

327



MEDICO, SURGICAL SUBMISSIONS

VOL IX

NO. 2

FEB - 1940

JL

L: 4: 7m211, N 31ND.

N 409.2

142975

MEDICO-SURGICAL SUGGESTIONS

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

VOL. IX

FEBRUARY 1940

NO. 2

CONTENTS

ORIGINAL ARTICLE—

Modern Treatment of Gonorrhoea—By V. Govindan
Nair, M.R.C.P., F.R.F.P.S., etc. ... 33

ARTICLES—

First Aid in Eye Cases—By T. C. Basu Chowdhary ... 45

The Causes and treatment of Baldness—By E. Rosanove,
M.B.B.S., M.R.C.P. ... 51

EXTRACTS ... 61

MEDICAL NEWS AND NOTES ... 65

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 typewritten. 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.



ACTION: Improves and builds fresh blood.
: increases amount of Hæmoglobin.
: 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*.

Bombay.....

Dear Colleague,

According to your last letter I am glad to draw your attention to ALCOPHLOGISTIN.

ALCOPHLOGISTIN is prepared from finely powdered Dehydrated and Sterilised Aluminium Silicate, chemically pure concentrated Glycerine, Boric and Salicylic Acids, Methyl Salicylate, Peppermint and Eucalyptus oils and Compounds of Iodine.

This thoroughly antiseptic preparation supplies continuous moist heat, and destroys the infecting germs. In the treatment of Pneumonia, Influenza, Pleurisy, Colds, Inflamed Breasts, Swollen Joints and glands and whenever Inflammation and congestion is to be treated, I have been freely prescribing ALEMBIC'S ALCOPHLOGISTIN with great confidence and remarkable success. I therefore recommend you to prescribe it in your practice also.

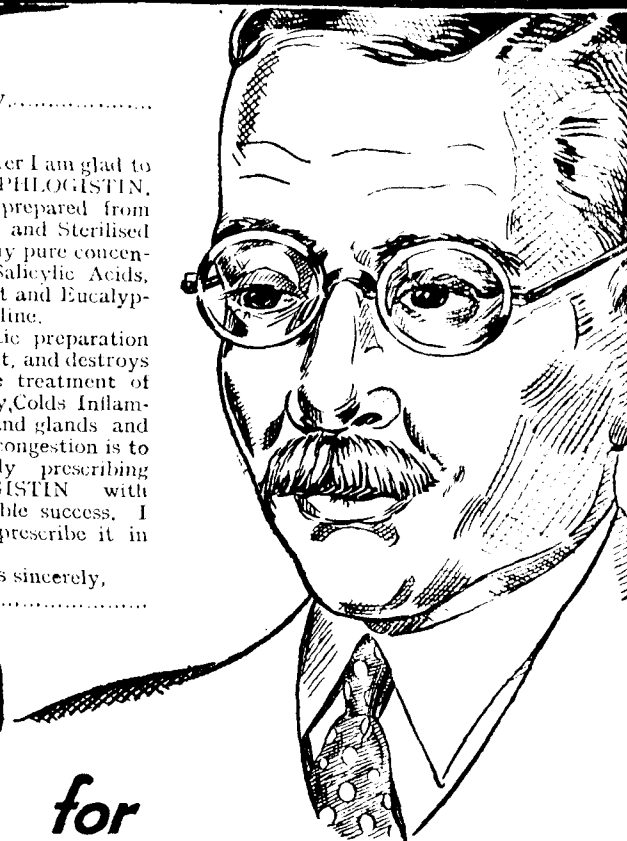
Yours sincerely,
Dr.....



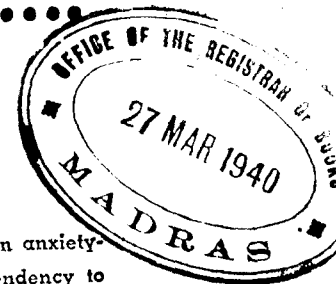
for
**INFLAMMATION
AND CONGESTION**

ALCOPHLOGISTIN

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



anxiety-states.....



The commonest of the psycho-neuroses are manifested in anxiety-states. Every physician has to cope with at least a tendency to these conditions in treating his convalescents. An alcoholic tonic is thus generally recognised as particularly suitable in convalescence.

Hall's Wine provides a gentle stimulus, and the fact that it is a medicated wine, prescribed by the doctor, gives the patient increased confidence.

The tonic elements in Hall's Wine increase its thermal energy value considerably above that of non-medicated wines and spirits. Hall's Wine improves the metabolism and thus increases the facility with which its iron is assimilated. It is thus a useful food, which rapidly increases the haemoglobin content of the blood.

Hall's Wine is compounded from the original formula of an English doctor and has been a stand-by of medical men for over fifty years.

For convalescents 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 77

When ordering please mention *Medico-Surgical Suggestions*.

When ordering please mention *Medico-Surgical Suggestions*.

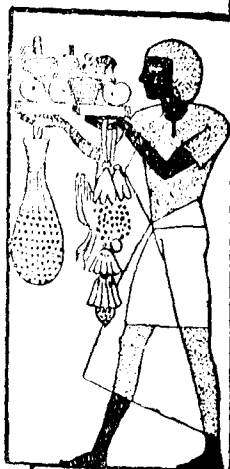
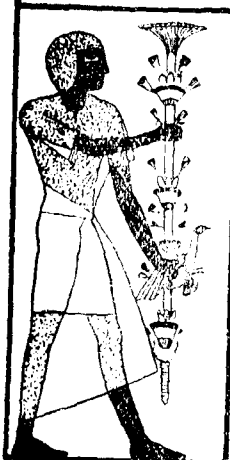
During the Age of Growth

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 ordering please mention *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.

THE INDIAN & EASTERN CHEMIST

The only Journal cate-
ring 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

When ordering please mention *Medico-Surgical Suggestions*.

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

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.



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*.

For any kind of Cataract always use world's renowned

"CATRACTOL"

(Registered).

A Specific cure for any kind of Cataract 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 & Co.

185, Chittaranjan Avenue (North), P. O. Box 11418 CALCUTTA.

TONSINOL

(Registered)

PILLS AND SOLUTION

Without Operation.

The only radical cure for enlarged and inflamed **Tonsils, Septic tonsils, Adenoids, Laryngitis, Granular pharyngitis, and Elongated uvula.** 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 mention *Medico-Surgical Suggestions*.



CITROCARBONATE

A palatable antacid which reduces gastric hyperacidity partly by neutralization and partly by buffering of acid.

- Citrocarbonate** functions as a systemic alkalizer and as a mineral nutrient. It supplies the four essential body bases: Sodium, Magnesium, Potassium, and Calcium, in approximately the same proportion as they are found in the blood.
- Citrocarbonate** is an efficient alkaline diuretic. The organic salts are rapidly absorbed and oxidized and thus contribute base and bicarbonate to the blood stream.
- Indications:** As an antacid, as a fever mixture, to alkalize the urine, as an aid in water therapy.
- Dosage:** 1 to 2 teaspoonfuls in a full glass of cold water as indicated.

Supplied in bottles of 4 and 8 ounces.

Manufactured by:

THE UPJOHN COMPANY,
KALAMAZOO, MICHIGAN, U.S.A.

Sole Agents:

T. M. THAKORE & COMPANY,
43, Churchgate Street,
Fort, Bombay.

CALCUTTA

12, Dalhousie Square,

KARACHI

123, Bunder Road,

LAHORE

124, Anarkali,

MADRAS

1/10 & 10-A, Stringer St., G.T.

NOVA-GOIA

Rua 31 de Janeiro, P.O. Box 2

RANGOON

65, Tseekai Mg. Taulay Street.

When ordering please mention *Medico Surgical Suggestions*.



MEDICO-SURGICAL SUGGESTIONS

VOL. IX

FEBRUARY 1940

NO. 2

Original Article.

MODERN TREATMENT OF GONORRHOEA.

BY V. GOVINDAN NAIR, M.R.C.P., F.R.F.P.S., etc.

*Venereologist and Dermatologist, King George Hospital,
VIZAGAPATAM.*

Gonorrhœa is a disease of antiquity. The treatment also is as old as the disease. This does not mean that no advances in the treatment of this dire disease were made in the recent times. Many a step forward have been taken in this direction, yet in spite of all the advances, the good old treatment of massive lavage, alkaline diuretics and urinary sedatives supported by specific vaccine therapy still finds a place. As a matter of fact, many of the advances are only adjuncts or additions to this basic treatment, but not substitutes.

This social disease is a great menace to society and a grave danger to the individual affected. It is a disease which is more difficult to control than its compeer syphilis. Even in those countries, where syphilis is reported to be on the decline, the incidence of gonorrhœa is just the same or on the increase. Its magnitude will be better understood if it is known that it was estimated that "at least 80 per cent of all men in large cities contract gonorrhœa at some time during their lives; that 20 per cent of all married men contract the disease and 45 per cent of them infect their wives" The enormity of the latter statement will be better appreciated if it is known that gonorrhœa in the female is not so simple a disease as it is some times considered to be in the male. Its gravity is further enhanced by the estimate that "from 60 to 80 per cent of all the operations for diseases of the uterus and its adnexa are for lesions occasioned by gonorrhœa." We know that tens of thousands of such operations are done every year in this country and you will agree with me that at least an equal number are suffering in silence with their genital tract damaged and leading a life of complete or

semi-invalidism. Do you know that 20 per cent of all blindness in children is the result of gonorrhœa in their mothers? How many women were robbed of their right to bear children? How many women had their lives ruined? How many suicides were there? How many houses were ruined?

Gonorrhœa is a disease of the genito-urinary tract in both the sexes. To understand this disease and its treatment it is essential that one must visualise the anatomy of the uro-genital structures. Gonococci do not affect all types of epithelium lining the mucous membranes. They have a special predilection or selective action on columnar epithelium. In the male let us examine the lining epithelium of the urogenital tract. The meatus and the fossa navicularis for a distance of about a centimeter are lined with squamous epithelium. Beyond this, columnar cells are seen as far as the bulbo-membranous junction. The columnar cells likewise line the glandular off-shoots of the urethra. The transitional epithelium is met with in the posterior urethra, bladder and ureters, but columnar or cuboidal cells line the smaller mucous channels that empty into these structures. The common ejaculatory ducts, the prostatic ducts, the vesicles, the vas deferens and the epididymal tube are all lined by columnar epithelium.

The female urethra is lined by stratified squamous epithelium though areas of pseudo-stratified columnar cells are common. This arrangement explains the rarity of true chronic gonococcal urethritis in women. Bartholin's glands and their ducts, the cervix uteri transpose except the external os, the uterus and the fallopian tubes are all lined by columnar epithelium. The vulva and the vagina and the external os are lined by squamous epithelium.

The vulva and the vagina in children are lined by columnar epithelium. The Bartholinian glands are not developed in them.

Peculiarities of architecture of uro-genital tract in relation to gonorrhœa.

1. The male lower urinary tract is a double bulbed syringe. The larger bulb is the bladder and the smaller one is the bulbar portion of the anterior urethra which super-imposes the barrel the anterior urethra. The nozzle of the syringe is the meatus. The lesser bulb empties by the voluntary contraction of its musculature, the accelerator urinæ muscle. This surrounds the bulb and if for any reason it fails to contract, the contained fluid simply dribbles out by ordinary tissue pressure. This occurs as the result of excessive sexual indulgence or general poor muscle tone.

2. The membranous urethra is surrounded by a strong sphincteric muscle which except during the act of urination or ejaculation remains in a state of tonic contraction. This cut off muscle divides the anterior and posterior portions of the urethra and its tonic contraction makes the anterior urethra a blind pouch.

3. The prostatic urethra is surrounded by the some-what resistant prostate gland.

4. The posterior urethra lies between two tonically contracted sphincters, so that the drainage of its purulent products occurs only during the act of urination.

5. The floor of the bulbar portion of the anterior urethra occupies a much lower level than the penoscrotal angle. Hence its purulent products have to assent by tissue pressure or by contraction of the accelerator muscle.

6. The prostatic ducts have no protective sphincter muscles at their outlet and circular fibers are lacking in the ejaculatory ducts.

7. The minute glands of Littre and crypts to Morgagni, due to their smallness, are ideal places for gonococcal colonisation.

8. At the junction of fossa navicularis is a fold of mucosa, the valve of Guérin, which interferes with the proper drainage.

9. The prostate gland depends upon its intrinsic and extrinsic muscles and tissue pressure for its proper drainage and these are woefully insufficient.

10. The drainage of the seminal vesicles is extremely poor.

11. At the junction of the seminal vesicle with the ampulla of the vas deferens and the ejaculatory duct is a peculiar valve formation. Its arrangement is such that substances coming by way of the vas or ejaculatory ducts will pass into the vesicle before escaping through either tube.

12. The epididymis has no efficient drainage and consequently an acute infection of it must either under go resolution or abscess formation.

In the females also the drainage of the urogenital tract is very defective. The other outstanding feature in the female which is not present in the male is the physiological storm, the menstruation. The baneful influence of menstruation upon gonococcal infection can be studied by comparing its course in the menstruating and non-menstruating females. In the pre-menstrual or early female life, the external genitalia bear the brunt of the attack and the disease runs a prolonged course on account of the poor resistance of the tissues and their inability to develop immunity. On the other hand, the course of gonorrhœa in women after the climacteric, is more or less like that in the male. Norris considers that "active gonorrhœa in women over fifty years of age is infrequent." Schumann says, "the disease undergoes spontaneous cure." Further, menstruation is a common predisposing cause of salpingitis, as this much dreaded complication and its further consequences are almost entirely seen in menstruating women.

Treatment. Before going to the recent advances in the treatment, it will be useful to go rapidly over the basic treatment.

General Hygiene and Diet. Rest in bed if attainable is better than partial rest particularly in woman. If rest is not possible, avoid all physical strains at work and if not at work, patient should avoid active exercises as cycling, motor-cycling, riding, football etc. Dancing is particularly harmful and everything that tends to stimulate the sex is injurious. A well fitting suspensory bandage should be worn to support the parts. A T bandage beginning from behind and ending in front will serve the purpose. A brisk purgative at the commencement and then keep the bowels free. Drink freely of plain water, barley water or canjee water. A light bland diet for the first ten to fifteen days; by the end of the third week a generous diet may be allowed. During the whole course of treatment all condiments, rich sauces, highly spiced foods, all pickles and chillies and articles of diet with high protein content should be forbidden. Meat should be avoided, alcohol in all forms is contra indicated.

Local Cleanliness. Hot hip-baths. Besides cleaning the parts they are helpful in soothing the pain. Warn the patient about the danger of contaminating his own eyes and infecting others. Keep the cloths clean. This can be done by wearing a roomy bag or a T bandage in which pieces of cotton are placed. They should be replaced when soiled. The soiled cotton should be burned. Plugging the meatus with a piece of cloth or a pledget of cotton wool must be condemned.

Medicinal treatment. There is no specific drug known so far. The balsams and oleo-resins, such as sandal wood oil, copaiba etc. are likely to cause gastro-intestinal and renal disturbances, while they have no decided curative properties. By their astringent action the profuse discharge in some cases may lessen. They have no bactericidal action. The best of this series is cedar-wood oil-urocedrol.

Alkaline diuretics are the best internal medicament, sod. or pot. citras, sod. or pot. bicarb. each 20 to 30 grs. The alkalisation is inimical to the gonococci and diuresis assists materially the drainage. The mechanical cleansing of the urethra by taking large quantities of the fluid is of great value. If there is irritability of bladder and urethra, urinary sedatives such as tinct. hyoscyamus and inf. buchu may be added. For posterior urethritis add tincture belladonna also. For painful eruptions bromides 15 to 20 grs. two or three times a day are useful; but better results are obtained with camphormono-bromate in a cachet 5 to 8 grs. twice or thrice daily.

Local Treatment. Males Gravity method of irrigating the urethra. A douche can of 2 pints capacity, rubber tubing 6 ft. long, a clip and Janet nozzle, preferably glass. The can must be boiled for the first time and then rinsed with boiling water every time before irrigation. The nozzle must be sterilised every time before use. Fluid required is 2 pints, of temperature 104° F. Height of can

is three feet above the patient's pelvis. *Lotions commonly used.* *Acute stage* Pot. permanganas, 1 in 8000 to 1 in 10000; albargin 1 in 4000 to 1 in 8000; Mercurio-chrome 220. 1 in 3000 to 1 in 6000; acriflavine 1 in 4000 to 1 in 6000; *Sub-acute and chronic stage.* Chloramine T 1 in 4000 to 1 in 6000; Hydrarg oxy-cyanide 1 in 5000 to 1 in 8000; Picric acid 1 in 500 to 1 in 2000.

Empty bladder, clean the meatus, glans and prepare before the irrigation.

Females. All sanitary towels and dressings must be burned. Hot hip baths to keep the parts clean; temperature 100 to 106° F. A table spoonful of sod. bi-carb. is to be added to the bath or antiseptics as sanitas two teaspoonfuls, Milton one tablespoonful or Lysol one teaspoonful.

Medicine. Alkaline diuretics as in males and in addition liq. sodans $\frac{1}{2}$ to 1 dr. three times a day during menses.

Douche. 3 to 4 pints, temperature of 100° to 110° or 112° F, same lotions as in the males and vaginal nozzle.

Moist Swabbing. Patient in lithotomy position, clean external genitalia and then introduce sterilised "Gusco's fenestrated speculum. With cotton swab in a sponge holder, clean the vagina and swab the whole cavity with aqueous picric 1 per cent. or acriflavine $\frac{1}{2}$ to 1 per cent. or mercurio-chrome 2 per cent. paying attention to the fornices. Touch the cervix with 2 per cent. picric in equal parts of spirit and glycerine. Remove excess of fluid and insufflate an astringent dusting powder to keep the parts dry.

Urethra is to be irrigated with a special nozzle as in the male using the same lotions. Here the fluid goes to the bladder and when it becomes full the patient is asked to void it.

Vaccine. Different types of gonococcal vaccines are used. 1. Polyvalent vaccine. 2. Sensitised vaccine according to Besredka. 3. Detoxicated or dissolved vaccine. 4. Auto-vaccine. 5. Exo and Endo toxins produced by the organisms in cultures and freed from the proteins of the organisms.

Modern treatment of gonorrhoea may be considered under three headings.

1. The Pyrexial therapy,
2. The dye therapy, (a) Local treatment by dyes
(b) Chemotherapy by the administration of chemicals particularly of the sulphanilamide group.

3. The anti-toxin treatment.

1. *Pyrotherapy.* Pyrexia as a method of treatment has been attracting the attention of Venereologists for some time. It has been the experience of many a clinician that the discharge in gonorrhoeal urethritis stops when acute complications as acute prostatitis, epididymitis or spermato cystitis occur with the usual

accompaniment of high fever ranging from 103° — 105° F. That the development of these complications has nothing to do in checking the urethral discharge is proved by the fact that the stoppage of blennorrhoea is only temporary though the state of complication continues. At the same time it is safe to infer that pyrexia is the cause of this temporary stoppage of the discharge. As with the subsidence of the fever, the discharge reappears. It is also the experience of the clinician that any intercurrent pyrexia of whatever aetiology has an inhibitory and in some cases even curative effect on gonococcal urethritis.

There are two general methods of inducing pyrexia.

1. *Active.* Here the patient's heat regulating mechanism is brought into play by the injection of malaria, foreign proteins, vaccines, colloidal substances etc.

2. *Passive.* Here the fever is produced by heating the body by external heat.

The results of various investigators show that between 70 and 93 per cent of cures in gonococcal infections are obtained by pyrexial therapy. The treatment should be given only under the direct supervision of specially trained physicians and nurses.

Different methods in use for the production of increased temperature are radiant heat and diathermy.

Hot baths: Patient is first kept in the bath and the temperature is then slowly raised and kept as high as possible.

3. Artificially induced malaria; Wagner Jauregg (1918-19) first used this method successfully in the treatment of general paresis and now it is used for many other conditions.

4. Pyrogenic agents. Intramuscular injections of milk or its products; turpentine; sulfosin; intravenous injection of bacterial vaccines both specific and non specific as Ducrey's bacillus, Bact. Col. and T.A.B. All these give only partial success and that particularly in chronic cases. Intravenous injections of gonococcal vaccine also produce certain amount of immunity in addition.

5. *Kettering Hypertherm.* This an apparatus devised by Kettering and Simpson. It consists of an air conditioned chamber in which the patient is placed with his head outside. The chamber is sealed so that it does not communicate with the outside air. Heated humidified air is pumped into the chamber at its foot. Heated moist air circulates in the chamber raising the temperature of the patient to 41° C. in 60 to 90 minutes.

Carpenter and his colleagues (1934) by elaborate investigations on different strains of gonococcal culture showed that exposure of the culture to a temperature of 41° C. for 4 hours or 41.5° C. for 2 hours would destroy 99 per cent. of the organisms in the culture. This temperature has no adverse effect on the human tissues. The result of this valuable experiment is utilised in the new apparatus

Kettering Hypertherm. Very encouraging results are reported by many workers. Pyrotherapy gives immediate symptomatic relief and cure in gonococcal infections. Ability to tolerate the hyperpyrexia depends on the condition of the heart, the resistance of the skin to heat and the temperament of the patient. Patients with hypertension, and cardiovascular, kidney and liver diseases, and old age are bad subjects for this method of treatment. It must also be remembered that the temperature must be brought down when the pulse rate goes above 160 per minute. In spite of all the precautions, complications do arise. They are headache, nausea, vomiting, muscle tetany, fibrillation, incoordination etc.

For gonorrhoeal endocervicitis cauterisation of the cervix with galvano-cautery is an ideal treatment, as a high degree of heat and deep action can both be obtained. It has the advantage of not requiring an anaesthetic as the cervix is insensitive and can be done in the consulting room itself. Stenosis resulting from this procedure is not met with. The end of the postmenstrual period, i. e. 8 to 10 days after the beginning of menses is the best period for cauterisation.

Dye therapy. A variety of dyes have been used for the treatment of gonorrhoea either for local application as irrigation or moist swabbing in females or for oral or parenteral administration.

For local treatment. Acriflavine, mercurochrome, picric acid, basic fuchsin, flavadin etc. are used.

Oral, and intramuscular or intravenous injections.

The use of dyes as chemotherapeutic agents began with the demonstration of their selective staining of bacteria outside the body. So it was considered that these dyes when given per orally might still have a specific affinity to the bacteria and destroy them without injuring the body cells. The dyes so used are

1. *Methylene Blue.* $\frac{1}{2}$ to 2 grs t. d. s. There are many proprietary preparations containing this dye as the chief ingredient. This colours the urine blue.

2. *Picochrome.* Two capsules of 0.2 grs. each are given t. d. s. half an hour before meals. No gastric or intestinal disturbance is noted. This drug is claimed to be superior to other oral urinary antiseptics in preventing complications. It is excreted by the kidneys without irritating them and its antibacterial properties are not affected by the reaction of the urine.

3. *Mercurochrome* 220. Two to 5 c.c. of a 1 per cent solution in 5 per cent. glucose is given intravenously on alternate days. Ten to twelve injections constitute a course.

4. *Acriflavine.* Neutral acriflavin, $\frac{1}{2}$ gr. three times a day is given by mouth. It is also given intravenously in 1 or 2 per cent. aqueous solution on alternate days or on every third day. It acts better when the urine is alkaline. Murray in 1930 used it parenterally in 5 per cent. solution in 5 c. doses and got better results

than with the other methods in use then. Hughes and Brich (1933) reported 50 cases of gonorrhoea treated with injections-intravenous and deep subcutaneous of 1 per cent solution in daily doses of 10 c. c. Though the urethral discharge ceased in favourable cases relapses were frequent. Acriflavine damages the liver and the authors were forced to give up the drug. We were using this method of treatment a couple of years ago and Iswariah and myself (1937) reported 50 cases of acute gonorrhoea treated with this dye. We used to give 2 per cent solution in distilled water, the dosage being 2 to 5 c. c. on alternate days or even daily. In some cases the dose was slowly worked up to 10 c. c. Our conclusions were also the same as those of Hughes and Brich. They were, 1. the urethral discharge lessens and also ceases after a few injections but relapses equally readily on stopping the treatment. In 15 per cent. of our cases the discharge recurred in spite of uninterrupted treatment. 2 Intolerances were practically nil, the few we came across were an erythema of the exposed parts of the patient goes out very much in the sun and a darkening of the complexion in two cases. 3 This method of treatment prevents complications.

Sulphanilamide. Ehrlich laid the foundation for chemotherapy on a scientific basis. His researches in the chemistry of dyes led to the discovery of chemotherapeutic agents, which when administered to animals, were tolerated by the tissues in large doses while at the same time inimical to the parasites in small doses. The work of Meitzsch and Klarer, on azo compounds, led to the discovery of a dark red crystalline powder, sparingly soluble in water and named prontosil. This was found to be almost a specific for infections with streptococcus haemolyticus. It is found useful in the infections of meningococci, Bac. Coli, pneumococci, Bac. typhosum, Bac. paratyphosum and gonococci.

We have used this drug-sulphanilamido-Prontosil album in the treatment of gonorrhoea both acute and chronic, complicated and uncomplicated with remarkable success. The dosage adopted is as follows:

First 2 days 12 tablets a day 24 tablets of 0.5g. each.

3rd & 4th day 8 " " 16 " "

5th & 6th day 6 " " 12 " "

7th & 8th day 4 " " 8 " "

or 12 tablets a day for 4 days to be followed by another course for 4 days after an interval of 5 to 6 days. The tablets are given in equally divided doses 4 times a day after the three principal meals and the last thing at night followed by a tumbler of water. Average dose for a case is 50 to 60 tablets. No other treatment specific or non-specific, local or general was given. The ordinary diet was allowed and fluids were neither forced nor restricted. Alcohol was forbidden and the patients were instructed to avoid anything that stimulates

the sex. Urethral smears and urine were examined daily. Prostatic smears were examined in all cases before the patient was finally discharged. In some cases the prostatic fluid was also cultured. As a test of cure a solid urethral bougie of average size was passed and provocative dose of gonococcal vaccine was given and prostatic smear examined next day.

A few words about the therapeutics of the drug may not be out of place. Prontosil and its derivatives given in therapeutic doses have no deleterious effect on any of the organs. Some observers have reported that patients have tolerated large doses, e.g. one patient tolerated as much as 6 to 7 grm. a day for a period of one month with no ill effects. We have also given 57 grm. of prontosil album in 19 days with no untoward effect. Many toxic effects have been reported in the press but most of them are not serious. They are lassitude, general malaise, slight fever, gastro-intestinal symptoms as nausea, vomiting, pain in the stomach etc. haemolytic anaemia, leucopenia, methaemoglobinaemia, sulphaemoglobinaemia, cyanosis, agranulocytosis, optic neuritis, peripheral sensory changes, skin reactions varying from slight itchiness to a generalised dermatitis. So far only a few deaths have been reported and these were due to agranulocytosis. The toxic manifestations observed by us are: lassitude, pain in the stomach, slight irritation of the urethra, general weakness and slight itchiness of the skin. In better class of patients we have noticed extreme prostration even after a day's treatment. We have found that the pain in the stomach can be avoided by administering the drug on a full stomach. To prevent sulphaemoglobinaemia anything which helps the formation of liquid stools should be avoided. Saline cathartics particularly magnesium sulphate, sulphur, coal tar products and even external application of mag. sulphate should be avoided. A low residue diet not containing many eggs is recommended. Onions and garlic are also better avoided as they contain a high percentage of sulphur. Liquid paraffin is the ideal laxative if there is constipation or an enema. On the appearance of the toxic symptoms the drug must at once be withheld. In mild cases nothing more is required, but simultaneous administration of liver might benefit those cases showing toxic disturbances of liver function.

Some cases developed during the course of treatment heavy phosphaturia.

The drug is almost completely absorbed from the alimentary tract in about four hours. Hence the rationale of administering the drug at 4 hour intervals. It colours the urine slightly orange yellow. This observation is very valuable as it gives an indication that the drug is being properly excreted. The non-excretion may be due to non-absorption or defective excretion of the kidneys. The excretion

is slow and latent if the renal function is impaired. So do not give it for those with damaged kidneys.

The results were uniformly good in chronic cases but there was a small percentage of failure in the acute ones. The treatment was found effective in infection of all kinds including complications. The drug was also found to be equally effective in female gonorrhoea, in the vulvo-vaginitis of children and gonorrhoeal ophthalmia.

Recently a disulphonamide, a derivative of prontosil and named Uleron has been introduced in the treatment of gonorrhoea. A number of German authorities claim this drug to be superior to prontosil album in the treatment of gonorrhoea. We have used this drug in a series of cases of all types. The dosage adopted by us was as follows: 6 tablets of 0.5 gm. each per day in three equally divided doses, preferably after a meal, followed by a draught of alkaline water, for 3 to 4 days constitute a course. Not more than three such courses are necessary in any one case and at least 6 to 8 days should elapse between any two such courses. Janet irrigation with 1 in 10,000 Pot. permanganate solution and vaccine therapy seem to ensure greater percentage of success.

Uleron is definitely less toxic than prontosil album and is non-toxic if the short course therapy at weekly intervals is adopted. The only bye effects we have come across are slight pyrexia in some cases and a popular rash in one case both disappearing on discontinuing the drug.

A form of toxic neuritis of the arms and legs occurring in the course of uleron treatment requires special mention. This does not seem to occur when the intermittent method of treatment is adopted. It has so far been noticed in cases of gonorrhoea treated with uleron, though the drug has been used in other infections as well. Alcohol is a predisposing factor in the production of the toxic symptoms and should therefore be avoided. Should any complications arise the discontinuance of the drug and the administration of Campholol, vitamin C and glucose usually control them quickly. In case of neuritis although vitamin B deficiency plays no part, betaxin has been found to be useful. As a prophylactic against neuritis all kinds of physical exertion during treatment should be avoided.

In view of our present incomplete knowledge, the short period of observation and the small number of cases studied it is rather difficult to assess the value of sulphanilamide and its derivative uleron. Both the drugs are chemotherapeutic agents proved to have only bacteriostatic and not bactericidal properties. Uleron has been hailed with very great enthusiasm throughout Germany, the country of its origin where it is now almost exclusively used for gonorrhoea. In other countries the drug is being viewed more critically. Cockkins and Mcelligot are of opinion that "the ultimate curative

value of uleron in gonorrhoea is much lower than that of sulphanilamide." Without being so emphatic about it we conclude from our short experience that uleron except for its low toxicity, is in no way an advancement over prontosil album in the treatment of gonorrhoea. The dramatic drying of the urethra of both acute and chronic cases of gonorrhoea in 24 to 36 hours and in some cases even earlier with prontosil album is not a feature with uleron. With the latter the disappearance of the discharge is by lysis taking 2 or 3 days and a further similar period is required for the urine to become clear. Prontosil album is found to be effective in both recent and late cases but uleron is more effective in subacute and chronic cases only. Uleron is a safer and less toxic remedy. The treatment with uleron of all complications such as epididymitis arthritis, adnexitis, bartholinitis, ophthalmia and others were successful. In many cases both the primary disease as well as its complications were cured, while in others it is unique that even though the gonorrhoea was not completely cured, the complications disappeared. So uleron seems to be particularly good in complications both local and metastatic.

The antitoxin treatment. This is one of the recent advances made in the treatment of gonorrhoea. So far there had been only two reports, one extolling it and the other equally condemning it. So it is too early to consider it.

Vulvo-vaginitis in children. It has been shown that the thin vaginal epithelium of an immature animal could be changed to the adult type by the injection of oestrin. This principle was made use of in treating gonorrhoeal vulvo-vaginitis in children. Oestrin when injected into immature animals was found to provoke great proliferation of the vaginal mucosa and convert it into squamous epithelium of the adult type. Many authorities think that the gonococci are unable to penetrate the adult vaginal mucosa.

Oestrogenic substances are available in the market under different names, e.g. theelin, progynon, amiotin, menformon, oestrin folliculin etc., Large doses are necessary and failures are often the result of insufficient dosage. Intramuscular or subcutaneous injections of 2500 international units are necessary. Recently vaginal suppositories have been introduced as an improvement on the injection, each suppository containing 1000 international units. The suppository should be applied every night for a minimum of 2 weeks after the cessation of the discharge and after the smears have become negative. The great drawback of this treatment is the development of secondary sexual characters in the unfortunate children. But by using the suppository any harmful results are recorded.

Rectal Gonorrhoea in woman. Some authorities think that it is a rare condition, while others consider the incidence of this condition

to be high, but overlooked as it gives rise to symptoms of a mild nature or none at all. According to the European observers the incidence varies from 15 to 85 per cent of all gonorrhoea in women. It is remarkable that in my experience there was not even a single case of rectal gonorrhoea in women though hundreds of cases were under my care. Reports of such cases in the Indian literature are practically nil. It is suggested that the difference in the nature and mode of dress of the Indian women and repeated washings of the parts as a matter of daily ablution may be responsible for the rarity of this condition in Indian women.

Treatment. Irrigation with pot. permanganate or better still acriflavin 1 in 5000: Instillation twice daily of 1 ounce of 5 per cent. mild silver protien through a rubber catheter is also recommended. Rest, suppositories of two per cent silver protionate, hot sitzbath, a non-irritating diet and mineral oil to keep the motion soft are the usual course of treatment.

In conclusion, the modern effective method of treatment of gonococcal infections is by the production of hyperpyrexia by Kettering Hypertherm or by chemotherapy with sulphanilamide or its derivative uleron. The antitoxin treatment is only on trial and the only two reports available are conflicting. Pyrexial treatment by Kettering hypertherm though effective is risky and equally laborious and trying to both the patient and physician. It also requires careful supervision by experienced physicians and nurses in fully equipped institutions and so is not likely to be widely used particularly by the general practitioner. So treatment by chemotherapy with sulphanilamide or uleron is the best of all the known scientific methods. It is unique in the simplicity of its administration, the short period of treatment, the large percentage of success, its property as a preventive and curative of complications, the smaller percentage of serious bye-effects among a multitude of them and its easy adaptability by the general practitioner. At the same time it must be remembered that it is not a prophylactic against gonorrhoea and it should be used carefully and under the supervision of a physician. Though it is effective by itself as a curative in gonorrhoea its value is enhanced in association with (1) Alkaline diuretics, as it acts better in an alkaline medium. (2) Local treatment with warm alkaline pot. permanganas 1 in 8000 to 1 in 10,000 and (3) vaccine therapy to stimulate the protective mechanism of the body.

Thus it will be seen that sulphanilamide and its derivatives form an advance in the treatment of gonococcal infections. I need not specially impress on you that the treatment is only just on trial. It is too early to evaluate their effects in the prevention of relapses and recrudescences. Instances are not wanting where gonococci have remained latent for over 20 years in the prostate with no symptoms in spite of the patient living a normal life in every way

and then suddenly become activated. We have in this drug no doubt a potent remedy for gonorrhoea. It is going to revolutionise the treatment of gonorrhoea. But a note of warning has to be sounded. Very soon the laity will come to know of the existence of such a powerful and effective drug leading to uncontrollable use of it. But sulphanilamide and its derivatives are not innocuous substances. On the other hand they are powerfully toxic. Our knowledge about them is incomplete. The safety margin about the effective dose and the toxic dose is very narrow and so it is necessary that this potent and powerful drug should be included among the dangerous drugs. At the same time it must also be known that uleron or sulphanilamide preparations are not infallible remedies. Even if they give 50 per cent cures or less they are worth having as we have no other remedy or mode of treatment which will give the same percentage of success in so incredibly short a period and at the same time causing minimum inconvenience and maximum privacy to the patient. We are convinced that treatment of gonorrhoea with these powerful drugs is a distinct advance in modern therapeutics. One is emboldened to go a step further and say that the successful treatment of gonorrhoea in future lies in the direction of chemotherapy by the sulphanilamide and allied compounds. But the dosage, the time and length of administration of the drug have yet to be fully worked out.

References: Loes, David., Practical Methods in the Diagnosis and treatment of Venereal Diseases. 3rd Edition.

Parran, Thomas, Venereal Diseases Information (1937) Vol. 18 No. 7.

Stokes, J. H. Modern Clinical Syphilology, 2nd Edition.

FIRST AID IN EYE CASES

By T. C. BASU CHOWDHARY, Agra.

It is really surprising to note that according to the last census the number of Blinds in India is 60,000 but in my opinion the number is underestimated, actually it is far more than what the official records show. Again the number of those who need not have been blind is about 400,000 to 500,000; it is also far less than that what we calculated after doing field survey of many districts in U. P. Though these official numbers may be wrong but they atleast give the reader an idea of the minimum number of blinds and would be blinds. The causes for this huge number of blinds are manifold but ignorance and want of immediate help are the two most important

factors. To remove ignorance is the work of social reformers but to render first aid and proper medical treatment in all types of eye cases is the work of our profession which we should do as creditably and energetically as possible. The matter has been dealt with in a very concise manner so that it should be useful to the average general practitioner.

Foreign Body—When any foreign body falls into the eye the first thing which a patient does is to rub that eye with his fingers as hard as he could. By doing this, more harm is done to the patient himself and all the more the F. B. gets embedded into the cornea. These foreign bodies are generally eyelashes, dust particles, flying fragments of emery or metal from workman's tool, flies, and other objects. The patient complains of pain, photophobia, lachrymation and redness of the eye. In such cases immediate help should be rendered otherwise the eye may be lost due to bad handling. First the eye is washed with sterilized saline lotion and thereafter it is thoroughly anaesthetised. Efforts are then made to take out the F. B. with a sterilized spud if it is stuck to the cornea. But if it is in the conjunctival sac it may be taken out by means of a pledget of cotton wool. Thereafter Atropine lotion 1% and some antiseptic drops may be put in and the eye bandaged.

In case it is not embedded efforts should never be made to take out the F. B. by ordinary handkerchief or such unsterilized articles.

Abrasion—As a result of trivial injury erosion of the superficial corneal epithelium occurs which may be called as "abrasion." It can easily be recognised by dropping a few drops of Fluorescein solution. If there is any abrasion it will be stained green. The most important item in the treatment of such conditions is to keep the eye scrupulously clean and keep the same at rest. In ordinary cases the eye should be washed three or four times daily with saline lotion but in severe cases, in addition to this, mercurochrome lotion and atropine should be instilled and then the eye bandaged.

Wounds—They are of two types *viz.*, deep and superficial.

The deep wounds of the eye are penetrating wounds and are much more serious than superficial wounds. They may cause infection of the eye which may even lead to panophthalmitis and the loss of that eye or there may be prolapse of iris through the gap made by the passage of the sharp weapon when penetrating the globe. All such wounds are to be treated immediately and aseptically. The proper way to deal with such conditions is to first wash the eye well with sterilized saline lotion and then after anaesthetising the same seize the prolapsed iris with iris forceps, stretch it and then cut it with iris scissors. The proximal parts of the iris should then be reposed into the anterior chamber with a repositor and should never be allowed to remain in contact with the wound. After instilling acriflavine and atropine drops in the eye it should be bandaged.

Superficial wounds should be treated as abrasions but more carefully and energetically.

Surgical emphysema of the conjunctiva—Fracture of the ethmoid causes surgical emphysema of the tissues of the orbit and it may even appear under the conjunctiva. In such cases no treatment for the conjunctival condition is necessary.

Haemorrhage—In cases of haemorrhage due to penetrating wounds the first thing to do is to apply cold to the eye either by cold compress or a lump of ice tied in a piece of cloth and then dropping Adrenalin Hydrochloride Solution (1 in 1000) every 5 minutes till it is totally stopped. The patient's head should never be lowered and he may be allowed to sit, if he can, on a semi easy chair with his head thrown back. In certain cases injections of calcium and haemostatic serum have been used with advantage. In every case tight bandage is necessary. But in cases of subconjunctival haemorrhages only cold compress are sufficient.

Chemical injuries—These may be caused by the entrance of lime, acids or alkalis. At first more or less complete opacity of the cornea is produced. Thereafter denudation of the corneal epithelium may occur. The patient complains of pain, photophobia and lachrymation. Congestion is very severe. Such injuries to conjunctival epithelium lead to adhesions, partial or complete of the lids to the globe, a condition known as symblepharon.

Lime burn—This is a common accident among the brick-layers, builders and labourers which requires immediate attention. The injury is usually serious. It is liable to cause extensive burning of the tissues and during the process of healing it might cause partial or complete adhesions of the lids to the globe. Severe congestion, lachrymation, pain and blepharospasm are the chief symptoms.

As soon as the accident occurs all fragments of the solid matter must be removed under local anaesthesia. If there be severe blepharospasm the lids should be infiltrated with novocain 1 per cent. in order to facilitate removal of the lime particles. In no circumstances water should be used in such cases. It may be very difficult to remove them as quick lime adheres to the conjunctiva and the insoluble calcium carbonate formed is deposited in the tissues. The frequent application of neutral ammonium nitrate solution 10 per cent. is recommended to dissolve such deposited calcium. The conjunctival sac is well filled up with castor oil and the patient is kept in a dark room. To prevent symblepharon a glass rod which has been dipped in sterilized castor oil should be swept round the upper and lower fornices twice daily. In order to put the eye at rest and to minimize the results of the iridocyclitis which is generally caused by such conditions atropine ointment 1 per cent. should be used twice daily.

Injuries by acids and alkalis not infrequently occur in chemical and physical laboratories. Considerable destruction of tissues may result from these burns. The signs and symptoms are practically the same as stated above under lime burn but the initial treatment is quite different. Here the eyes should be immediately irrigated with a large volume of normal saline or even with tap water in case the saline lotion is not available at hand. The subsequent treatment is the same as for lime burn.

Fire works burn—It is generally found either among the makers or among children who play with them. The signs, symptoms and treatment, as far as eyes are concerned, are practically the same as in cases of lime burn.

Fire Dam burn—It is rare but when occurs it is generally very serious. It occurs among the coal miners. Its signs, symptoms and treatment, as far as eyes are concerned, are identical with lime burn.

Some other rare burns—I know a few cases where the injuries have been produced either by some indigenous drugs such as "madar" "Safada" "Chaso" etc., or sometimes even with Tincture of Iodine. Recently an Aglo-Indian child was treated by me for Tr. Iodine burn. The child was suffering from ordinary conjunctivitis and argyrol lotion was prescribed by his family physician. His elder sister not knowing which is the phial of argyrol lotion or of Tr. Iodine as it was kept there side by side, took up the phial of Tr. iodine thinking it to be of argyrol, and dropped it into her brother's eye. This immediately produced severe burning sensation and other allied symptoms. The child was brought to me after about four hours. After routine treatment the child completely recovered within 6 weeks.

In cases of extensive burn of the body if the eyes are also affected, they present practically all signs and symptoms of chemical burn except severe pain but this does not mean that there is no pain. The treatment is also the same as for chemical burn.

Gas injuries in warfare—The instructions for the treatment of gas injuries in warfare given in Air Raid precautions issued by H. M. Stationery office are as follows:—

"The only first aid for blister gas in the eyes is free washing with either plain warm water, normal saline or sodium carbonate solution about 10 grains to the pint. The points of importance are that the washing should be free, best done with some form of douche can with rubber tubing and a nozzle, and that it should be carried out at the earliest moment after contact." The subsequent treatment is as described for other burns.

Mustard gas The ocular injury by mustard gas though exceedingly painful, usually heals up rapidly under treatment but Mayou has described a more serious case. Six days after being blinded the

patient had intense injection and photophobia in both eyes. The surface epithelium of the cornea was slightly roughened but was intact in its superficial layers. About 2 millimeters from the margin there was a yellow band of purulent infiltration which was gradually absorbed after five weeks without the superficial epithelium breaking down.

In some cases a bacterial infection of the roughened cornea may occur with ulceration. The treatment for this condition is to keep the eye scrupulously clean, and instil atropine and mercuriochrome or acriflavine drops. If the ulcer goes on increasing carbolic acid is the best thing for all such cases and bandage.

Atropine irritation—It is an inflammation of the conjunctiva with formation of follicles caused by local use of the drug in susceptible persons. It generally starts in the skin of the lower lid and disappears when atropine is discontinued. When it is necessary to continue its use in a susceptible patient the eyelids may be smeared with castor oil, one drop of the mydriatic placed in the conjunctival sac, any excess being removed with cotton wool. When atropine causes irritation, other mydriatics such as solution of Hyoscyne Hydrobromide $\frac{1}{2}$ per cent or Homatropine Hydrobromide 2 per cent may be tried but they too in certain cases cause irritation.

Infectious Diseases—When a patient is suffering from any infectious disease such as small pox, cerebro-spinal fever and typhoid etc. the attending physician must be very careful about the condition of the patients' eyes. These diseases play a very important part in causing blindness. It is, therefore, necessary that as soon as cases of infectious diseases occur in a locality the health authorities must see that the cases are segregated and properly treated. Prevention is better than cure, so in all cases the eyes should be washed gently and thoroughly with sterilized warm boric lotion and then acriflavine lotion 1 in 1,000 is instilled, but if ulceration takes place atropine ointment 1 per cent should be used in addition to the former treatment. If this is carried out faithfully together with general cleanliness and nourishing diet, it is always possible that a large number of patients can be saved from the gallows of Blindness.

Ophthalmia neonatorum and such allied conditions—It is a disease of newly born babies and it is generally caused within the first week of birth and due to neglect and mismanagement at the time of delivery. Inflammation, redness, mucopurulent discharge and lacrymation are the chief symptoms.

These conditions should be very carefully treated. The eyes should be thoroughly and very gently washed with saline or boric lotion every 2 hours and then $\frac{1}{2}$ per cent Silver Nitrate or acriflavine 1 in 1,000 or mercuriochrome 1 in 500 lotions may be instilled: The eye may be fomented three times a day.

For prevention the eyes of the newly born baby should not be opened unless and until the whole body of the baby is well washed and when the eyes are opened they should be thoroughly cleaned with sterile boric lotion and thereafter acriflavine 1 in 1,000 is dropped. Care should always be taken that no drop of water goes into the eyes of the nurse or physician as these discharges are always infective.

Gonorrhoeal ophthalmia—This is a very important eye disease which is in the beginning generally mistaken for a case of ordinary conjunctivitis whereby much valuable time is lost and the case becomes very serious and as an end result the patient becomes blind. If this disease is treated properly from the very start the prognosis may be favourable in the majority of cases. Severe mucopurulent discharge, congestion, pain, lacrymation, photophobia and pitting of the cornea are the chief symptoms. The treatment consists in properly but gently washing the eyes with warm saline lotion or mercury lotion 1 in 10,000 and thereafter acriflavine or mercuriochrome lotion may be instilled followed by a few drops of atropine lotion. Yellow ointment 1 per cent may be used so that sticking of lashes may not occur. In severe cases gonorrhoeal antiviral may also be used on pads.

Milk injections have produced marvellous results and so it can be used in any form or preparation such as Lactumin, Lactoprotein and Aolan etc.

Spurts of water from infected eyes—When any drop of water or discharge from an infected eye falls into any other person's eye either during washing the eyes or dropping the medicine into them, it should be immediately irrigated thoroughly with saline or boric lotion and then silver nitrate $\frac{1}{2}$ per cent or acriflavine 1 in 1,000 may be instilled. These accidents should never be neglected as the discharge of the eyes is always infectious.

Iritis and Glaucoma—These are the two diseases which generally confound the medical practitioners. In the beginning pain is the chief symptom of both the diseases and generally the attending physician considers any such pain in the eye-ball or near about it as that of glaucoma and hence eserine sulph. 1 per cent or pilocarpine nitrate or hydrochloride 1 per cent is used. It is quite safe if the case is really that of glaucoma but if it happens to be a case of iritis, it may prove very harmful. Similarly if atropine is used in a case of iritis though really that case is of glaucoma, it causes permanent harm to the eyes; hence in both the conditions signs and symptoms are to be studied very carefully before prescribing either myotics or mydriatics.

As for the treatment is concerned it is as usual. that is purgatives, analgesics, fomentations and leeches or blisters are the

common items for both the diseases but atropine is only meant for iritis and eserine for glaucoma.

It might be supposed that diseases as unlike as iritis and glaucoma should not be confounded, but it often seems that the practitioner considers a case of acute inflammatory glaucoma to be iritis, and treats the glaucoma with atropine—the worst possible treatment. Both diseases reduce vision and present pain as a prominent symptom. The following well-known table gives the points in differential diagnosis:—

IRITIS.	GLAUCOMA.
1 The pupil is small.	1 The pupil is dilated.
2 Tension may be increased in the height of the disease.	2 Tension is increased either intermittently or permanently.
3 The A. C. is of normal depth except in cases which are not properly treated from the very beginning and complete annular synechia is formed. In such cases A. C. is always deeper than normal.	3 The A. C. is always shallow.
4 The cornea is very sensitive to the touch.	4 The cornea is anaesthetic.
5 The Ophthalmoscopic examination cannot be done with satisfaction.	5 It can be done and will clearly show excavation of the head of the optic nerve and pulsation in the retinal arteries.
6 The refraction has no etiological bearing.	6 Refraction is generally hypermetropic.
7 Causes are—trauma, syphilis, rheumatism and gonorrhoea.	7 Causes are numerous including closure of the iris angle, trauma, intra ocular growth and certain conditions of blood and blood vessels.
8 Usually the patient is below 45 years of age.	8 Usually the patient is over middle age.

Indian Journal of Ophthalmology, Jan. 1940.

THE CAUSES AND TREATMENT OF BALDNESS.

BY E. ROSANOVE, M.B., B.S., M.R.C.P.

Morris Fishbein, in *Doctors and Specialists*, tells the following story: "Once a young fellow, rapidly, becoming bald, consulted the late Dr. Joseph Zeisler, of Chicago, who was himself the possessor of a glistening cranium. Suddenly it dawned on the young man that

the professor was himself a victim of the very condition for which he was prescribing. "How come?" inquired the young man. "Ah," said Professor Zeisler, "when I was a young man there was no Doctor Zeisler."

A similar incident is liable to occur to any of us, and I commend the Professor's reply as a very neat get-out.

The question of loss of hair is a very large one, and it is a problem that is often brought to the general practitioner to solve. The solution is not always easy.

The various types of baldness or alopecia are as follows:

1. Congenital alopecia.
2. Alopecia areata.
3. Alopecia due to mechanical causes:
 - (1) after X-ray.
 - (2) after thallium acetate.
 - (3) due to trichotillomania.
4. Alopecia totalis and universalis.
5. Cicatricial alopecia—the pseudo-pelade of Brocq.
6. Alopecia due to diseases of the scalp:
 - (1) with dandruff.
 - (2) ringworm.
 - (3) favus.
 - (4) impetigo.
 - (5) lupus erythematosus.
 - (6) lupus vulgaris.
7. Alopecia due to general diseases:
 - (1) syphilis.
 - (2) after fevers and debilitating diseases.
 - (3) senile baldness.
 - (4) after the menopause.
 - (5) in some general skin diseases.
8. Hereditary premature alopecia.

Roxborough, whose book on dermatology specializes in an effort to aid diagnosis, gives the following classification of the causes of loss of hair:—

1. Diffuse loss on the frontal regions and vertex:
 - (a) senile alopecia.
 - (b) hereditary premature alopecia.
 - (c) seborrhoea oleosa.
 - (d) pityriasis capitis.
2. General thinning or loss of hair on the scalp:
 - (a) debilitating diseases, *e. g.*, anæmia, diabetes, phthisis.
 - (b) following acute febrile illnesses, *e. g.*, influenza.
 - (c) following parturition.
 - (d) thyroid or pituitary defect.
 - (e) pityriasis capitis.

- (f) alopecia totalis.
- (g) in some general skin diseases, *e. g.*, erythrodermia.
- (h) after ingestion of thallium acetate.
- (i) after X-ray treatment.
3. "Moth-eaten" appearance on back and sides of scalp:
 - (a) syphilis.
4. Loss of hair in well-defined patches on scalp:
 - (a) alopecia areata.
 - (b) ringworm.
 - (c) favus.
 - (d) staphylococcal infection.
 - (e) streptococcal infection.
 - (f) cicatricial alopecia (pseudo-pelade).
 - (g) due to rubbing or pulling of the hair (trichotillomania).
5. Scars:
 - (a) favus.
 - (b) kerion.
 - (c) lupus erythematosus.
 - (d) scleroderma.
 - (e) herpes zoster.
 - (f) syphilis.
 - (g) lupus vulgaris.
 - (h) boils.
 - (i) following excessive X-ray or radium treatment.
 - (j) injury.
 - (k) burns and scalds.
6. Complete loss of hair on scalp and body:
 - (a) Alopecia universalis (totalis).

1. CONGENITAL ALOPECIA.

Congenital baldness is extremely rare, but may consist of complete absence of hair from birth, or the hair present at birth may fall out and be replaced by down.

I have seen one case where there was complete absence of hair from six weeks after birth until puberty. Now, at thirteen years of age, the child has irregular tufts of hair growing on the scalp, and in between there are fine downy hairs. The eyebrows are growing for the first time. This is certainly an endocrine disturbance, and the prognosis in this case is not as black as it appeared to be.

2. ALOPECIA AREATA.

This is a common condition. It consists of oval or round patches of baldness, usually single, but multiple patches occur. In the early stages, the central bald area is clear and not covered with greasy scales or broken off hair roots. With a lens it will be seen that the hair follicles are intact. At the edges of the lesion the hair is sparse, and if one or two of these hairs are removed and closely examined, they will be found to be the typical "exclamation mark"

hairs; that is, thick at the top, and tapering, through atrophy, to a point at the bottom. In a long-standing case these exclamation mark hairs will not be found, the surrounding hair is healthy, and the condition will not now spread.

The onset of alopecia areata is usually acute, occurring overnight or in a day or two. There are no symptoms associated with it, and often it is a relative who first draws the patient's attention to the condition.

An initial patch may remain stationary, or it may spread rapidly, or a number of patches may coalesce. Any degree of baldness up to complete baldness may occur, even leading to complete loss of hair all over the body.

A patch may start on any part of the scalp. It is common to get a noticeable patch of alopecia on the beard area of the face in adult males, either alone or together with a lesion or lesions on the scalp.

Etiology. The condition is seen in both sexes and at all ages. Statistics show that it is slightly more common in females, and also that it is more common under 21.

Its exact cause is unknown. Sabouraud disproved the theory that it was contagious. It is known that it is often found to be hereditary or familial; that it often occurs after mental or emotional states (shock, worry, or strain); that a definite septic focus is found in a few cases, and that the condition clears up when these are treated; that in some cases endocrine disturbances, have been the direct cause; and that it often occurs in perfectly healthy individuals with no history of any of the above etiological factors at all.

Diagnosis.—The following conditions have to be differentiated:—

1. Ringworm of the scalp: Here the lesion is scaly, not smooth; there are short, thick, broken off hairs, not "exclamation mark" hairs; the fungus can be demonstrated microscopically; a green fluorescence shows with ultra violet light passed through a Wood's filter; and the condition is practically never seen in adults.
2. Cicatricial alopecia: Cicatricial alopecia and alopecia caused by lesions leaving scars, *e. g.*, lupus erythematosus, boils, injury, etc. There are present atrophy and scarring, and the typical alopecia areata signs mentioned above are absent.
3. Syphilitic alopecia has a typical moth-eaten appearance, and other signs of syphilis are obtained.

Prognosis.—As a rule, cases of alopecia areata are quite cured in a few months, but they may take some years. Occasional rare cases are seen where the condition spreads and leads to an alopecia totalis or alopecia universalis. When this occurs, the prognosis is much more serious, as it is often incurable.

Treatment—The main basis of treatment is vigorous stimulation of the skin of the bald patch. This may be done by various local applications such as tincture of iodine, tinct. cantharidis, lin. tereb, lysol solution 2 per cent silver nitrate, etc.

Ultra-violet light locally greatly adds to the effectiveness of the treatment. This is given in doses large enough to cause a marked peeling or even a mild vesication. Treatments are given once or twice weekly, and improvement is often seen after two or three applications.

General health conditions must be studied and treated in each case. A holiday does good. Nerve and general tonics are indicated. Septic foci should be looked for and removed.

Several recent methods of treatment, such as injections of pituitary extracts, both anterior and posterior, and injections locally of aolan have not been sufficiently tried to prove their effectiveness.

3. ALOPECIA DUE TO MECHANICAL CAUSES.

(1) After X-ray treatment.

In England and Europe, where ringworm of the scalp is so common, but not so common as it was, and where the infection is so severe, the correct treatment is epilation of the hair of the scalp by superficial X-ray therapy. Done by an expert, the dose is just sufficient to cause all the hair to fall out in 17 to 21 days. The falling hair removes with it numberless fungus spores, and during the bald period vigorous local measures are undertaken. By the time the new hair grows, the ringworm infection is cured. The great difficulty of the treatment is to give an accurate dose; too little will not epilate the hair, too much may cause a permanent alopecia. Under the circumstances, and also because ringworm of the scalp is comparatively rare and benign in Victoria, epilation treatment is unnecessary here. In England the duration of a case without epilation is two years, here it is three to six months.

(2) After the ingestion of thallium acetate.

Thallium acetate is a heavy toxic metal, and it is used in some clinics to produce an epilation of the hair in cases of ringworm of the scalp. The dose must be very accurately estimated in each case, but its toxicity is very high, and instances of severe toxic effects have been reported, and through an error in dosage, fatalities occurred in two brothers in England some years ago. Its use, therefore, is unwarranted in Victoria, but good results are obtained with it in some European clinics.

(3) Trichotillomania.

This interesting condition occurs mostly in children. The hair is pulled out by the patient, an irregular bald patch resulting. In this patch can be seen broken off hairs. An epidemic of trichotillomania may occur in schools. The habit once started becomes an unconscious one, hairs being pulled out or broken off whilst reading,

writing, etc., and great difficulty may be found in stopping it. The wearing of gloves, and the shaving of the hair often helps in breaking the child of the habit.

4. ALOPECIA TOTALIS AND ALOPECIA UNIVERSALIS.

In alopecia totalis all the hairs of the scalp have fallen out, and in alopecia universalis not only the hairs of the scalp, but also the hairs of the eyebrows, eyelashes and the hairs all over the body have fallen out.

These conditions are sometimes sequelae of alopecia areata. In children and young adults, they are considered to be suspicious of congenital syphilis, even if no other stigmata are present. Treatment along these lines may lead to a happy result.

The prognosis of this condition is poor. As the case advances, the skin of the scalp loses its tone and the hair follicles disappear.

Treatment consists in general health and anti-specific measures, together with local stimulation as in alopecia areata. As these conditions may be due to an endocrine deficiency, gland therapy is usually tried.

5. CICATRICAL ALOPECIA (THE PSEUDO-PELAGE OF BROcq).

Strictly speaking, this term should include all forms of baldness in which there is atrophy or scarring, actually it is usually limited to the pseudo-pelage of Brocq. This is a rare condition in which there occur small areas of alopecia which are smooth and atrophied. Hair follicles are absent, and there are no exclamation mark hairs. In a year or two small patches may coalesce to form a large area, but as a rule the spread is much slower. The prognosis is very bad; the baldness gradually and steadily spreads in spite of any treatment.

6. ALOPECIA DUE TO DISEASES OF THE SCALP.

(1) Alopecia with dandruff.

This is, without any doubt, the chief cause of diffuse baldness in males. The patient most commonly seen complaining of loss of hair is the man in the early twenties.

The start of the trouble occurs as soon as one gets a haircut. Unless there is complete surgical sterilization of the barber's instruments—and this, I am told, is impracticable—it is inevitable that every boy's scalp becomes infected with the pityrosporon of Mallassez or bottle bacillus. At puberty, the glands of the skin join in the awakened activity of all the glands of the body, and later a seborrhoea may occur on the scalp in a more or less marked degree. Later still the hair begins to fall, mainly from the temporal areas, and the posterior region of the vertex. As a rule, it is found that the susceptibility to hairfall at this age varies directly with the presence of dandruff and oiliness of the hair. Up till about 30 years of age this loss of hair may be fairly severe; after that it becomes much less marked. It is true that if a man has a thick crop of hair at

thirty he will never develop that complete state of baldness that is often seen. It is therefore seen how important it is to give the correct advice and treatment to a patient from puberty on, for there is no doubt that much can be done to prevent severe baldness in the majority of cases.

To become infected is inevitable in all who go to a barber. But the susceptibility to develop dandruff varies with the individual; a scalp which gets oily very quickly will do so more readily than others. There are some who, in spite of lack of any care or treatment, never suffer from dandruff.

In all cases it is important to counteract the infection immediately after a haircut. This is done by rubbing well into the scalp that night an ointment containing 3% sulphur precip. and 3% ac. salicyl. Next morning the scalp is washed thoroughly with a spirit shampoo.

The question naturally arises, "Why does this type of baldness occur so seldom in women?" Nowadays they attend hairdressers more frequently than men; they certainly suffer from dandruff very commonly; and many of them have oily hair.

Agnes Savill, in her book, "The Hair and Scalp," says that the immediate cause of hairfall is due to a microbacillus of pityriasis sicca (dandruff). In an examination of many cases of oily seborrhoea in women she has found few or no microbacilli present.

Again, there is undoubtedly an important endocrine factor involved, as the typical male type of baldness—that is, receding hair at the temples and thinning of the hair over the vertex—is extremely uncommon in women. I can only recall one case. Savill says that Sabouraud made enquiries in the East and found that eunuchs never became bald.

Cutting the hair is another possibility. The theory is that the stimulation of the hair roots is lost. It certainly is noticeable that the man who wears his hair long, does not part it but combs it well back from the forehead, does not go bald.

Contributory factors that may influence hairfall in males are tight-fitting hats and wetting the hair each day under the shower.

The Treatment.—Treatment should start with prophylactic measures after each haircut. The use of sulphur and salicylic acid ointment at night, followed by a spirit shampoo next morning, will prevent the development of dandruff. If this routine is carried out at least once a week, the scalp will be kept in a healthy condition, and much baldness will be prevented.

Many people consider that their hair is very dry, and use oils and grease. In the majority of cases this is wrong, and the use of oily preparations are contra-indicated. Some women object to the use of the ointment, as it makes their hair very greasy; in that case

they may be ordered a resorcin lotion to rub into the scalp vigorously each night.

Ultra-violet light locally will also greatly help this condition. Doses are given once or twice weekly, but an erythema dose is all that is required, vesication is unnecessary.

The use of communal brushes and combs at golf clubs, etc., should be strictly avoided. Patients do reinfect themselves with their own brushes and combs, therefore these should be sterilized frequently. These cannot be boiled, but they should be washed with soap and water and thoroughly cleaned.

The general health should be attended to, and special care taken to get fresh air and exercise; but the most important part of the treatment is undoubtedly the local care of the scalp.

(2) *Alopecia with Ringworm.*

This occurs only in children. After puberty an immunity is developed and ringworm of the scalp is practically unknown. I have never seen a case, and I have only heard of one.

The lesions are multiple, round or oval patches of alopecia covered with a greyish scurf. In the lesions are seen short, thick stumps of broken off hairs. The fungus, spores and mycelium, can be demonstrated microscopically, and a typical greenish fluorescence can be demonstrated by ultra-violet light passed through a Wood's filter. This fluorescence is of practical use both in diagnosis and as a test for cure.

Ringworm is important in the differential diagnosis of alopecia areata.

(3) *Alopecia with Favus.*

A very rare condition in Australia, and much more common in Eastern European countries.

The typical lesion is a sulphur yellow concave crust with a mouse-like odour; dry scaly patches and bald atrophic areas are also found. Favus is due to a fungus, the *Achorion Schonleini* and occurs mostly in children, and also in adults.

The odour and the appearance of the condition are distinctive; there should not be any difficulty in its diagnosis.

(4) *Alopecia with Impetigo.*

Impetigo of the scalp runs a course exactly similar to that of the face. The lesions ooze and form a honey-coloured crust which may be missed on the scalp until the hairs fall out from the affected area. The baldness is only temporary, and regrowth of the hair quickly follows.

(5) *Alopecia with Lupus Erythematosus.*

As a rule, Lupus erythematosus of the scalp is accompanied by lesions of the face or ears, but it may be on the scalp alone. The lesions may be anywhere on the scalp, and of any size. There may be a faint red spreading margin, and a thin scaling. The central

older area is white and atrophic, with plugging of the follicles. The hair is gone, and nothing will make it grow on the atrophic areas.

(6) *Alopecia with Lupus Vulgaris.*

An extremely rare condition in Australia, lupus vulgaris or the glabrous skin is common in England, but is comparatively rare on scalp. It is due to the tubercle bacilli, and a lesion will leave an atrophic bald patch. A history, or a lesion elsewhere on the body, and the presence of apple-jelly nodules on diascopic pressure (pressure with a piece of glass, e.g., watch glass or glass slide) are the important diagnostic features.

7. BALDNESS DUE TO GENERAL DISEASES.

(1) *Syphilitic Alopecia.*

This is important. It is a secondary manifestation, usually occurring about two or three months after infection. There is a typical "moth-eaten" appearance, and it should not be missed on its appearance alone. There are present multiple irregular bald areas, commonly on the sides and the back of the head which have a "chewed off" look. Other signs of syphilis may be found, and the Wassermann test will clinch the diagnosis. Prognosis is good, the hair rapidly becoming normal with anti-specific measures.

(2) *After Fevers, etc.*

The diagnosis of alopecia after fevers and debilitating diseases such as influenza, measles, tuberculosis, diabetes, typhoid, etc., is easy. The cause is the generalized toxæmia affecting the hair roots, and the fall occurs from two to eight weeks after the illness. Sabouraud says that the temperature must rise to at least 103°F. to cause any marked degree of hairfall. Regrowth is usually rapid.

(3) *After the Menopause.*

A diffuse thinning of the hair over the vertex is commonly seen after the menopause.

(4) *Senile Baldness.*

This may occur in both sexes in the fifties. The baldness is over the vertex and atrophy of the skin of the scalp may eventuate.

(5) *In Some Generalized Skin Conditions.*

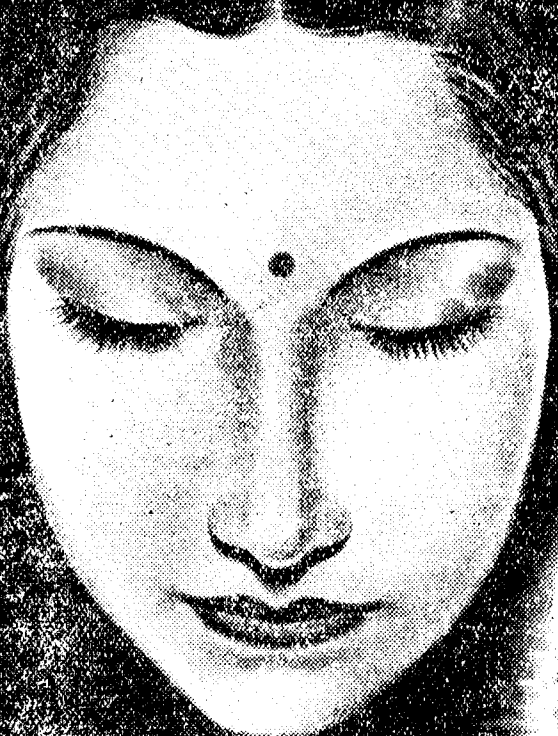
In some conditions as erythrodermia, baldness may occur. This is usually temporary, the hair regrowing after the skin disease is cured.

8. HEREDITARY PREMATURE ALOPECIA.

In an otherwise healthy scalp in a young man, baldness starts each side of the temples and over the vertex. The history shows the familial tendency to early baldness, and treatment is, as a rule, not of much help.

(The General Practitioner, March 1939.)

Alembic ELIXIR VALERIAN BROM



A soothing and hypnotic preparation for all nervous diseases of functional character.
Free from Dangers of the Barbitol Hypnotics.
More efficient than ordinary bromides.



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

When ordering please mention *Medico-Surgical Suggestions*.

Extracts.

CERVICAL RIB IN EARLY LIFE.

KING, J. C.

Am. Jour. Dis. Child, 4: 744, 1938.

Probably the most common symptom of cervical rib is tumor of the neck. Other symptoms may be divided into those of vascular and those of nervous origin. Interference with circulation is brought about chiefly by compression of the subclavian artery, either by the cervical rib itself, as the artery arches over it, or by the scalenus anticus muscle. Instances of pressure on the subclavian vein which produced aneurysm have been reported. Thrombosis of the vessels at the site of obstruction has been known to occur. Circulatory disturbances may become manifest in a number of ways, varying from mild changes in the color and temperature of the extremity involved to trophic changes or even gangrene of the fingers. The radial pulse may be diminished in volume or may be completely obliterated. In those cases in which the radial pulse is normal under ordinary conditions, if the arm on the affected side is raised over the head and the head is turned sharply to the opposite side, the pulse may be obliterated. This is known as the Halsted test and is explained by the stretching of the scalenus anticus muscle, with compression of the subclavian artery between the muscle and the cervical rib to which it is attached. Edema of the neck has been a prominent symptom in 2 of our cases, and is probably due to pressure on the subclavian vein. Symptoms of nervous origin, such as pain, atrophy and sensory disturbances, are attributed to pressure on the brachial plexus. The pain associated with cervical rib may be dull and aching after a long day's work or play or it may be sharp and knife-like when brought on by sudden turning of the head or shoulder. It is most commonly felt along the course of the ulnar nerve but may be felt along the distribution of the entire brachial plexus. It may or may not be associated with sensory disturbances, such as tingling and numbness. Atrophy is a late manifestation and may be limited to the intrinsic muscles of the hand or may involve any or all the muscles of the shoulder girdle, the arm, the forearm and the hand. Torticollis, or wryneck, is a frequent and prominent symptom of cervical rib in children. It is spasmodic and is caused by pressure on the spinal accessory nerve. Spasmodic torticollis was present in 5 of 9 children in the cases reported by SOUTHAM and BYTHELL and was also the outstanding feature of 1 of our cases. The association of Horner's syndrome with cervical rib has been described; it is presumably due to pressure or traction on the inferior cervical

ganglion. Symptoms of pressure involving the vagus and the recurrent laryngeal nerves are other rare complications.

The diagnosis depends chiefly on the roentgenologic studies; but a careful history and an accurate evaluation of the symptoms, together with the finding of tumor of the neck associated with nervous and vascular changes in the upper extremity, as previously described, should lead the clinician to a provisional diagnosis even before the roentgenogram has been taken. Roentgenologic diagnosis usually presents little difficulty. With children in whom the rib is small and is not readily visualized in the usual roentgenograms of the chest, oblique views in which the rays are directed upward, laterally and posteriorly toward the affected side will demonstrate more clearly the full length of the rib. The taking of roentgenograms by this method is recommended in the study of a cervical rib before surgical treatment is advised.

The treatment of cervical rib is operative, but since in the majority of cases of this anomaly there are no symptoms it is well to observe a patient long and thoroughly before resorting to surgical intervention. Three good rules to follow are: 1. Never inform a patient of the presence of a cervical rib that is not producing symptoms; certain patients, once informed, are forever conscious of it and acquire neurotic tendencies. 2. Advise surgical treatment only in cases in which the nervous or vascular disturbance is sufficient to incapacitate the patient. 3. If surgical intervention is indicated, operate early and avoid permanent damage to the tissues involved.

CONGENITAL SYPHILIS.

GIVAN, T. B.

Arch. Pediatrics, 55: 600, 1938.

It is generally conceded that by congenital syphilis is meant that form of the disease in which the spirochæte pallidum is transmitted from the mother to the foetus through the placenta. She may not have ever shown manifestations of the disease and in some instances may show a negative serology, yet she has syphilis if she gives birth to a foetus or infant with the disease. The spirochæte usually does not gain entrance into the foetus before the fourth month of gestation and may not until near term.

The diagnosis will depend upon a careful consideration of data regarding the following: 1. History of syphilis in the father as well as the mother. 2. Wassermann and a Kahn or other test on

the entire family. 3. The skin and mucous membrane. 4. Liver, spleen, kidneys, lymph glands. 5. Roentgenograms of the bones. 6. Central nervous system.

The father and mother. It is difficult usually to obtain an accurate history of syphilis from the average clinic patient.

It is pretty generally conceded that tests of the cord blood, whether negative or positive, may not give a true picture in a great many instances. By the second month reliance may be placed on the serology in all but an occasional case. These infants should be checked carefully every two weeks for the first five months and every three months thereafter for a few years.

The Skin and Mucous Membranes. If the baby has reached one to three months of age before developing skin lesions bullæ do not occur. Maculopapular and papulosquamous lesion are the rule at this time. They are distributed about the hands, forearms, elbows and ankles and legs, the diaper region and the face. The trunk usually escapes. The mucocutaneous areas, about the mouth, nares and anus are particularly sites for the invasion of the spirochæte.

Liver, Spleen, etc. The liver is nearly always invaded and most likely will show enlargement. The same is true of the spleen.

Bones. Roentgenologic examination of the bones should be a part of every diagnostic study when suspecting congenital syphilis. The early signs occurring most usually at or shortly after birth show on the film as submetaphyseal rarefactions or as areas of osteochondritis in multiple bones.

Central Nervous System. The infant showing a florid syphilis at birth usually dies in spite of the immediate institution of treatment. Most of these patients' central nervous systems are also invaded; there are often noted convulsions, a tense fontanelle, separated sutures and positive Wassermann test of the cerebrospinal fluid which also may show an increased cell count, increase in globulin and a positive colloidal gold test. In infants from six weeks to five months of age with the above signs, proper treatment usually affords an excellent prognosis.

After infancy, congenital syphilis has a definite tendency to pass into a latent phase. Reactivation often occurs in two age groups: first, from the fifth to the eighth years and second, the years near puberty.

Signs in One to Five-Year Group. May show scars or furrows about the mouth or anus which remain throughout life; and some may present various grades of mental deterioration from previous damage to the central nervous system by the syphilitic process. Condylomata may appear in this group, but not after the age of five years.

Signs in the Five to Nine-Year Group. 1. Interstitial Keratitis. 2. Hutchinson's Teeth. 3. Bone Changes. The "sabre shin,"

due to thickened tibia, is not infrequent. Osteitis, periostitis and osteomyelitis are the pathological lesions of the bones of the latent congenital syphilitic. 4. Synovitis. 5. Saddle nose. 6. Skin Lesions are almost unheard of in the older child; a gumma now and then does occur. 7. Vascular changes in the central nervous system may occur. Convulsions and hemiplegia are not uncommon in the patients having positive finding in the cerebrospinal fluid. 8. Enlarged lymph nodes, even epitrocleas, are present in so many other infections that their enlargement is of little significance as an aid to diagnosis.

Signs Near Puberty or Later. Any of the signs described in the previous group may be present at puberty or much later. One significant development that usually does not occur until near puberty is eighth nerve deafness.

Treatment: 1. Acetarson by mouth. In the weak debilitated infant, with numerous lesions present, the method suggested by Bratusch-Morrain may be used:

1st week	... 0.005 gram per kilogram daily.
2nd week	... 0.01 gram per kilogram daily.
3rd week	... 0.015 gram per kilogram daily.
Next 6 weeks	... 0.02 gram per kilogram daily.

If improvement is shown, allow the infant a rest period of two to four weeks; then repeat the course. At this time I usually double the above amounts and continue several such courses with favour to six weeks' rest periods in between.

2. Injection method. The young infant with multiple lesions should receive very small amounts of arsenic until healing gets under way to avoid, many times, fatal reactions. Sulpharsphenamine, dissolved in 1 c.c. to 2 c.c. of freshly distilled sterile water, injected into the gluteal muscles, has been a drug of choice by many workers for the past fifteen years.

0.01 gram per kilogram twice weekly for 2 weeks.

0.015 gram per kilogram twice weekly for 4 weeks.

0.02 gram per kilogram weekly for 6 weeks.

This should be followed by twelve intramuscular injections of bismuth given once a week; $\frac{1}{8}$ to $\frac{1}{2}$ c.c. of an insoluble bismuth in oil suspension may be used. Such a preparation should contain approximately 0.1 gram of metallic bismuth to each cubic centimeter. Then a second course of both the arsenical and bismuth should be administered even though the serology is negative after first course.

Treatment of older children: The same methods outlined in the treatment of the infant may be used.

Medical News and Notes.

THE KRISHNA DISTRICT MEDICAL ASSOCIATION, MASULIPATAM.

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

The minutes of the monthly meeting of the Krishna District Medical Association, Masulipatam, held at Bezwada at the Museum Hall on the 17th Feb. 1940.

Dr. K. Chelapatirao Nayudu, of Bezwada was voted to the chair to preside over the meeting of the Joint Session of the Krishna District Branch and the Bezwada Branch of the I.M.A. which was attended by 75 Doctors.

The following Resolutions on the formation of the Andhra Provincial Branch of the I. M. A. were moved by Lt.-Col. T. S. Shastri, the President of the Krishna District Branch of the I.M.A.:-

This common meeting of the Krishna District Branch and the Bezwada Branch of the Indian Medical Association assembled at Bezwada on 17-2-40 with the President of Bezwada Branch (Dr. K. Chelapatirao Nayudu) in the chair, do hereby resolve:—

1. That the time has arrived to form a Provincial Branch of the I.M.A. for the Andhra Area of the Madras Presidency at a very early date; 2. that the Andhra Provincial Branch of the I.M.A. should be formed at a meeting convened for this special purpose at a central place, like Bezwada which is easily accessible to most of the Andhra Districts; 3. that all the existing units (local Branches) of the I.M.A. working in the Andhra area (of 11 Districts) should be invited to send two representatives of theirs to this special meeting; 4. that 15 days' notice may be given to each unit to send their representatives. 5. and that the date of the meeting should be when the Easter railway concessions are available; 6. that as most members of this District (including Bezwada) find it impossible to undertake a long and expensive journey to Vijayanagaram when railway concessions are not available, this meeting resolves that the forthcoming Andhra Medical Conference should be postponed to Easter. 7. If the postponement to Easter of the Conference be not possible for any reason, it is requested that the question of the formation of the Andhra Provincial Branch should not be decided at the Conference.

These Resolutions were seconded by Dr. M. Seshacharyulu, and supported by Dr. D. S. Ramachandrarao, M.A., M.D., and were passed unanimously.

Now the Anniversary Function of the Bezwada Medical Association began with a delightful Tea party to which the Bezwada Medical Association invited the Bezwada Branch of the I. M. A. and the Krishna District Medical Association. This was presided over

by Dr. E. Somasekhar, F.R.C.S. (Eng), District Medical Officer, M. & S. M. Ry. Hospital.

The following programme was gone through.

1. Presidential address which included a discussion on Enteric.
2. The Annual Report was read by Dr. B. Sambamurti, the Secretary of the Bezwada Medical Association.

3. A case of Myelocoele, a case of Hermaphrodite, and congenital Syphilis were exhibited by Dr. H. C. Halgo, I.M.D., of the Bezwada Government Hospital.

4. Case-notes on Tetanus and Pyloric obstruction were read by Dr. M. V. Subbarao, Resident Medical Officer, Government Head-Quarter Hospital, Masulipatam.

There was discussion on the above cases; and the meeting concluded with the remarks of the President, and with a vote of thanks to the Chair.

The party then adjourned to a delightful dinner which was kindly arranged by the Bezwada Medical Stores.

Dr. RAYAS'

House-Hold Remedies:

Pain Balm. This is a genuine remedy for Head-ache, Rheumatism, Neuralgia, Chest-pain, Cough, Sprain etc.

Itch Cure. A reliable remedy for all sorts of Itch, Eczema and other skin affections.

Wanted Agents in Every Town.

Sample on request.

Manufacturers:

THE RAYAS PHARMACY,

179, Mint Street, Sowcarpet,

MADRAS.

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 Pro-
ducts, 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*.

MEDICO-SURGICAL SUGGESTIONS

Vol. IX.

FEBRUARY 1940

No. 2.

27 MAR 1940

protection against "common cold"

Full dosage of Dissolved Vaccines "Glaxo" may be given from the beginning. The antigens are already in solution and immunity is thus developed much more rapidly. The period of immunity achieved with Cold Dissolved Vaccine "Glaxo" represents a very definite increase. Moreover the rapid antibody response has an added value in treatment: a cold can often be aborted by a prompt injection of 0.5 cc.

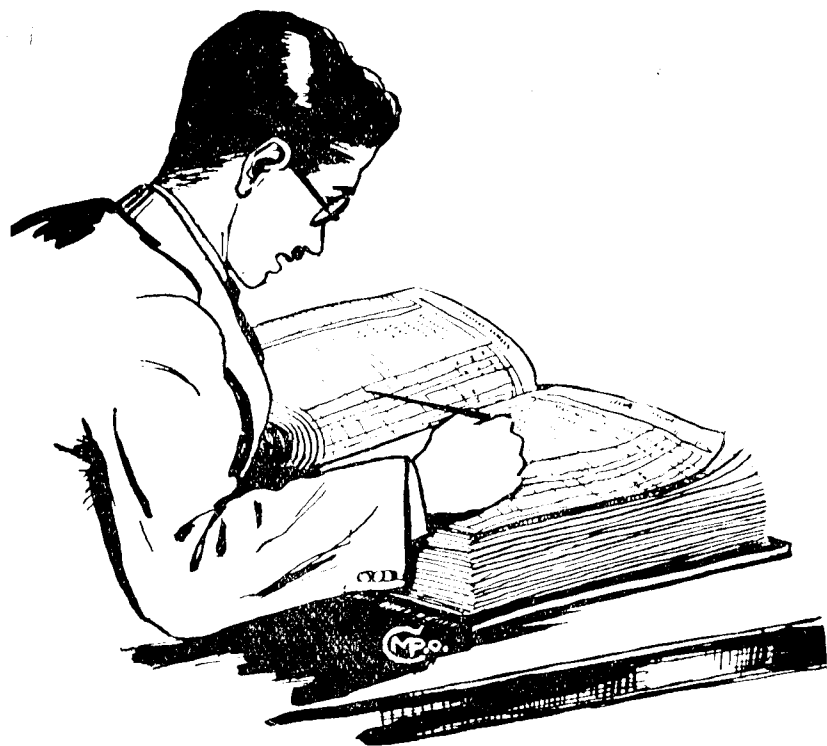
Cold Dissolved Vaccine "GLAXO"

Each cc. contains in solution the antigens of: B. pneumoniae (Friedlander) 25 million; M. Catarrhalis (Friedlander) 25 million; Pneumococcus (Friedlander) 150 million; Streptococcus (respiratory) 150 million; Staphylococcus 100 million; C. Coryzae 25 million; H. influenzae 100 million;

In 5 cc. rubber-capped bottles.

GLAXO LABORATORIES LTD.
GREENFORD, ENGLAND

Representatives in India:
H. J. FOSTER & CO., LTD.
P.O. Box 202, Bombay,
257, Connaught, 108, Madras,
244, Lahore.



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.*

ALCALZIUM
IN CASE OF
PULMONARY
TUBERCULOSIS

ALCALZIUM WITH IRON & VITAMIN 'D'
In case of Deficient Growth, Rickets,
Disorders of Teething and Dental Caries,
Fractures with delayed consolidation etc.

ALCALZIUM WITH IRON & VITAMIN 'D'
In Case of DIARRHOEA, ENTERITIS, SPRUE, CONVALESCENCE after
FEVER, HAY-FEVER, ACUTE RHINITIS, SERUM DISEASE, PULMO-
NARY AFFECTION, SCROFULA, PHOSPHATURIA, etc.

ALCALZIUM WITH IRON & VITAMIN 'D'
In case of necessity of mineral supplies For
CHILDREN, EXPECTANT and NURSING
MOTHERS and MALNUTRITION.

Each Tablet represents:	
Calcium Lactate	3.5 Gr.
Sodium Lactate	2.5 Grs.
Dicalcium Phosphate	2.0 Grs.
Ferri Et Ammon Citras	1.0 Gr.
Vitamin D	100.0 Units

Alembic

ALCALZIUM

WITH IRON & VITAMIN 'D'

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

When ordering please mention *Medico-Surgical Suggestions.*

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 failure.

Doctors and Embellishers
and abroad and
than 18,000 people
20 years.

தமிழ்நாடு ஆவணக்காப்பக நூலகம்,



**No free sample
sent at all.**

Ag.

S. Krishn
10

THE I

SIR NILE

A S
The Official M

**1. Original Article
abstracts
Published**

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.

தமிழ்நாடு ஆவணக்காப்பக நூலகம்,
எழும்பூர், சென்னை-600 008.

தவணைத்துள்ள.

சே. எண் : 11, 61608 :

[illegible]

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