression, tachycardia and heart lesion, vascular thrombosis (both coronary and cerebral thrombosis) and above all tuberculosis have often been found to follow this disease.

PROGNOSIS.

In general the following should be considered as of bad prognostic omen. Persistent sleeplessness. Refusal of fluids—persistent

vomiting—a rising pulse rate with a falling temperature—marked dyspnoea with cyanosis, meningitis, lateral sinus thrombosis empyema and toxic jaundice.

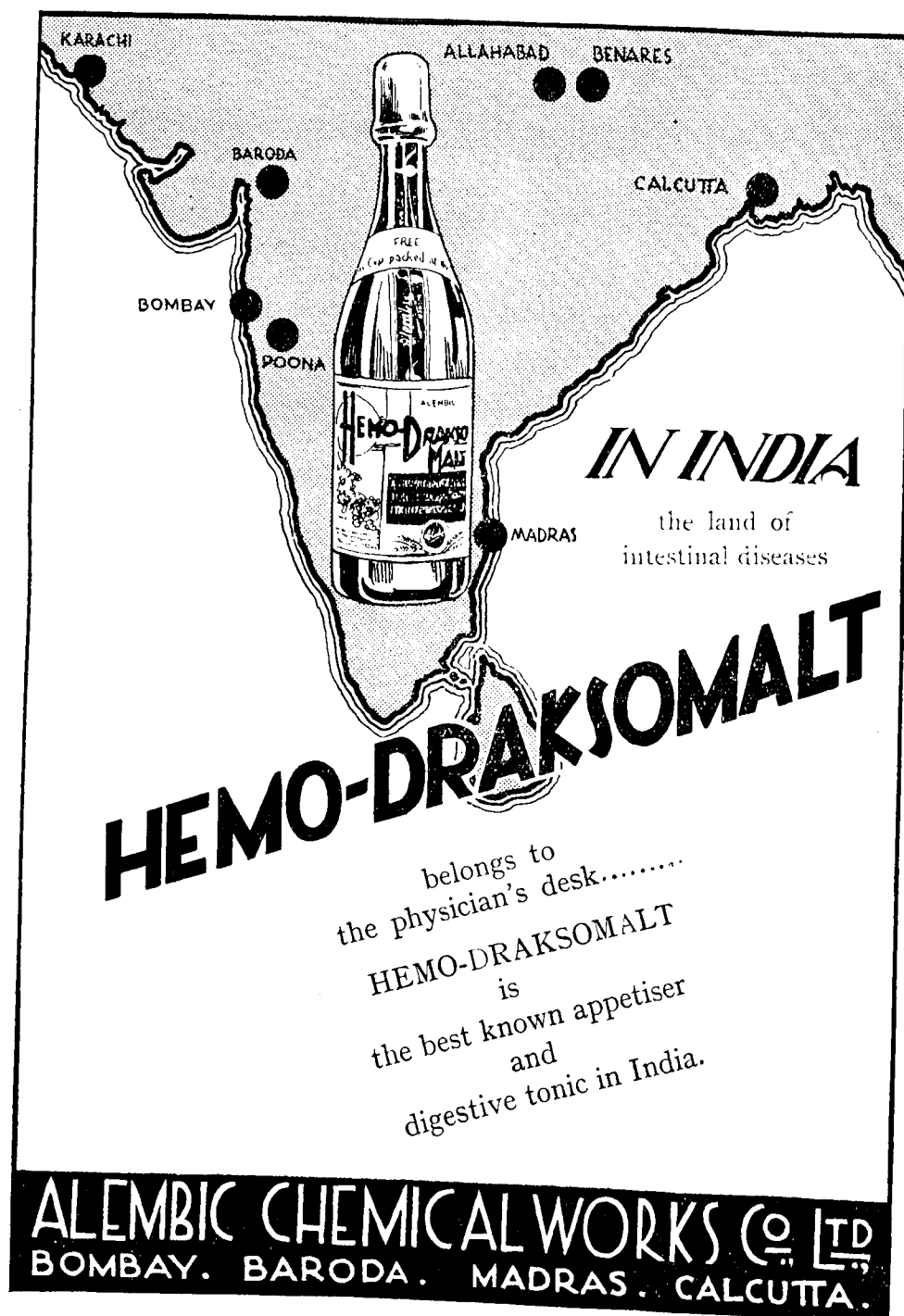
TREATMENT.

Prevention is better than cure. The wearing of mask of several layers of muslin protects from infection. Plenty of fresh air, avoidance of crowded rooms, theatre and other public places. A daily gargle and wash of the nose have been found useful. The best prevention in the season is inoculation with preventive vaccine containing B. influenza, pneumococci and streptococci. But when the attack has set in, one must accept one's fate philosophically as with a cold in head and to wait until the disease passes off. Rest in bed in a free well ventilated room is essential. The best drug of choice is an injection of S. U. P. 36. Give it immediately and it will never fail you. A smart purge with quinine and salicylates. Relieve the pains with aspirin and sleeplessness with bromide and chloral. Hot whisky or brandy last thing on retiring is capital for sleep. For fever tepid sponging and a mild diaphoretic would be found useful.

Tonsillitis and sore throat—spray and inhalation is of help. But it is the wretched cough that asked for the doctor's skill. For the persistent irritable unproductive cough syrup cocillana or Dower's powder at bed time may be tried. A linctus of the following has been found very useful. Diamorphine Hydr. gr. 1/24, Terp. Hyd. gr. 1/2, Syr. Pruni Virgi dr. 1/2, Honey dr. 1/2, Brandy dr. 1. This taken every third or fourth hour relieves cough well. In the pandemic of influenza of 1918-19 urotropine was a drug of choice. The pneumonic cases were treated with injection of oxygen and marvellous results were obtained with oral use of horse serum. Copious imbibing of brandy simply changed the prognosis of grave cases. The other line of treatment is symptomatic. Camphor in oil, strychnine and cardiazol are both cardiac as well as respiratory stimulants. For abdominal influenza, when vomiting is persistent, stop food. Give feeds by rectum. Champagne by mouth should be given trial. Glucose intravenously, bromides rectally relieve the irritable medulla thus allaying vomiting.

The treatment of complications is likewise symptomatic. The diet depends upon the severity of attack and the state of the gastrointestinal tract. For the first two days of a mild attack of influenza the diet should be light with plenty of fluids, glucose, fruit juices, lemonade and light thin clear soup and later on if the stomach allows it bread, toast, butter, poached eggs, if no appetite, a glass of champagne or whisky would help. During convalescence sufficient rest, good food and tonics are needed.

(*Journal of I. M. A. Dec. 1939.*)



HEMO-DRAKSOMALT

belongs to
the physician's desk.....

HEMO-DRAKSOMALT
is
the best known appetiser
and
digestive tonic in India.

ALEMBIC CHEMICAL WORKS CO. LTD.
BOMBAY. BARODA. MADRAS. CALCUTTA.

When ordering please mention *Medico-Surgical Suggestions*.

Extracts.

ZINC PEROXIDE IN FOUL SMELLING MOUTH AND NECK INFECTIONS.

Frank I. Meleney, in *The Annals of Surgery* for January, 1938, says that there are certain infections of the mucous membrane of the mouth and throat that are due to some anærobic and microaerophilic organisms. They may also be found in normal mouths, but are more often observed in dental caries or in any persistent gum irritation.

If the infection manifests itself as a severe cellulitis of the submucous tissues it gives the typical "Vincent's angina" picture. If the germs invade the floor of the mouth and burrow down into the tissues of the neck or invade the lymph nodes and threaten to produce a closure of the glottis, the infection is called "Ludwig's angina."

In prolonged vomiting, the digestive action of gastric juices may produce ulcers. In starvation cases the stomatitis has been attributed to lack of vitamins, but smears and cultures from these lesions do not reveal any activity of anaerobic organisms. Infections in which the anaerobic organisms are dominant, the necrosis of the tissues involved have a rather characteristic and very offensive putrid odour. If the hæmolytic streptococcus is the causative organism, high fever, profound intoxication and spreading cellulitis of the throat are very apt to arise acutely and subside rapidly, while in the anærobic infection they develop insidiously and resolve slowly.

TREATMENT.

When the anærobic and microaerophilic organisms are present in the mouth, they may be eliminated by oxidizing agents such as potassium chlorate, potassium permanganate, or sodium perborate, but they are more quickly and more effectively eliminated by the use of zinc peroxide. When there is an infection and superficial ulceration of the mucous membrane, zinc peroxide is much more effective. When the infection has spread to the deeper layers, surgery is required and should be radical. It is frequently necessary to remove masses of lymph nodes or the submaxillary salivary glands in order to effect the proper drainage. When the tissues have been opened by adequate surgery the infection can be brought under control by the careful application of zinc peroxide suspended in sterile distilled water, to every part of the infected surface.

The zinc peroxide should be sterilized in small quantities at 140° F. dry heat for 4 hours and applied as follows: The dry powder is suspended in approximately an equal quantity of water so that it has the consistency of 40 per cent. cream. It can be suspended evenly with an "Acepto" syringe and applied with the

syringe to every part of the wound surface. If there are any sinuses, it should be delivered into them through a catheter; but if there are any parts where the infection cannot be reached, they will have to be opened up to permit contact. When the whole surface of the wound has been covered, fine-meshed gauze soaked in zinc peroxide should be placed over the surface, and the whole wound sealed with several layers of vaseline gauze to prevent evaporation. The dressing should be changed daily. The old zinc peroxide and exudate should be washed off with saline from an irrigating can. The peroxide suspension is then applied as before. This zinc peroxide should also be used at the same time as a mouth wash, about 1 part powder to 4 parts water, every 3 or 4 hours. If there are any lesions on the tonsillar walls or pharynx, it should be applied with a cotton swab. Gargling or swishing the material around in the mouth will usually not result in contact with the tissues back of the fauces. When the smears and cultures have become negative for pathogenic organisms, simple dressings will be satisfactory.

RESULTS.

The author's experience with these cases during the past 2 years has demonstrated the superiority of this treatment over any previous treatment: first, in the rapid subsidence of acute general symptoms; second in the rapid resolution of the local process; third, in the rapid disappearance of the foul odour which is so offensive to the patient and to other persons: and fourth, in the rapid healing of the wound. We believe that zinc peroxide thoroughly applied should be used as a prophylactic mouth wash in all cases preliminary to tonsillectomy or dental extraction.

TREATMENT OF CAUSTIC BURNS OF THE EYE.

William B. Hubbard, in *Archives of Ophthalmology* (August, 1937), discusses the emergency treatment of burns of the eye caused by soluble acid and alkali, and presents new experimental studies. Experimental work, he says, is of paramount importance; factors such as the time that has elapsed before initial treatment, and the amount, type and strength of the caustic, are so variable that one cannot outline the proper treatment from clinical observation alone.

Mechanical removal of the chemical is the most important factor. The time that elapsed before first aid is given is tremendously important; after a certain time of exposure for any concentration irreparable damage has been done.

In the present experiments, the effect of irrigation with water was compared with the effect of irrigation with a weak neutralizing fluid. With this procedure harsh chemical reaction is avoided, and the mechanical factor of removal is present in both cases.

The effect was studied when a 32 per cent. solution of sulphuric acid and a 20 per cent. solution of sodium hydroxide were instilled into the eyes of rabbits. Eleven drops of caustic were used. The sulphuric acid was allowed to act for thirty seconds and the sodium hydroxide for ten seconds. These solutions finally destroyed useful vision in the majority of cases.

In these experiments I decided to irrigate the right eye with tap water in all cases. The left eye after the sulphuric acid burn was irrigated with a 2 per cent. solution of sodium bicarbonate, and after a sodium hydroxide burn with a 2 per cent. solution of acetic acid.

Every possible precaution was taken to perform the experiments with accuracy. Two experienced assistants aided. The caustics and irrigation solutions were carefully measured, and the time was regulated exactly by a stop watch.

Results: Between 80 and 100 per cent. of the acid burns treated by irrigation with a weak alkali were definitely worse than the acid burn of the opposite eye treated by irrigation with water alone. Seventy-five per cent. of the alkali burns treated by irrigation with a weak acid were definitely better than the alkali burn of the opposite eye treated by irrigation alone.

It is well known that acid proteinates are insoluble and that alkaline proteinates are soluble. The findings in these cases substantiate the theory that a soluble alkaline proteinate does not protect against further injury, although an insoluble acid proteinate does.

Thus, if sulphuric acid is a typical acid, and if sodium hydroxide is a typical alkali, the following conclusions are in order:

(1) Acid burns of the eye should be treated immediately by irrigation with water and not with neutralizing fluid—neutralizing substance in water is harmful.

(2) Alkali burns of the eye should be treated immediately by irrigation with a weakly acid solution. If this is not practicable, they should be irrigated with water and a weak acid should be instilled quickly.

A WAY OF DEATH

When the last hour comes, and all humanly possible has been done to save life the time arrives when the physician must consider easing the pathway of the dying patient. It is simply inhuman to abandon efforts calculated to ease pain and render bodily comfort when death approaches. The wise physician can rob death of much of its terror by his presence and kindly ministrations up to the moment of its arrival. In so doing he is certainly performing one of his highest functions. Death must come to all men and the physician fulfills a high trust when he makes its coming less grievous to bear both by patient and the patient's family. Many small details enter into the process of bringing comfort to the dying patient. Small details, however, are the very essence of art. In his capacity as comforter to the dying the physician is exercising one of the most beautiful aspects of his high calling which in itself is a curious mixture of science and art alike.

Believing that this topic needs periodic attention we quote excerpts from a recent article. After the digestive processes have failed the dry and parched condition of the mouth will cause intense thirst. As long as the patient can swallow water, weak tea with lemon, or wine should be given with increasing frequency but in smaller amounts. After the patient can no longer take fluid in any manner without choking, small pieces of ice enmeshed in gauze may be placed between gums and cheeks. Vaseline applied to the lips keeps them moist and free from crusts. The mouth should be swabbed with a cleansing mouth wash as often as necessary to keep it clean. Sometimes the mouth, instead of being too dry will contain an excess of secretion. Turning the patient on his side and placing a piece of gauze between gums and cheeks will facilitate the drainage of fluid from the mouth. The nostrils should be kept moist and free from crust by cleaning with mineral oil on a cotton applicator. The eyes too, need attention. They may contain secretions which are distressing to look at and annoying to the patient. If this is the case, flushing the eyes with boric acid solution will be of value. If the eyes remain wide open, they may be dry due to lack of secretion. Sterile mineral oil dropped in the eyes will lessen irritation due to this. Whatever position eases the respiration or lessens stertor should be maintained. The one guiding principle should be no matter in what position the patient may be placed he must be well supported if he is to be comfortable. When death is very near, the patient should probably not be moved. Another cause of a dying patient's discomfort is a distended bladder. This condition may be a reason for restlessness and should always be noted. When the bladder is distended there may be a constant dribbling of urine. If so, the patient should be protected from a wet bed and a foul odor. As the peripheral circulation fails the heat regulating system also

fails. The patient's body surface becomes cool and usually covered with a damp perspiration. The patient should be kept absolutely dry and sponged frequently. It would seem that light covering is all that is necessary. Heavy covering and hot water bottles or warmers from whose burning sensation the patient may be unable to move may add to his restlessness. Fresh air is essential. The room should be well lighted and ventilated. Light instead of annoying the patient may be desired. Hearing is probably the last of our senses to leave us. Therefore, quiet, dignity and restraint should be maintained. Whatever must be said should be said in a natural tone. Morphine is frequently ordered for a dying patient. Large and frequent doses may be needed. There is no limit to the amount that may be properly given. As the end approaches, a full grain is not too much of a dose. And if then the needle cannot find a vein it is always easy for a long needle to reach the heart. Usually subcutaneous injections are, of course, useless. All patients do not have the same attitude toward death. Some fear death; some face death with quiet courage; some welcome death as a kind release from suffering. We should aim to become familiar with the practices of different faiths and should know what is necessary for patients of Protestant, Catholic, Jewish and other faiths when they are near death. While we are caring for the dying patient, our sympathy and concern must extend also for the loved ones who are watching at the bed side. Actions speak louder than words and what we say is not nearly as important as what we do."

In the conferring of these small, humane attentions the physician may well hope that when his time comes some brother will likewise make easier his own journey through the portals of death.

PSYCHOLOGY BETWEEN THE DOCTOR AND THE PATIENT.

Earl D. McBride says in *Digest of Treatment* that the psychologic aspect of a doctor's practice is probably as important a factor in his success as his scientific knowledge and skill, yet is a subject little taught or explained. The young physician starting in practice suddenly realizes that knowledge does not solely constitute the extent of his wisdom. Besides knowledge and the heritage of personality there must be attained the art of attracting friends and reasoning with patients, the success of which is the secret of developing a reputation and the key of distinction.

There are certain principles in promoting fellow-feeling, which if applied, will establish respect, devotion and reputation. These

principles, when recognized, mastered and practised will pay dividends of success.

1. Confidence.—Most assuring of all is recognition of the doctor's ability and knowledge. Tact, diplomacy and comprehensive understanding, however, bear the weight of authority to the discriminating patient. Even though he actually may be thoroughly capable of treating the case successfully, any act giving rise to mistrust will make it impossible to hold the patient. To inspire confidence and trust one must have implicit confidence in himself. There is no place for an inferiority complex. Thorough preparation, training and experience tend greatly to overcome such a handicap, but it requires independent and personal exercise of authority to overcome the sense of inferiority.

2. Judgment of Human Nature.—Each patient has characteristics in personality which must be quickly analyzed. In common parlance we might say the doctor "must outsmart" his patient. He must read human nature to be able to perceive the disposition and to express himself and offer suggestions to which the patient will respond willingly and credulously.

3. Goodwill.—There are no more powerful laws of human nature than those which inspire love and respect. They are universal and most persons will respond unconsciously to them. Likewise they will resist those who attempt to win by force, bluff, insolence, impertinence, or arrogance. To gain the gratitude and friendliness of the patient the following attributes should be adopted:—

(a) Personal interest.—The most important person in the world, as far as the patient is concerned, is the patient himself. He comes to the doctor because of love of self. He is not interested in the doctor except for the good he may receive from him. If he is led to believe the doctor is not interested in him, faith and confidence diminish.

(b) Pleasantness.—No one likes a grouch. Hard heartedness is repulsive. Courtesy and a pleasant smile always contribute to recognition of friendliness. Kindliness will win co operation. Respect the patient's feelings, and he will acquiesce to the greatest degree of tolerance. Abuse him, in his own estimation, and he will react with hate and fear. Praise him and he will respond with appreciation. Belittle his complaints and he will respond with exaggeration and resistance.

(c) Fairness.—Fair play is a fundamental principal of moral propriety. The golden rule is right. He who fails to recognize it as a benediction of human relations is sure to meet disappointment. Faithful sincere service must over shadow self. One of the most frequent expressions of the patient who trusts his doctor is, "He is honest." "If he does not know he tells you so." To the contrary

we often hear the statement, "That doctor was just experimenting on me."

(d) Cordial recognition.—A man's own name is the most important sound that can be spoken to him. To remember the name of the patient is to make a lasting impression of the doctor's interest in him. As far as the patient is concerned the doctor is his doctor. The attitude which lacks concern and recognition destroys the buoyancy of esteem and appreciation.

4. Comprehensive explanation of professional opinions.—Avoid technical terms. One of the fine arts of the relation between doctor and patient is that of mutual understanding. Every doctor has had the experience of spending much time explaining his diagnosis and opinion of the case only to have the patient or his relative demonstrate an entirely different understanding than was intended.

5. Avoid an argument.—Regardless of how wrong the patient may be in his own opinion of himself the doctor will err seriously if he tries to argue with him, or to thrust upon the patient the dramatization of ultra scientific ideas that are beyond the patient's conception. Patients do not appreciate big words and demonstrations of importance on the part of the doctor. Let the patient have his ideas. Let him express them. Give him the satisfaction of sympathy and respect for his feelings by praise and honest appreciation.

6. Remuneration.—The patient usually expects to pay for his doctor's services, but he does not expect the doctor to be more interested in his fee than in giving service. The doctor's livelihood depends upon the remuneration he receives from his patients. His professional success, however, depends on the service he renders. His services are often evaluated on a basis of what the patient senses to be of real benefit in his own way of thinking. He often is not given to understand the value of laboratory investigations and other procedures which have been developed for his good, and are necessarily expensive. The patient usually expects, or at least hopes, for more than can be given him. To promise little and give much is always gratifying. Crushed hopes are disastrous to faith and trust.

Medical News and Notes.

THE KRISHNA DISTRICT MEDICAL ASSOCIATION, MASULIPATAM.

(The Krishna District Branch of the Indian Medical Association.)

Minutes of the extraordinary meeting held on 13-12-'39 at 5 p.m. presided by Lt-Col. T. S. Shastry, I.M.S., the President.

Dr. Jayasurya, M.D., (Berlin) who came here to attend the Sessions Court that morning, was invited to tea that evening. As the time was very short, only the local members could be invited. Only 12 members including 2 lady members attended.

After refreshment and tea Lt. Col. T. S. Shastry, the President took the chair, and Dr. Jayasurya spoke at length on the Indigenous drugs which he was investigating which would be cheap but equally efficient one day replace some of the foreign preparations that now dominate the market. He also entertained the gathering with the details of the Leprosy campaign that is being tried by him in certain selected areas of Hyderabad state under his supervision.

The meeting came to a close with the President's remarks.

The Minutes of the 8th Monthly meeting of the Krishna District Medical Association, Masulipatam, held at Vuyyur on 16-12-'39 in the Premises of the Vuyyur Sugar Factory:—

Mr. Patrudu kindly played the host, and 40 members including 5 women members and members of the Public attended the meeting, and Lt. Col. T. S. Shastry, the President, took the chair.

After tea and music, the business meeting began in a spacious open enclosure under specially fitted electric lights.

The following resolutions were unanimously passed:—

1. Resolved to send hearty congratulations to Dr. B. C. Roy, M.D., M.R.C.P., (London), F.R.C.S. (England), first non-official President of the Indian Medical Council, Delhi, Simla, passed unanimously.

2. Resolved to ratify the proceedings of the special meeting held on 13-12-'39 at Masulipatam in honour of the unexpected visit of Dr. Jayasurya, M.D., (Berlin).

Then the Clinical meeting began at 6-30 p. m. The following Clinical case-notes were read:—

1. A Case of Molar Pregnancy read by Dr. M. V. Subbarao, L.M.P., Resident Medical Officer, Masulipatam.
2. Dr. Ramarao, L.M.P., of Gollapalli read out a very stimulating address on Female Sex Hormones.
3. Dr. Satyanarayana Chowdary, L.M.P., of Mudinepalli, read out an interesting address on Calcium in Tuberculosis Treatment.

4. F. B. Oesophagus (a safety pin)

There was ample discussion on these cases and the meeting was brought to a close with thanks from the President to the Managing Director, Sri Adusumilli Gopalakrishnaiah and the General Manager, Sri S. Sitarama Patrudu of the Sugar Factory, Vuyyur, for their generous hospitality. An appeal from the chair to the members to take to Red-Cross work and training of the public in first aid etc., was made. The meeting was brought to a close after Mr. Patrudu has responded, fully appreciating his Association with the Medical Profession and promising to help the training of his staff and labourers in First Aid and Red-Cross work.

There was a delightful dinner party at the Travellers' Bungalow, which was arranged and got up by the local Rural Medical Practitioner, Dr. Narasimhamurthy and Dr. Mrs. N. M. C. Seshagirirao followed by a Harikatha Kalakshapam by Sri Harikatha Kantirava Ch. Kanakaratnam Bala Bhagavatar of Vuyyur.

THE MEDICAL PRACTITIONER'S ASSOCIATION NUZVID.

A monthly meeting of the above Association was held on Sunday 26-11-'39 at Nuzvid in the Government Hospital at 3-30 p. m., with Dr. C. Applachari in the chair. After prayer, the secretary read the minutes of the previous 2 meetings which were duly adopted. During the business part of the meeting there was a proposal by the secretary to cut down the annual subscription to a reasonable amount in view of the fact that most of the members, being members of the District Branch of the Indian Medical Association are paying heavy subscriptions for the latter. Then the question of holding the 6th Anniversary and its time also arose and after some discussion, the members resolved to put off the two items to the next meeting. The clinical meeting comprised of the following case reports and demonstrations by the following members.

1. By Dr. C. Applachari: A case demonstration of Abdominal Tuberculosis in a lady that commenced from a tubercular infection of the appendix.

2. By Dr. N. Rama Rao,

- (1) A case of Raynaud's disease.
- (2) A case of Gonorrhoeal prostatitis that manifested signs and symptoms of either a vesical calculus or a polyus.
- (3) A case of foreign body in the throat of an infant aged 10 months, the F. B. being a silver toe Coil of its mother which was stuck up, causing suffocation and cyanosis intermitently.

The members took part in the discussion of the cases. Before closing, the meeting passed a resolution congratulating Dr. B. C. Roy upon his having been elected as president of the Indian Medical Council, the first non-official ever elected.

THE TINNEVELLY DISTRICT MEDICAL ASSOCIATION
PALAMCOTTAH.

(Tinnevelly Branch of the Indian Medical Association.)

ELEVENTH ANNIVERSARY.

The Eleventh Annual gathering organised by the Tinnevelly District Medical Association commenced at 3 p.m., on Sunday the 26th November 1939, in the St. John's College, Palamcottah. Members numbering 70 were present. Five members of the Independent Medical Practitioners' Association also were present.

The business meeting commenced at 3 p.m., under the Presidency of Lt-Col. K. V. Ramana Rao, I.M.S., The Secretary and Treasurer read out the minutes of the last monthly meeting held at Headquarters on the 22nd of October 1939, which were passed.

Resolved the programme of meetings for the year 1940 and the election of Office-bearers.

At 4-30 p.m., the guests were entertained to tea. Lt-Col, K. V. Ramana Rao, I.M.S., the President of the Association offered a hearty welcome to all the members and guests and the Chairman of the Annual Re-Union in suitable terms.

Major-General N. M. Wilson, O.B.E., K.H.S., I.M.S., Surgeon-General with the Government of Madras opened the proceedings of the Conference as the Chairman of the Re-Union.

The Surgeon-General said that the Government is starting at each District Headquarters Hospitals a centre for diagnosing and treating Tuberculosis with latest equipments. He also stressed that doctors should get properly trained, so that they may be very useful to the public. The facilities for training is provided at Madras and Madanapalle.

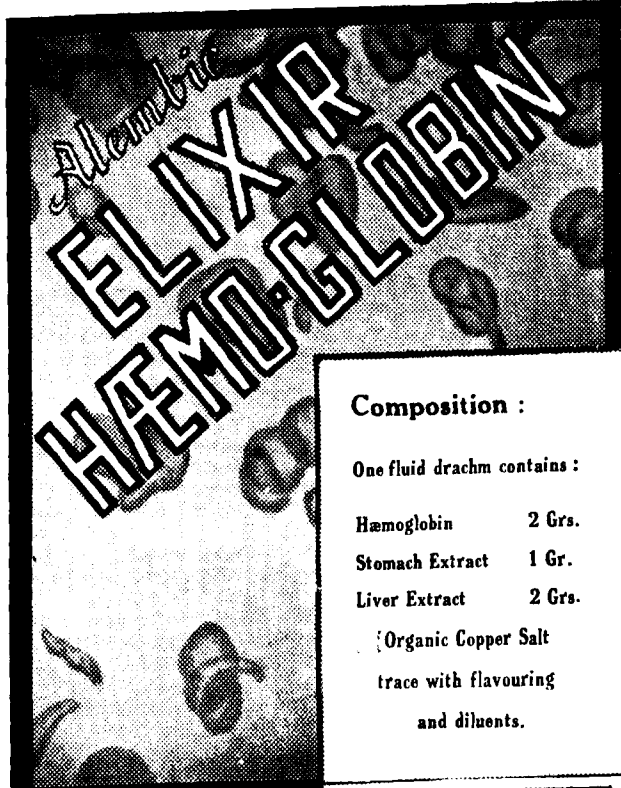
Lieut-Col., K. V. Ramana Rao, I.M.S., read a very interesting and elaborating paper on "Transplantation of the Ureter", and also read case-notes of patients operated by him.

Dr. G. S. Tampi, B.A., M.B.B.S., read a paper on Acute Abdomen and gave a detailed account of the cases treated at the Headquarters Hospital, Palamcottah.

The Grand Banquet was brought to a happy close at 10 p.m. after toasts were proposed and replied as below :—

King-Emperor — Lt-Col., K. V. Ramana Rao, I.M.S.,
Association — Dr. T. N. Govinda Aiyar, M.B. & C.M.,
Guests — Lt-Col., K. V. Ramana Rao, I.M.S.,
Reply — Mr. A. K. Bijin, M.A., LL.B.,

The meeting ended with a hearty vote of thanks to Major-General N. M. Wilson, Surgeon-General with the Government of Madras and to the Principal, St. John's College, by the Secretary.



Composition :

One fluid drachm contains :

Hæmoglobin	2 Grs.
Stomach Extract	1 Gr.
Liver Extract	2 Grs.
Organic Copper Salt	
trace with flavouring and diluents.	

**IN ALL CASES OF SEVERE
PRIMARY AND SECONDARY
ANAEMIA.**

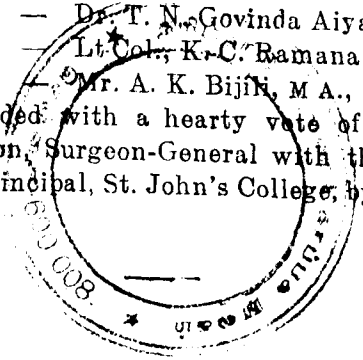
A powerful blood rejuvenator in sickness and convalescence especially when blood is impoverished due to protozoal or deficiency diseases like malaria, Kalaazar, sprue, scurvy, rickets, beri-beri etc.

**WITH
LIVER
AND
STOMACH
EXTRACT**

ALEMBIC CHEMICAL WORKS Co. Ltd.
Bombay, Baroda, Madras, Calcutta.

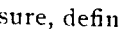
When ordering please mention *Medico-Surgical Suggestions*.

14299



FOR YOUR

FOR YOUR  **"OPACITINE"** (Rgd.) is a sure, definite, guaranteed, cent, per cent sovereign remedy against any kind of Corneal opacity (a Nabula, a Macula or even a Leucoma) of any size, shape and duration whatsoever. It is useful in Chronic Trachoma, Belpheritis, Pterygium, Catract, etc., etc. It has succeeded where yellow ointment, Dionine and other artificial Dyes of the Opacity have given way. Tried by Vaidis, Hakims, Doctors and Eminent Eye Specialists of India and abroad and has been used by more than 18,000 people for more than 20 years.

ITINE" 



"OPACITINE"
REGISTERED.

DOCTORS
call it
A "MIRACLE."

Try once and be convinced.

Price :—Large Phial	...	Rs. 10 or Sh. 20
Medium Phial	...	" 5 " " 10
Small Phial	...	" 2 8 " " 5

*No free sample
sent at all.*

(Special discount to Medical Profession.)

Agents Wanted: Apply for full particulars and Literature with 1½ anna stamps to : Packing & Postage extra.

S. Krishna Research Laboratories, (Registered.)
103, Railway Road, PASRUR, Dist. Sialkote. (Pb.)

**JOURNAL OF
THE INDIAN MEDICAL ASSOCIATION**

EDITED BY

EDITED BY
SIR NILRATAN SIRCAR, K.T., M.A., M.D., D.C.L., ETC.

WITH THE HELP OF

A STRONG ALL-INDIA EDITORIAL BOARD

The Official Monthly Publication of the Indian Medical Association.

FEATURES

1. Original Articles. 2. Case-Reports. 3. Society Proceedings. 4. Valuable abstracts from leading Medical Journals from all over the world.

Published on the First Day of the Month

Annual Subscription : Rs. 6/- post free

Free to members of the Indian Medical Association

AN EXCELLENT MEDIUM FOR ADVERTISEMENT

For particulars, write to Secretary,
Samavaya Mansions, Calcutta.

Published by Dr. P. R. Venkappaya,

Printed by Mr. R. Krishnamachari, B.A., for the C. C. P. Works, Ltd., Madras.

[illegible]