

NO. 10

DIGITIZED

MEDICAL SURGICAL SUBSTITUTIONS.

OCT - 1936

Vols.

NO 10



JL
L: 4 : 7m N31 no.
N36. 5:10
142 710.

MEDICO-SURGICAL SUGGESTIONS

Vol. V.

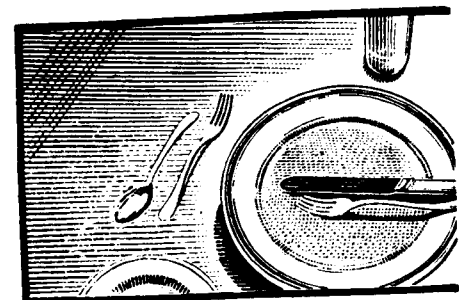
OCTOBER 1936

No. 10.

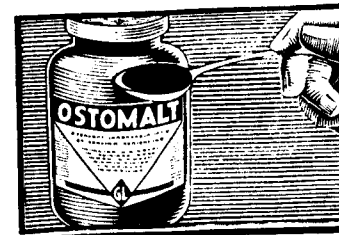
To restore APPETITE

Failure of appetite, whether in childhood or adult life, is successfully remedied by a preparation of malt and vitamins.

In this type of case Ostomalt, the modern, standardised malt- tonic, has replaced the



old malt-and-oil mixtures. Being highly concentrated in vitamins A, B complex, C, and D, small doses are quite sufficient. Ostomalt is free from oil and has a delightful orange flavour. The full benefits of its rich vitamin content can thus be obtained without risk of digestive disturbances.

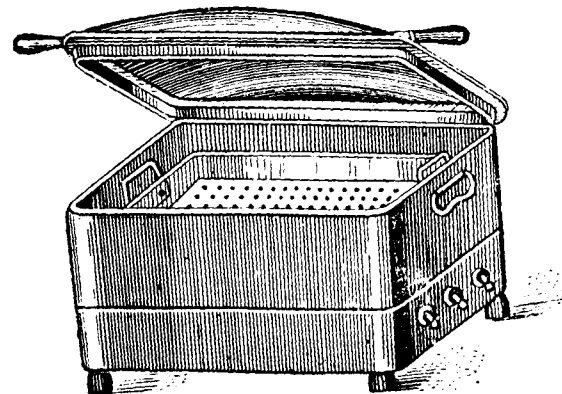


OSTOMALT

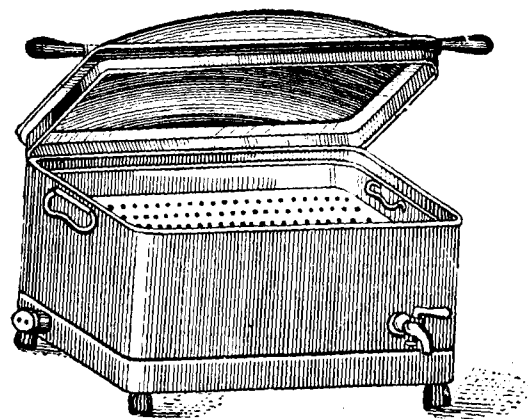
VITAMIN MALT TONIC

GLAXO LABORATORIES LTD., GREENFORD, MIDDLESEX, ENGLAND
Indian Representatives: H. J. FOSTER & Co., Ltd., P.O. Box 202, Bombay; P.O. Box 2257, Calcutta; P.O. Box 108, Madras

ELECTRIC STERILISERS



With High, Medium and low
regulating device.



Without regulating device.

For particulars apply to:—

HEBBAR BROTHERS, LTD.

246, Thambu Chetty Street, G. T. Madras.

FOLLIPEX

**Follicular Hormone for the Treatment of Climatic
Disturbances and Menstrual Disorders.**

In packings of:—

Bot. of 10 Tablets	of 1000 M. U. in each tab.
„ „ 10 Suppositories	„ 1000 „ „ „ sup.
Box „ 5 amp. in aqueous solu.	500 M. U. in 1 CC.
„ „ 5 „ „ „ „	1000 „ „ „
„ „ 5 „ „ „ „	10000 „ „ „
„ „ 5 „ „ „ „	250000 „ „ „

PROCYTHOL Normal:—a 2cc amp. contains the active
anti-anaemic principle of 500
Grms. of Fresh Liver.

(In packings of:—5, 25, 50, & 100 amp. boxes.)

PROCYTHOL Forte:— a 2cc amp. contains the active
anti-anaemic principle of 5000
Grms. of Fresh Liver.

(In packings of:—5 & 30 ampoules boxes.)

Indicated in:—

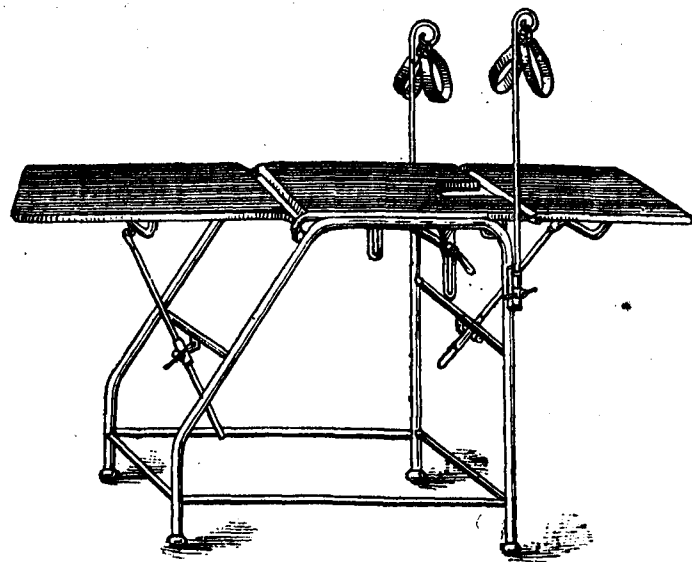
Primary, Secondary, and Perni-
cious Anaemia; Anaemia
following infectious diseases,
Asthma etc., etc.

Apply for interesting literatures to:—

EZRA BROS.,

Churchgate St., 28, Rundall's Road, 3/a, Marcus Lane,
BOMBAY. Vepery, MADRAS. CALCUTTA.

When ordering please mention *Medico-Surgical Suggestions.*



Aseptic General and Gynaecological operation table, of special drawn steel tubing, all joints oxy-acetylene welded, painted with H. V. white enamel, all adjustable lever heavily nickel-plated, fitted with strong and sturdy nickel-plated leg rests, and polished pure zinc douching tray.

HEBBAR BROTHERS, LTD.,

MANUFACTURERS OF

Surgical Instruments Aseptic Hospital Furniture

Show Room : 246, Thambu Chetty Street,

Works : 107, Thambu Chetty Street,

MADRAS.

When ordering please mention *Medico-Surgical Suggestions*.

(232)

NOBLE PRIZE WINNER

Dr. G. R. MINOT

(Quoted from "Times of India", Dated 12-12-34)

"Professor Minot has made discoveries which suggest that **Chlorophyll** the green colouring matter of plants, may greatly accelerate the absorption of Iron—the stock treatment for ordinary or secondary Anæmia."

"It is considered probable that the use of **Chlorophyll** may be of value in cases where the taking of large quantities of iron causes digestive disturbances."

Further researches on Chlorophyll have proved that:—

1. It is rich in Vitamins A. B. & C.,
2. It stimulates the function of Red Bone Marrow assisting rapid production of R. B. C's in the body.
3. It helps assimilation of Iron.
4. It reduces enlarged spleen and

'BLOOD BEANS'

is the only combination of Iron, Arsenic, Strychnine and copper nucleinate, with **CHLOROPHYLL**.

Distributors:—

HEBBAR BROTHERS, LTD.,

246, Thambu Chetty Street,

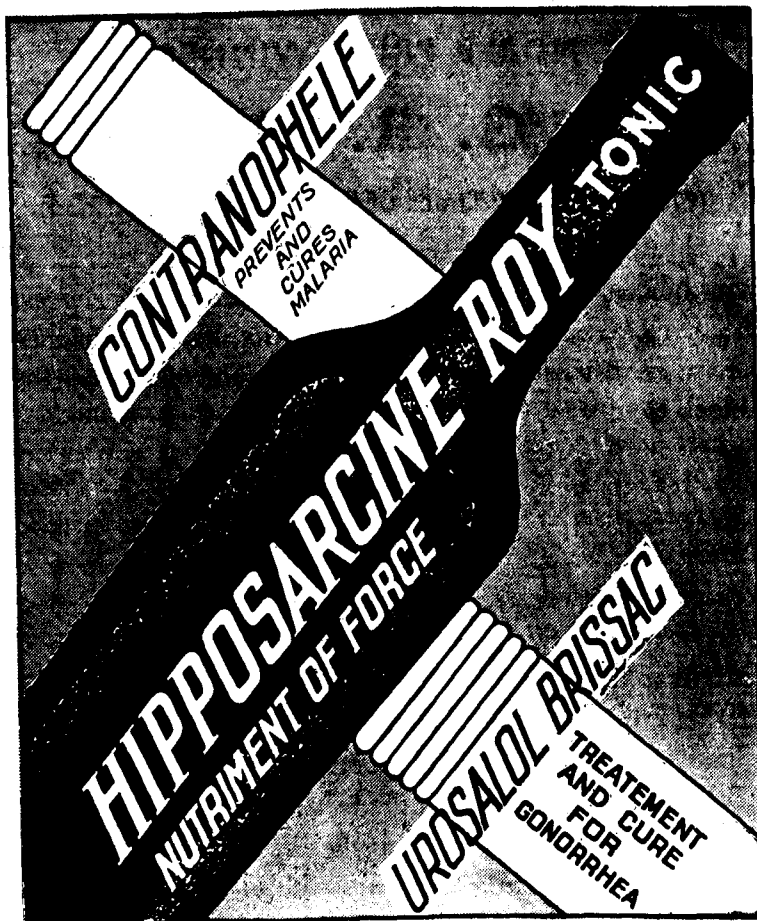
G. T., MADRAS.

For details apply to:—

YASMIN & Co.,

10, Churchgate St., Bombay.

When ordering please mention *Medico-Surgical Suggestions*.



UROSALOL French Government Laboratory Control No. 758-1

Pure Sandalwood Oil	0.20	Indicated in Urethritis, Gonorrhea, Acute and Chronic, Pyelitis, Cystitis, Prostatitis
" Salol	1.05	
Hexamethylenetetramine	0.05	

HIPPOSARCINE French Government Laboratory Control No. 758-2

Muscular Extract	2.3	Total and aseptic Muscular Extract with haemoglobin containing Vitamins A, B, C, D, E TONIFYING FOOD REMEDY against constitutional debilities in anaemias following childbirth, in convalescence after infectious and debilitating diseases
Haemoglobin	1.0	
Benzoate of Sodium	0.12	
Orange juice	q s	

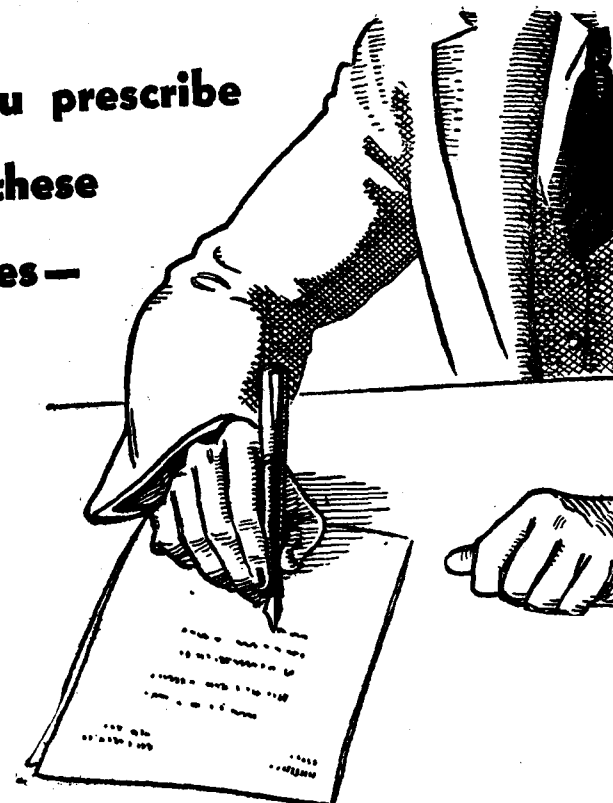
CONTRANOPHELE French Government Laboratory Control No. 758-3

COMPOSITION	INDICATION
Basic Quinine Sulphate, Cinchonidine Sulphate, Methylene blue, Sodium Methylarsenate, Basic Ferrous Oxalate, Rhubarb Extract	Unequalled in the treatment of Malaria during all its stages

Sole Agents: — FRENCH MEDICINES AGENCY, Post Box 88, MADRAS.

When ordering please mention *Medico-Surgical Suggestions*.

When you prescribe
for these
cases —



SCOTT'S Emulsion is a valuable tonic in all cases of nervous debility, anaemia, defective nutrition, tubercular affections and of those numerous debilitating diseases common in the East.

Scott's Emulsion exhibits cod liver oil, with pure glycerine and the hypophosphites of lime and soda. The Emulsion is perfectly stable under all conditions and maintains the full vitamin potency of the cod liver oil.

In the course of its direct and rapid absorption into the system, Scott's Emulsion stimulates the digestive organs, thus facilitating the assimilation of ordinary foods. Patients of all ages find Scott's Emulsion very palatable.



This famous Trade
Mark guarantees
purity and quality

SCOTT'S Emulsion of Pure Cod Liver Oil

When ordering please mention *Medico-Surgical Suggestions*.

SIROP "THIO-CALCIN" with combinations.

SIROP "THIO-CALCIN" WITH VITAMIN A. & D.

SIROP "THIO-CALCIN" PLAIN.

This product is without Calcium, and contains 10% of Pot Sulpho Guaiacolate with Glycerine, Orange Juice and Syrup.

SIROP "THIO-CALCIN" DIABETES.

For diabetic persons. This is free from sugar.

SIROP "THIO-CALCIN" E. M. H.

Contains 1/24 grain of Ethyl Morphine Hydrochlor to each teaspoon. Useful in irritable and Whooping cough and Bronchial Asthma. Sold in 2 Ounce bottles.

Available at all Chemists.

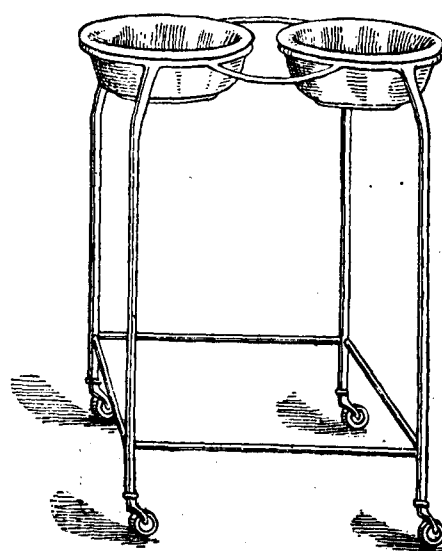
Sole Agents :-

Messrs. DADHA & CO.,
P. B. No. 541,
Madras.

For Literature and samples apply to :-

THIO-CALCIN CO.,
16, Venkatesapuram,
Mylapore, P. O., Madras.

BASIN-STAND



Made of brass tubing, all joints oxy-acetylene welded, heavily nickel-plated, with two enamelled basins, fitted on cone bearing rubber tyred castors. Specially made for Prince of Wales Children's Hospital, Madras. Could be made of steel tubing and white enamel painted.

Manufacturers :-

HEBBAR BROTHERS, LTD.,
246, Thambu Chetty St, Madras.

When ordering please mention *Medico-Surgical Suggestions*.

MEDICO-SURGICAL SUGGESTIONS

A MONTHLY JOURNAL OF PRACTICAL MEDICINE & SURGERY

Editors : Dr. K. P. Rama Hebbar & Dr. P. R. Venkappaya.

VOL. V

OCTOBER 1936

No. 10

CONTENTS

ORIGINAL ARTICLE	PAGE.
Salpingitis. By P. H. Vittal Rao, M.B., B.S., D.G.O.	... 287
SELECTED ARTICLES	
Oral Lesions of Interest to the Medical Practitioner. By G. Victor Bokyo, M.B., D.D.S.	... 296
External Otitis. By Clay Gwinn, M.D.	... 302
Some Dental Emergencies. By R. S. Taylor	... 307
EXTRACTS	... 313
MEDICAL NEWS AND NOTES	... 315

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

Sample Copy for 4 As. Stamps.

Office of the Editors & Publisher : 246, Thambu Chetty St., Madras, India.

NOTICE

Original articles, case reports, and other topics of medical interest are cordially invited, and are accepted only with the distinct understanding that they are contributed exclusively to *Medico-Surgical Suggestions*. Manuscripts should be type-written, with double spacing. 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 Editors. Authors desiring reprints of their articles published in the Journal should specify the same at the time of forwarding them. The Editors accept no responsibility for views expressed by contributors.

All business communications relating to subscriptions, scale of charges for advertisements, orders for copies of the Journal, etc., 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.

VITRATE.

(Confec. Vitamin Concentr. Comp.)

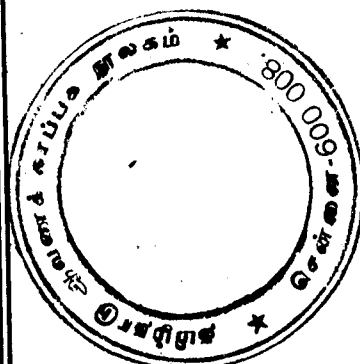
In a Palatable Vehicle
Containing yeast & Malt
Extracts which Furnish
Vitamins B and G.

Each Fluid Ounce contains:--
Vitamin A. 22,600 Units.
,, D. 1,200 Units.

(Derived from Super D Cod
Liver Oil Concentrate)

Iron and Ammonium Citrate
- 4 Grs. -

IN 8 OUNCE
BOTTLES



Manufactured by:—
THE UPJOHN Co.,
U. S. A.

ADULT DOSE :—One to Two
Teaspoonfuls Three Times
Daily, taken plain or Diluted
with Milk or Orange Juice.
Infants and Children in Pro-
portion according to Age.

Agents :—

T. M. Thakore & Coy.,
5, Sunkurama Chetty Street,
G. T. Madras.

Head Office:

43, Churchgate Street,
Bombay.



When ordering please mention *Medico-Surgical Suggestions.*

MEDICO - SURGICAL SUGGESTIONS

VOL. V

OCTOBER 1936

NO. 10

Original Articles SALPINGITIS.

BY P. H. VITTAL RAO, M.B., B.S., D.G.O.

Guntur.

Introduction—When I consented to read this paper I was thoroughly conscious of the fact the subject can be best discussed by a Gynaecologist, who has had wide experience in an institution, and that being a tyro in the independent profession I lack the wealth of material and the richness of experience to draw some useful practical conclusions and to place them before this learned house to emulate thought or stimulate discussion. Still I congratulate myself if in this attempt I can succeed in stressing a few salient points in the etiology and treatment of the condition which I believe can very well come under one of the preventable diseases, if I may call it so.

Definition—Salpingitis is the general term used for all the infections of the Fallopian tubes, and as the ovaries are also generally involved the condition is some times called salpingo-oophoritis.

Preliminary anatomical considerations—It would appear as if nature has designed the Fallopian tubes to become the seat of an infective process, and were this the case, the attempt has certainly been a successful one, for few organs are more frequently affected by inflammation, acute or chronic. It is open at both ends so that infection may enter at either end as well as by the blood stream or by continuity. The uterine outlet is extremely narrow, being only 0.1 mm. in diameter, and may readily become blocked by swelling of the mucosa, so that efficient drainage per uterus is impossible. Finally the innumerable folds of mucosa are admirably adapted to harbour micro-organisms for long periods of time.

Aetiology—Salpingitis is infective in origin pure and simple, though factors like chill, constipation, obstruction to circulation of

the tubes and ovaries may act as predisposing causes in some cases. There are two types, primary and secondary.

1. *Primary*—Here salpingitis is a part of the clinical picture of primary pneumococcal peritonitis, which occurs in children and I don't propose to deal with it, because it has usually a fatal course.

2. *Secondary*—1. Due to tubercle bacilli, 2. Due to pyogenic organisms, cocci usually. Salpingitis due to tubercle bacillus is a tuberculous infection of the abdominal visera, though certain authorities believe that the process starts in the tube primarily. I do not propose to deal with this condition either, because there is no special treatment except for the general affection as such. In most cases, unless the condition is diagnosed pretty early, when extirpation of the tubes is the treatment, perhaps with uncertain results.

Now coming to the type due to pyogenic organisms, the modes of infection are:

1. *Ascending infection*—In the vast majority of cases, infection reaches the tubes by way of the uterus, an extension by continuity of structures of the inflammatory process present in the uterus.

2. *Blood-borne infections*—Excluding tubercular infection this may occur sometimes in acute specific fevers, influenza, small-pox, etc.

3. *By continuity*—or direct infection from the alimentary tract. Here the appendix hanging down on the pelvic brim is frequently at fault. At first the right, later the left tube is affected. Sometimes organisms from the descending colon or other parts of the intestine may infect a quiescent pyosalpinx of gonorrhoeal origin.

4. *Through the abdominal ostium*, as a part of pelvic peritonitis.

By far the majority of cases arise from an extension of an uterine infection. In many cases the infection occurs at parturition, though it may follow the use of an uterine sound, curettage, dilatation or any uterine medication, due to imperfect cleansing of the vagina, vulva, or instruments, or after operations on the cervix.

A very common and significant fact has recently attracted the attention of gynaecologists and is becoming more evident that a considerable proportion of cases, up to 30 to 40 per cent according to some, occur in women, where the above said causes may be easily excluded. Perhaps this is due to the use and practice of contraceptive measures, pessaries, etc, under imperfect hygienic conditions. This is a point I would like you to remember, for many reasons. Perhaps in these instances pure or mixed cultures of ordinary pyogenic organisms are the offenders.

According to authorities like Munro Kerr, Mackenzie, etc., gonorrhoeal salpingitis does not account for more than 40 per cent of their cases, but cases due to the above mentioned causes are on the increase. But in our country the gonorrhoeal variety ranks foremost with the puerperal type.

Let us become wise due to the follies of others, remembering the important fact in good time, and try to prevent catastrophes due to contraceptive measures, by teaching the patients the correct way of using them, when they seek advice.

Pathology—It is an endosalpingitis which, however, may rapidly spread to the muscular and serous coats exciting a local peritonitis in the adjacent organs.

The various stages are:

1. Mild catarrhal inflammation of the mucous membrane of the tube, with occlusion of the narrow uterine end of the tube; no structural alterations.

2. Repeated attacks leading to hydrosalpinx; may resolve in early stages.

3. If the infection is more virulent, pyosalpinx.

4. Tubo-ovarian abscess.

5. If the outer end of the tube is not occluded, pus will trickle into the abdomen and if protective adhesions are formed a big mass may be formed, which may be palpable per abdomen.

6. If the pus finds its way down and reaches the pouch of Douglas, forms a pelvic abscess.

7. Rarely the adhesions at the brim of the pelvis are not formed, in which a case a generalised peritonitis will ensue.

Coincident changes in other organs—Changes in uterus, usually coincident endometritis; in the cervix: cervicitis; bladder: cystitis; urethritis may be present.

ACUTE SALPINGITIS

Symptoms and signs of acute salpingitis are those of acute pelvic irritation, with a history of incomplete abortion, obstetric interference, instrumentation, leucorrhœa, sometimes urethritis, and sometimes appendicular colic. Onset is usually sudden, with intense and diffuse pain in the lower abdomen, increased on movement. Fever is present but not high. Nausea and vomiting are present, not severe; constipation; if the attack continues sometimes mucous diarrhœa. Leucorrhœa and sometimes burning sensation, during, or frequency of, micturition, is complained of; metrorrhagia in a considerable percentage of cases. The patient is acutely but not very ill, lying down; tongue furred and dry; furrowing of the tongue is more prominent in the puerperal variety. Palpation of the abdomen reveals usually bilateral tenderness over pelvis, with a variable amount of rigidity and spasm.

Local—Inspection of the vagina reveals evidence of gonorrhoeal infection of urethra, vagina, cervix, Skene's or Bartholinian glands in the gonorrhoeal variety.

Bimanual examination shows cervix to be tender and sensitive and attempts at moving the uterus causes pain. The uterus may

feel soft and boggy. The adnexal regions are also tender. In the early stages masses cannot be felt, more due to the rigidity and spasm of the abdominal muscles and the pelvic tenderness. As a matter of fact a detailed pelvic examination is not possible in this stage.

Symptoms and signs of the important complications, namely, pelvic abscess: In this condition the temperature continues to be of the hectic variety, wasting and daily sweating. Locally the abscess can be made out by vaginal examination.

Diagnosis of acute salpingitis: In the majority of cases diagnosis of acute salpingitis should not be difficult if a detailed history of the patient is taken as regards abortion, gonorrhoea, obstetric interference, etc., and a thorough general and local examination is made. But at times it may be impossible to distinguish this from other acute abdominal conditions especially.

1. Acute appendicitis.
2. Tubal pregnancy.
3. Ovarian cyst with twisted pedicle.
4. Suppurating dermoid cyst.
5. Acute endometritis.

1. Acute Appendicitis.

1. Incidence: Should be thought of first in unmarried women and girls.

2. Previous history: Often no menstrual history, obstetric interference, unless coincident.

3. Onset: acute.

4. General symptoms: fever usually high, digestive disturbances vomiting is a prominent symptom.

5. Pain: at first around umbilicus, later localising at MacBurney's point.

6. Tenderness and rigidity more.

7. Vaginal examination: Right fornix tender; touching the cervix causes no pain; movement of uterus causes no pain;

Acute Salpingitis.

In married women.

Such previous history present.

Acute.

Fever usually not so high. Vomiting not prominent.

At first more diffuse and bilateral, later it is lower down in the tubal region.

Less.

Both fornices tender, pain on touching the cervix and movement of the uterus.

The blood count is not of much value. One should remember that both these conditions may be present together. If still in doubt, operate; otherwise it will be taking a great risk if it should be a case of appendicitis.

2. Tubal Pregnancy.

1. History: Usually normal menstrual history (perhaps there will be a period of sterility for some time.) History of missed period present, usually symptoms commence in the early second month.

2. General symptoms:

More of shock and collapse. Fever not prominent, sometimes not present, and during exacerbations too there may be slight or no fever.

3. Pain on one side.

4. Vaginal examination:

A. Bleeding present, and much less compared to the general symptoms.

B. Local signs of pregnancy may be present if more than two months.

C. Pulsatile swelling on one side of the fornix is characteristic.

D. Decidual cast, if it is shed in a tubal abortion will clinch the diagnosis, but absence of the same does not negative it.

E. Zondek Ascheim test.

3. Twisted pedicle of an ovarian cyst.

History: Usually no history of gonorrhoea or obstetric interference. History of tumour and pelvic symptoms are present. At the time of the twist, symptoms are of sudden onset with severe pain extending throughout and symptoms of shock.

Fever: Comes on later, after hours, when degeneration starts and local peritonitis is set up. (When general peritonitis results diagnosis is still more difficult), whereas in acute salpingitis there is fever from the start.

Local. No signs of endometritis.

4. Suppurating dermoid.

A. History of an unmarried woman, or sterility if married and no history of uterine infection.

B. Presence of other pelvic symptoms like pain, dragging sensation, etc.

Acute Salpingitis.

Menstrual pain present, menorrhagia present.

No missed periods.

Fever is present, and always present during exacerbations.

Pain on both sides.

Slight bleeding may be present, more if in periods.

Not present unless she is pregnant.

No pulsation felt unless it is transmitted from one of the arteries-not common.

No decidual cast.

C. General : Fever is present.

D. Local : Tenderness and a fixed mass are present. No evidence of uterine infection or vaginal discharge.

5. *Acute endometritis* : Local examination will clinch the diagnosis. Tenderness is confined to the uterus. No marked tenderness in the periuterine structures, nor is there a mass or fullness felt.

Prognosis : In the gonorrhoeal variety, being a self-limiting process, it is good. In the majority of cases they recover without operative interference, but the remote prognosis as regards functional utility etc, depends on the after-treatment.

In the puerperal variety it is difficult to say when the tubes become infected. The progress of the infection must be watched carefully, if the tubes are not removed after trying conservative measures for some days fatal results may ensue.

Treatment of acute salpingitis : As regards treatment of acute salpingitis the general tendency of modern gynaecologists is only medical treatment first ; though there is a school, and Aleck Bourne belongs to it, which advocates that once diagnosed, immediate operation namely, removal of the tube (this is in the first attack itself.) Some of the claims advanced for this procedure are.

1. Further complications are avoided.
2. Chances of future pregnancy much greater
3. Speedy convalescence.

Recently in America they seem to be conceding to this view especially when there is a likelihood of reinfection.

Medical treatment :

A *General*. Rest in bed is most important ; the patient feels more comfortable in Fowler's position with her legs flexed.

Diet. Liquid nutritious diet till the temperature comes to normal ; barley water if there are urinary symptoms.

Bowel movement : Laxatives are not advised by some. Liquid paraffin by mouth at bed-time or a low enema without causing discomfort to the patient.

Hot or cold application to the abdomen, hot air chambers for few hours each time twice or thrice a day has a beneficial effect.

Sedatives are indicated, but morphia has to be avoided as far as possible even when the diagnosis is certain ; one thing against its use is that it will mask the oncoming symptoms. An injection of one cc. of collosol manganese intramuscularly has good effect in diminishing pain and may be repeated on alternate days depending on the result.

General specific measures. Some advocate the use of vaccines straight away from the onset of the disease, but I have not used it. In the puerperal variety, especially of the streptococcal type massive doses of streptococcal serum can be tried from the first, even intravenously, diluted in saline.

Non specific protein therapy : Started after the cessation of the acute attack, commencing with small doses.

Diet to be increased liberally depending on the progress.

B. Local measures. If the infection has followed labour or miscarriage, see that the uterus is clean. This will entail an exploration of the uterus and removal of any septic remnant material perhaps best done with the finger than with the curette. Instead of applying any antiseptic of doubtful value, it is better to inject some sterile glycerine into the uterus ; this may have benefit due to hygroscopic action.

Operative treatment. If the infection has taken place from an operative wound of the cervix, remove the sutures to facilitate free drainage.

If there is collection of pus low in the pelvis, it is opened and drained by a vaginal incision through the posterior fornix-posterior-colpotomy best done under anaesthesia with the help of a good light.

If there is collection of pus high up in the pelvis, it is best to resort to and continue conservative measures first, because firstly she may recover under this regime, and secondly even if afterwards drainage is decided upon it can be undertaken with much less risk to the patient. It is the common experience that collections of pus in the pelvis tend to become sterile after a certain period of time (3 or 4 months) except in the streptococcal variety where one is not certain even after a few years.

In acute inflammatory masses whether strepto- or gonococcal intraperitoneal operation is to be avoided. If the symptoms are urgent and the pocket of pus cannot be reached and drained per vagina it may be possible to drain it extraperitoneally by operation above Poupart's ligament. This is practicable when the abscess is situated in the broad ligament (as most streptococcal abscesses are) and it has proved to be a life saving measure in several instances. The route followed is the same as for the ligation of the external iliac artery.

If the inflammation takes the form of a rapidly spreading peritonitis, the peritoneal cavity should be opened and drained, either by vaginal section or abdominal section or both. Such cases are seen principally in pelvic inflammation following miscarriage or labour and constitute a very severe type of puerperal sepsis.

Steps of the operation :

1. Preliminary examination of the mass under anaesthesia and note what portion is fluctuating.
2. Incision through vaginal wall, put near the cervico vaginal junction.
3. Blunt dissection through the connective tissue, best done by sense of touch alone.

4. Puncturing the abscess wall—open the pus pockets.
5. Drainage with a drainage tube, tight packing around it to stop bleeding.
6. Never irrigate, or put a gauze drain because it hinders proper drainage.

After-treatment :

1. Continue the free drainage till it heals up and the cavity has been practically obliterated by granulation.
2. Avoidance of unnecessary irritation like repeated packing etc.

Treatment of associated symptoms :

Urethritis. Hot sitz bath; local mild application of 10 per cent silver nitrate or protargol or 1 per cent mercurochrome.

Cystitis: if present, no local measures are to be done till the irritability subsides. Plenty of alkalis at first till the irritability is controlled and then noting the reaction of the urine change it. Give plenty of barley water and glucose and bland diet. Intravenous injection of 3 to 5 cc. of 10 per cent calcium gluconate had a very good effect in allaying the irritability in a case under my treatment, but it was only temporary. Hexamine or other proprietary preparations are worth a trial. After the irritability of the bladder has subsided, irrigation of bladder may be commenced. Normal saline is the best that can be used for the purpose.

All this is as regards the woman. During this time the male consort should be properly treated, and he should be strictly warned to observe abstinence till the local treatment is thoroughly attended to, and completed.

Recently follicular hormone of the ovary has been advocated for the treatment of acute salpingitis.

After-results. What ultimate results can be expected in these cases of acute pelvic inflammation? What is the after-history of these patients? For this purpose it is convenient to divide them into two types.

1. Those who did not require operation.
2. Those that did require operation.
1. If the patient can be tided over the acute attack without operation, one of the following four terminations are possible:—
 - (a) Complete recovery.
 - (b) Partial recovery—here all symptoms subside except that she becomes sterile.

(c) Chronic pelvic inflammation. Though there is no resultant pus pocket, there will be a mass of exudate which acts as a focus of chronic inflammation acting as a source of irritation and causing pain, menstrual disorders and giving rise to frequent attacks of pelvic peritonitis and persistent invalidism. This is the end-result in many of the neglected cases of the gonorrhoeal variety.

YOU WILL BE CONVINCED DOCTOR !

Dr. PUROHIT'S

“SHWASHARI”

has gained the confidence of the medicoes in Asthma & Bronchitis.

Shwashari—Plain-Blue packing—Contains :—Panama Bark, Ammonia Carb, Grindelia, Senna Leaves, Pot. Iodide, Adhatoda Vasaka, Syrup Hypophos, Coriandar & Caraway and Euphorbia.

Shwashari—Compound-Red packing—specially indicated in Torpidity of the Liver and Intestines. Contains in addition to the above all, Ammon-Chloride, Vin. Ipecac, Cascara.

Sold at all Chemists :

Madras Stockists :—

in 3 oz., 6 oz. and 12 oz. bottle
for Rs 2, 3-8-0 and 6 only.

(1) HEBRAR BROS. Ltd.,
(2) SRIKRISHNA BROS.

By V. P. P. Rs. 3, 4-8-0 and 7-8-0 for 3, 6, and 12 ozs., respectively.

For sample write to :—

Dr. PUROHIT'S PHARMACY, Kolhapur.

SURGEONS' REQUIREMENTS

MEDICINE CHESTS.
INSTRUMENT CABINETS.
OPERATION TABLES.
REVOLVING STOOLS.
INSTRUMENTS TABLES.
DRESSING TABLES.
IRRIGATORS STANDS.
EXAMINATION COUCHES.
ETC. ETC. ETC.

BOYLE-DAVIS GAGS.
CHLOROFORM-ETHER APPARATUS
OPHTHALMIC CHAIRS.
E. N. T. CHAIRS AND LAMPS.
WASH BASIN STANDS.
ARM IMMERSION BOWLS.
STRETCHERS INVALID CHAIRS.
BED-SIDE LOCKERS.
ETC. ETC. ETC.

FURTHER PARTICULARS FROM:

HEBBAR BROTHERS, LTD.,

MANUFACTURERS OF

SURGICAL INSTRUMENTS AND ASEPTIC HOSPITAL APPLIANCES,
IMPORTERS OF ELECTRO-MEDICAL APPARATUS,

246, THAMBU CHETTY STREET. MADRAS.

When ordering please mention *Medico Surgical Suggestions.*

SIROP "THIO-CALCIN"

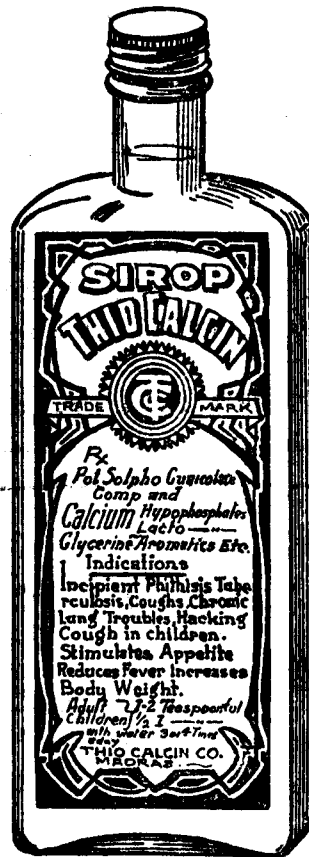
(REGD.)

**A Super Calcium Tonic and Cough
Specific:—**

**EFFICACIOUS
IN
BRONCHITIS**

**EARLY
TUBERCULOSIS**

**PREGNANCY
AND
LACTATION.**



**Each Fluid ounce
Contains**

**Pot. Sulpho.
Guaiacolate grs. 20.**

**Assimilable
Calcium grs. 30.**

**Glycerine
minims 120.**

Orange Juice Q. S.

Syrup etc. Q. S.

***Sold in 6 and 16 oz. vials
at all Chemists.***

THIO-CALCIN CO., 16, Venkatesapuram, Mylapore.

Chief Agents:—

DADHA & CO., P. B., 541, Madras.

When ordering please mention *Medico-Surgical Suggestions.*

(d) Some survive the first attack but the sepsis continues and may end in pyæmia, leading to death finally, unless treated promptly.

2. In cases where immediate operation is required again the same four terminations are possible. (a) Complete recovery; (b) Partial recovery; (c) Chronic pelvic inflammation. In gonorrhoeal cases the other tube gets infected (by extension) and starts giving trouble. In cases following labour (streptococcal variety) plastic exudate and many adhesions may result. In cases where vaginal drainage was performed, the drainage track may close too soon, thus allowing the abscess to reform, or another focus may go on to abscess formation and lead to the repetition of the symptoms. (d) Some cases do die in spite of prompt and best surgical aid (fulminating type).

The next important consideration is prognosis as regards future pregnancy. (1) If the inflammation is of the gonorrhoeal variety, involving the tubes and the peritoneum, sterility usually results, as is found in prostitutes and some of the childless women. But if they are treated early and thoroughly and are not re-infected they react nicely to treatment. (2) In the ordinary septic variety, the chances of pregnancy are greater and it is common experience to see women going through one or more attacks of severe sepsis and becoming pregnant again. It may not be out of place to mention here that if there is not adequate spacing between that and the next pregnancy, say two or three years, depending upon the severity of the sepsis, it may flare up again after the next confinement; at least one has to be prepared for it.

R. S. Strachan, in one of the recent British medical literature, says that for women who never became pregnant after an attack of salpingitis, the cause is the passing of probes up the cervical cannal. He says "this complication is known to be very rare in women who have never been pregnant. for the reason that while the internal os is intact it is almost impervious to any organism." He says the intact internal os acts as a barrier to any organism and any method of treatment entailing the passing of instruments through the internal os is to be condemned as strongly as possible.

(To be continued.)

Selected Articles

ORAL LESIONS OF INTEREST TO THE MEDICAL PRACTITIONER.

BY G. VICTOR BOKYO, M.S., D.D.S.,
Paterson, N. J.

Many so-called border-line lesions involving the tissues in and about the mouth require a careful differential study for diagnosis and subsequent treatment. The reason for this is the close relationship which these lesions bear to the systemic condition. Patients with these jaw conditions often make their first visit to their physician and others go to their dentist (stomatologist) for relief from the same symptoms. The study and treatment of such lesions may require the co-operation of both physician and dentist for the patient's welfare. Some of the more common oral diseases will therefore be described in this discussion.

Types of Infection: Oral infections or diseased conditions may be either of bacterial origin involving surface mucous membranes, primarily, as the fuso-spirochetal, mixed or fungus infections with subsequent involvement of the deeper and more remote soft and hard tissues; or, again, other pathologic conditions may consist of areas involving diseased tissue changes which are situated more deeply within soft or hard tissue structures as the dento-alveolar abscess, periapical tooth granuloma, cystic conditions, tumors et cetera.

It is important to realize that the former group of surface tissue infections which are detected by clinical signs aided by microscopic findings of smears, may function locally and has potential sources of infection with possible systemic metastasis in a manner similar to the latter group of pathologic conditions. This latter group, because of the hard tissue changes, are more readily detected by the roentgenogram as symptoms of infection. The group of surface bacterial infections are overlooked rather lightly and often with serious consequences to the patient. The erroneous feeling is often prevalent that the oral lesion should reveal roentgenologic changes within the adjacent bone before respected seriously. An x-ray report of oral conditions is of value only as an adjunct to a physical oral examination.

Fuso-Spirochetal Infection: The more common of the oral surface tissue infections which brings the patient to his physician or dentist is the fuso-spirochetal infection, known more popularly by the terms of Vincent's infection, acute ulcerative gingivitis and trench mouth. The presence of this disease is extremely important because of its serious relationship to the local and systemic tissues.

For this reason a human bite results in a high mortality due to the complicating presence of fuso-spirochetes. The writer has observed two instances of gangrene of the hand and arm followed eventually by death. In each case the cause was a human bite complicated with oral fuso-spirochetes. Both of these instances occurred in negroes and were the result of heavy drinking and brawls.

Patients subjected to inhalation anesthetics for surgical procedures may risk fuso-spirochetal infections of the lungs in the event of the presence of these oral organisms in diseased numbers. It is therefore a wise precaution to eliminate mouth infections preliminary to any inhalation anesthesia in addition to the contra-indication of surgical procedures about the mouth in the presences of these organisms.

It is not uncommon for a fuso-spirochetal infection to be superimposed secondarily upon other primary diseased conditions so as to mask the true underlying symptoms of either a local or systemic condition. Oral manifestations of leukemia, agranulocytic angina, anemia, and diabetic conditions may be secondarily infected with these organisms. There is apparently a definite relationship between the increased virulence and recurrence of oral fuso-spirochetal infections and mouth tissues whose vitality has been deranged by underlying systemic diseases.

The fuso-spirochetal infections, which are usually discovered in the acute stage, but may persist as a chronic condition, are caused by the presence in pathologic numbers, of a form of spirochete accompanied by a fusiform bacillus. The symptoms of the acute condition, which spread rapidly throughout the mouth and throat are revealed by acute pain, congested tissues covered in areas with a pseudo-membrane which bleeds on the least provocation. The removal of this grey membrane reveals a raw bleeding surface. The patient generally appears toxic, shows an elevated temperature, palpable gland nodules along the lower border of the mandible and is naturally depressed because of all the symptoms. Under conditions that the infection spreads to the throat resulting in a fuso-spirochetal angina, the patient may first visit his physician.

The clinical symptoms the picture of which one gains by experience, are characteristic and practically always reveal the story. Smears examined from lesions will confirm the diagnosis. Nevertheless, a microscopic report acts only as an adjunct to the clinical examination.

The foci harboring the fuso-spirochetal micro-organisms and consequently the exciting cause of the acute reaction, are usually deep soft tissue pockets found around and between teeth, subgingival pocket spaces resulting from irregular overhanging margins of filling restorations, improperly constructed gold crowns and the pericoronal area of partly erupted third molar teeth. The organisms, because of their anerobic qualities, lodge in the deepest portion of

these pockets where oxygen is absent. The same pockets must be not only temporarily treated for control of the acute symptoms, but eliminated entirely so as to avoid a chronic condition and eventually recurrence of the acute symptoms. For this reason a thorough x-ray examination is essential of all teeth without which the treatment and study for location of the tissue pockets is not complete.

The fundamental principles underlying the treatment of the fuso-spirochetal infection is first palliative for control of the extensive discomfort. This is accomplished by application of mouth hygiene to the infected areas. The surface pseudomembrane is lightly removed by cotton swabs followed by hot irrigations of an alkaline solution. Oxygen-liberating solutions as peroxide and perborate which spell death to these organisms, are then used with forced irrigation into the pocket sources. The areas are then thoroughly dried and a final application is made with any average germicidal solution as chromic acid 7 per cent and 10 per cent talbot's iodo-glycerine solution, aniline dyes, mercurochrome 2 per cent and 5 per cent and salvarsan in glucose solution 5 per cent. The treatment of neoarsphenamine intravenously may be used as an adjunct to the local applications but the systemic method will not eradicate the sources of bacterial growth. The above treatment is additional to the routine systemic treatment for building up the resistance of the patient.

In view of the proper treatment locally, the acute symptoms subside readily. In conditions of the infection persisting in view of the treatment, or recurrence of the disease continues the throat and systemic condition of the patient should be studied for underlying sources of disease.

Other Mouth Conditions: The fuso-spirochetal infection should not be confused clinically with other surface inflammatory and infectious conditions of the mouth tissues. The popular feeling among the laity seems to be that any discomfort within the mouth points toward the so called trench mouth.

The acute catarrhal stomatitis is a mild condition revealing symptoms of acute inflammation with redness and pain at the source of irritation. The causative factors are gum irritations from erupting teeth and partially exfoliated deciduous teeth, neglect of mouth cleanliness in children or any physical and chemical irritation.

Aphthous Stomatitis is a less mild form of inflammation and is characterized by grey ulcerated spots or aphthae. These ulcerated areas produce pain out of proportion to their size. This eruption is frequently observed in mouths following the extraction of teeth. A disturbance in systemic balance is a potential predisposing cause.

Thrush, a form of stomatitis found commonly among children with unclean mouths, is caused by a fungus, the *oidium albicans*. Small white ulcerated areas associated with discomfort are typical symptoms of this infection.

Toxic stomatitis is one characteristic of a systemic absorption of a metal as lead, bismuth and mercury. Phosphorous was a common cause until our health laws eliminated this dangerous source. Patients receiving mercury and bismuth in the course of a syphilitic treatment may show early signs of soreness throughout the gum tissue and teeth as a warning symptom. The blue lead line along the gingival margin may be found among individuals as painters dealing with many lead containing paints.

Gangrenous stomatitis is the most extensive form ending, as the name implies, in gangrene. Noma or cancerum-oris is the end result of this type.

Treatment of Stomatitis: The principle of treatment in the average condition of gingivitis or stomatitis is the removal of the predisposing cause in addition to the exciting factor. The source of irritation whether be it a metal or medicament in addition to the chemical irritants, is stopped. The systemic condition or resistance is improved by the balanced diet or added vitamin containing drugs in addition to correction of elimination. Mouth cleanliness or hygiene is also instituted by alkaline irrigations as sodium perborate. In formation of ulcerated areas zinc chloride 8 per cent or silver nitrate 10 per cent and 20 per cent may be used to stimulate healing. In the average stomatitis the inflammatory condition is of short existence.

Swelling about the Jaw: A swelling involving tissues in the region of the angle of the mandible may characterize symptoms of several confusing conditions. This is due to the normal glandular arrangement of the sub-maxillary gland and accessory gland nodules along the lower border of the mandible, the cervical chain of gland nodules situated in the neck and the parotid gland in front and below the ear. The sub-maxillary and accessory gland nodules together with the sublingual glands drain the tissue areas of the teeth, gingiva, tissues of the floor of the mouth and adjacent soft and hard tissue structures; while, the cervical chain drains the tissues of the pharynx and neck. The parotid gland may result in an inflammatory condition with the swelling extending below the ear to involve the angle of the mandible.

Glandular involvement resulting from tissue infection may persist as indurated and palpable glands without an accompanying swelling of the surrounding tissues; or on the other hand, the indurated glands may be enclosed within a surrounding soft tissue swelling. Consequently a hard and palpable gland nodule without an associated swelling may indicate infection of a chronic type which is readily overlooked because of the absence of subjective or objective symptoms. A swelling in the region of the angle of the mandible may, therefore, involve either the portion of the cervical gland approximating this area, the submaxillary gland and even the parotid gland or a combination of any of these mentioned gland

groups. For this reason, such symptoms require a thorough study of the areas drained by these gland groups which includes the oral cavity, throat and systemic conditions which may produce a general glandular affection.

Lower Third Molar Teeth: The partly erupted lower third molar tooth with a soft tissue ledge covering the distal portion of the tooth crown, generally has a free space or pocket underneath this free tissue margin revealed as a radiolucent area in the x-ray. This retro-third molar tissue pocket acts as a source for bacterial growth and therefore predisposes this area to a chronic pericoronal infection which may result in recurrent attacks of acute infection throughout the oral cavity. This same tissue pocket may also act as a focus for fuso-spirochetal organisms and its associated mouth and throat infections. An intra-oral examination often reveals the soft tissue lingual to a tooth of this type and extending towards the anterior tonsillar pillar considerably inflamed and characteristic of bacterial irritation. In the chronic condition, the gland nodules at the angle and within the submaxillary area may be hard and palpable. In the acute stage, the swelling may extend to involve this area with obliteration of the mandibular outline. Intra-orally the infection may spread lingually and produce symptoms of discomfort in the throat with difficulty of swallowing which may send the patient to his physician. A differential diagnostic symptom typical of the third molar tooth infection is the localized soreness and, in the extreme cases, trismus and difficulty in opening the jaws; this is due to the involvement of the muscles of mastication the location of which bears a close relationship to this area. These symptoms do not occur in throat infections.

Roentgenograms of these third molar tooth infections are of value only when supplemented with an oral examination because of the lack of bone changes in the early stages of the disease. The pericoronal tissue pocket, nevertheless, will be revealed in the x-ray as a radiolucent area.

Jaw swellings due to lower teeth anterior to the third molar tooth do not extend distally to involve the region of the angle of the mandible nor refer symptoms of discomfort to the throat except in true cellulitis of the floor of the mouth as Ludwig's angina. Roentgenograms also may reveal radiolucent areas involving the offending tooth and may therefore confirm the diagnosis more readily.

The treatment for this group of third molar teeth depends on the position of the tooth as revealed by the x-ray and virulence of the infection. In certain chronic cases with a good position of the teeth, the flap overlying the tooth crown may be excised thereby eliminating the tissue pocket. In the majority of instances the tooth should be removed as an excellent prophylactic measure for avoiding future trouble.

Salivary Calculus: A persisting discomfort and induration of the submaxillary and sublingual gland groups or recurrent swelling of these areas particularly with discomfort during eating suggests a possible salivary calculus. The symptomatic discomfort and tenderness may be referred to a deep seated area of the gland location so as to cause a possible confusion with a throat condition. In such instances the patient may seek the advice of his physician. Chronic periapical infection of lower bicuspid and molar teeth may also produce chronic induration of these gland areas but not of the recurrent type. A roentgenologic study of the teeth and submaxillary in addition to the sublingual tissue areas will help to determine the source of trouble. Calculi are revealed in the x-ray as radiopaque areas. This calculus may result in tissue irritation and inflammation which may close the salivary duct to the flow of saliva and result in fullness of the gland noticeably during eating. The calculus may form within the duct or gland substance proper of children or adults.

The treatment depends on the location and size of the calculus. Usually, surgical access to the calculus may be obtained intra-orally. In a few instances, a large calculus within the gland substance proper, may necessitate an extra-oral surgical procedure with a probable removal of the entire gland. In instances of invasion by infection, an acute abscess may be precipitated and accompanied by the usual symptoms requiring immediate surgical drainage with subsequent removal of the stone.

Maxillary Sinus: Symptoms of pain and swelling in the region of the maxillary sinus often present confusing border line conditions. This is due to the anatomical formation and relationship between the roots of the posterior upper teeth and the antrum. A distinct and thick layer of bone may separate the antrum from the root apices of the adjacent teeth and in other instances an extremely thin layer or only the periosteal soft tissue covering of the sinus and alveolo-dental periosteum may form the tissue of demarcation between the two structures. In many cases, the antrum floor may actually dip into the area between the roots of teeth or the same roots may extend into the sinus space. Consequently, an infected antrum may refer symptoms to the adjacent teeth or periapical infection of teeth may invade and refer symptoms to the sinus.

It is not uncommon that the removal of infected teeth adjacent to the antrum floor may result in a perforation opening into the sinus proper. This may be due to the normal anatomical relationship or pathologic destruction of intervening bone. This type of perforation will heal, in the absence of infection within the sinus, without any surgical or therapeutic interference. But, the extraction of a similar type of tooth may result in an acute exacerbation of a chronic infection already within the sinus, resulting either from

nasal, other sinus or tooth infection. In many such instances the dentist may be held wrongfully responsible for an acute maxillary sinusitis following the extraction of teeth and without justice, be subject to criticism or even be the defendant in a malpractice suit. Many post-operative misunderstandings between the dentist and patient in such cases may be avoided by proper pre-extraction roentgenologic studies and discussion with the patient or relatives regarding the possible complications normally associated with the removal of such teeth.

The root apices of infected teeth closely approximating the maxillary sinus may normally fracture during the removal and, owing to the lack of supporting bone or presence of diseased bone, be forced into the antrum proper. In the presence of a normal sinus, such roots may be removed through an enlarged opening which may then be closed with a soft tissue flap and healing will be uneventful. The necessary opening into the antrum should be made through that portion of the wall where the soft tissue may best be approximated for subsequent closure. In this manner a persistent opening into the sinus necessitating a subsequent plastic closure, may be avoided. If the antrum, following the immediate closure of the oral perforation, requires further treatment, this can be accomplished intranasally by the medical specialist.

Furthermore, the acute dento-alveolar abscess, unerupted and impacted upper third molar teeth, radicular cysts, odontomata, giant cell tumors, adamantinomata, sarcomatous and carcinomatous lesions of the maxilla may invade the antrum secondarily. These conditions may be avoided or detected early by proper prophylactic examination and roentgenologic studies by the dentist.

(American Medicine, Vol. 42, No. 3 and 4.)

EXTERNAL OTITIS.

CLAY GWINN, M.D.

El Paso, Texas.

In this discussion I shall consider the more common inflammatory diseases of the ear canal.

The anatomy of this part being peculiar, and since it has a definite relationship to its diseases, I wish to call particular attention to several points concerning it.

The external auditory canal is about 2.5 cm. in length. The external half is cartilaginous, the remainder bony. Viewed antero-posteriorly it is slightly curved, the convexity being upward. Viewed from above it passes first backward then forward, forming an angle before the bony wall is reached. It narrows towards the bony juncture then enlarges to the drum. This narrowing traps many foreign bodies that enter the ear, and makes their removal more difficult if they pass the constriction. The floor is

VEERYABUND.

(Registered.)

HOPE FOR THE HOPELESS.

To those who miss real pleasure and enjoyment in life through want of health and energy, brought about by early excess and indiscretions or by inherited diseases or other causes. Here is a chance of regaining their capacity in taking a course of **Veeryabund** the king of Nerve Tonics. Prepared from the most powerful drugs in India. A sure remedy for Indigestion, Spermatorrhoea, Weak Heart, Impotency and Nervous Debility.

Phial of pills Rs. 3-0-0.

Rati Ranjan external oil for secret joy Rs. 3-0-0.

Medical Opinions.

Hon. Col. Dr. D. DAWESPELLE, B.A., M.D., B.M.S., P.H.D., LL.D.,
President: "The International Menticultural Society, London."

This is to certify that the preparations of the Amrutharathnakaram of Madras, namely Veeryabund pills for strengthening the semen, Rati Ranjan external oil for impotency have been tested on my patients in almost incurable cases and have been found to be very efficacious and among the indigenous medicines of India, they stand unrivalled in efficacy. I heartily recommend the suffering public to approach this Pharmacy, should they require reliable treatment.

(Sd.) D. DAWESPELLE.

Dr. S. N. GARGA, M.D., H.M.P.B.C.F.R.H.S., (London),
Principal, Hydropathic Institute, Meerat, writes:—

On examination I found your pills very efficacious for sexual weakness specially. I congratulate you on your precious invention.

CHANDANAMRITHA

The quick cure for Gonorrhoea.

Guaranteed cure for gonorrhoea of both sexes. Stops burning and pricking sensation and discharge in 24 hours. Complete cure with a set of phials. Mixture, Phials. Rs. 5-0-0.

AMRUTHAM

All-in-one cure.

A handy home companion, which cures all diseases. This valuable compound contains, Gold, Musk, Saffron, Makaradhwaja, Vasantha-kusumakara, Purnachandrodaya and other powerful Indian drugs.

40 days' Medicine Rs. 10. V. P. charges extra.

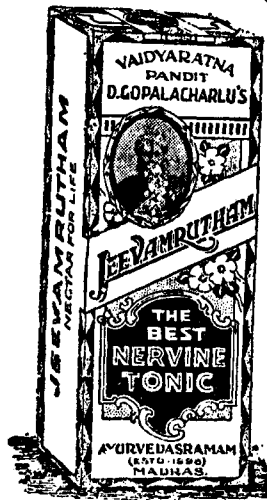
F.M.S. & Foreign orders must include Rs. 2 in addition for each medicine by M.O.

Amrutharathnakaram Pharmacy,
53, Govindappa Naick St., Madras.

When ordering please mention *Medico-Surgical Suggestions*.

PANDIT D. GOPALACHARLU'S JEEVAMRUTHAM.

(The Ideal Health Restorer.)



Jeevamrutham has been in use all over since 1898 as a tonic for young and old and prescribed by eminent medical men of both Western and Eastern system. Indicated in Nerves' weakness, Anaemia, Loss of Vitality, Indigestion, Loss of appetite, Palpitation of heart, Loss of vigour etc. Improves blood and thrills with ever increasing health, strength and energy.

Your chemists stock it in 2 sizes.

Big Rs. 3-4-0. Small Re. 1-12-0.

BALA BHASKARA

Approved specific for those dreaded diseases in children viz., Infantile Biliary cirrhosis of the Liver, Enlargement of Liver and Spleen &c. Also indicated in Dilation of stomach, constipation, frequent rise of temperature, vomitings, jaundice, swelling of feet and hands, enlarged abdomen and such other diseases owing their origin to deranged Liver. Preferred by medical men after tired of unsuccessful treatments.

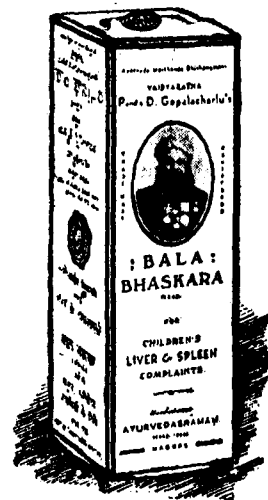
Your chemists stocks it in 2 grades.

Simple Rs. 4-0-0. Complicated Rs. 8-0-0.

Clinical Sample Free to Medical Profession.

Manufacturers:

**AYURVEDASRAMAM,
MADRAS.**



longer than the roof, due to the drum inclining at an angle of about 140 degrees. The lower part of the canal is cartilage, the upper part fibrous. In this cartilagenous portion are two horizontal breaks, the incisuræ santorini, which are important from a clinical standpoint because a deep seated furuncle may discharge into the parotid gland, or a parotid abscess may discharge into the canal through these slits. Below and in front is the tempero-mandibular joint; posteriorly is the glenoid lobe of the parotid gland. The upper posterior portion of the bony wall is thin and is encroached on by the mastoid cells. This portion is important from the clinical standpoint because cholesteatoma of the antrum often break into the canal; and infiltration of the periosteum and sagging of this segment occurs in mastoiditis.

The canal is lined with skin. The cartilagenous portion contains sweat glands, sebaceous glands, and hair follicles, the inner portion containing fewer than the outer. At the bony cartilagenous juncture are special glandular elements, such as the ceruminal and large sebaceous glands. These play an important role in diseases of this location. The skin is thin and lies almost directly upon the perichondrium, there being little connective tissue between. This firm attachment, and the fact that the skin contains very fine and sensitive nerve endings, accounts for the severe pain that accompanies inflammatory conditions.

Furunculosis. This is probably the most frequent disease of the external auditory canal. It usually develops at the junction of the pinna and the canal. There is a marked reaction in the follicles, especially if more than one is involved. The process may be mild with only slight local reaction, or it may be so severe that the canal is completely closed and may even extend to the point of sequestration of the bony canal, or may rupture into the mastoid process or parotid gland. It is an extremely painful condition with the symptoms usually out of proportion to the findings. Jaw movements are usually restricted. The most important diagnostic finding is severe pain from manipulation of the auricle.

Often the differential diagnosis between furunculosis, otitis media and mastoiditis, and even parotitis is difficult. Some cardinal points of differentiation are: In furunculosis there is little, if any, change in hearing; in otitis media and mastoiditis it is usually reduced. Manipulation of the auricle, or pressure on the canal, produces severe pain in furunculosis and in otitis media and mastoiditis usually none. In furunculosis the canal is distorted; in otitis media and mastoiditis it may be constricted but not distorted. Direct pressure over the mastoid elicits no tenderness, in furunculosis and in mastoiditis tenderness. In furunculosis a discharge is present only if the furuncle has been opened or ruptured. In otitis media and mastoiditis the discharge comes through the drum and is usual

profuse. The drum, if seen, is normal in furunculosis. Temperature and blood picture are more nearly normal in furunculosis than in otitis media and mastoiditis. The groove behind the ear usually remains apparent in mastoiditis and obliterated in furunculosis. X-rays may show clouding but no cell destruction in furunculosis, while in mastoiditis there is cloudiness plus destruction in cells.

In parotitis there is diffuse swelling over the gland with encroachment on the canal, without any pointing or tenderness. Hearing is unaffected and there is a dryness on that side of the mouth.

Not infrequently otitis media or mastoiditis and furunculosis co-exist. Patients also are observed in which there is a swelling on the posterior wall with all the signs and symptoms of a simple furuncle, the drum appearing normal. Failure of the usual treatment plus further examination, reveals the trouble primarily in the mastoid.

Treatment: Methods of treatment are almost as numerous as the physicians that treat the condition. The patient, however, is usually most interested in the pain, so that must be controlled by the use of aspirin, pyramidon, and in cases an opiate. Furuncles should not be incised before liquefaction has occurred. The use of ethyl chloride will minimize the pain. In my experience a pack of ichthyoldine, neosilvol in glycerine, or phenol in glycerine accompanied by the dry heat of a 500 Watt Mazda, or the infra-red lamp, has been the most effective means of controlling the pain and swelling. This is followed by a thorough drying of the canal. The hot water bottle, or electric pad, is used continuously at home. This procedure is followed both before and after liquefaction of the furuncle. Others report good results using stanoxyl, the acetate of aluminum, tin ionization, and stanus. Bacteriophages and autogenous vaccines have also been suggested.

In practically every text or article a hot moist pack, or irrigation with solution has been advised. All of us are familiar with the condition of our hands following continued immersion in water, or following an operation in which rubber gloves have been worn. The epidermis becomes wrinkled, pale, devitalised even to the point of maceration and desquamation of the external layers. Compare now the friction resisting cornified epithelium of our hands with the soft specialized lining of the canal, and conclude that, by the douching and packs, we have prepared an excellent media for bacterial growth and spread of the infection to adjacent glands and follicles.

Tank, Swimming Pool, or Beach Ear: Is the outstanding example of what occurs when water is allowed to remain too long in the auditory canal. This causes maceration of the tissues followed by itching, which the patient tries to relieve by scratching the canal with any available small instrument, thus abrading the epithelium and giving the infecting organism an entrance into the tissues.

The symptoms and course of this condition are about the same as furunculosis. The treatment is the same, with special emphasis upon keeping the canal absolutely dry.

Otomycosis or Fungus Infection: Are more common in regions of lower altitude and greater humidity. The entire canal may be filled with a moist dirty gray, brownish gray or almost black growth. Itching, stinging, burning and varying degrees of pain are the chief symptoms. Scales, crusts and flakes in the canal aid in making a diagnosis. Finding the spores and mycellium in a smear makes the diagnosis positive. At times, it is necessary to keep a culture as long as two weeks to find the spores. Removal of the scabs, or scales, produces bleeding which leads one to believe that these fungoids are endodermophytions and grow beneath the stratum corneum.

In the treatment of fungus infections I again wish to stress the importance of the dry canal. The most common methods of treatment are those in which various solutions of ethyl alcohol and boric or salicylic acid are used. Many report favourable results using the Scott-Hill, or alcohol-acetone solution of mercurochrome. Some of these fungi have a remarkable tolerance for alcohol. The method of treatment that I have found to be the most satisfactory is as follows: The canal is thoroughly cleaned, using hydrogen dioxide, then dried, after which Castellani's solution is rubbed into the entire canal wall. Castellani's solution is composed of carbolfucsin, resorcin and boric acid in alcohol, digested in acetone. The canal is then dried under the infra red lamp. Later the stain is removed with 10 per cent solution of sodium hyposulphide. This is combined with the internal administration of potassium iodide, on the theory that it prevents the formation of more spores. The solutions of alcohol alone do not seem to penetrate the deeper layers as well as those containing acetone and carbolfucsin.

Eczema: The external auditory canal may be affected primarily, by extension from the face, scalp or auricle or be secondary to a chronic discharging middle ear. It may be acute, sub-acute or chronic.

The erythematous type is the most common. It is characterized by hyperemic patches, of variable size and number, associated with itching and burning. The skin is harsh and dry, of reddish color with a violaceous or yellowish tinge. There is some thickening with scaling and a tendency toward oozing. The papular, vesicular and pustular types are seen less frequently.

The treatment includes both local and general measures. Attention should be given to diet, hygiene, proper elimination, and the determination of any allergic condition. Calamine lotion or ointment, or an ointment containing crude coal tar, zinc oxide,

corn starch and petrolatum should be applied locally. If the eczema is due to a discharging middle ear, or if it is an extension from the face, scalp or auricle, the primary focus must be treated. Again the canal must be kept dry, especially if there is oozing. There have been some favourable results reported from the use of x-ray, radium and the quartz light.

Erysipelas: Usually is seen following a mastoid operation. This causes much worry at times because of the initial chill followed by the rapid rise in temperature, suggesting a brain abscess or sinus thrombosis, before the characteristic swelling and red line of demarkation appears. This is possibly one exception when moist dressings may be used on the external ear. The area should be painted with ichthyol collodion and hot magnesium sulphate packs applied. Combined with the administration of anti-erysipelas serum.

Pruritis: Is one of the most distressing and annoying conditions seen. The patient is constantly bothered by the itching, and the physician has no positive findings, except possibly a traumatized canal from scratching. The etiology, is obscure; it may be purely nervous, or it may be from a general condition such as hypothyroidism, or from allergy. It should be treated locally with salicylic acid solution, Castellani's solution or calumine lotion. If the patient has an itching scalp, dandruff or any other skin disease, it must be attended to as it may be the primary focus.

Bullae: During influenzal epidemics, and during attacks of the so called "flu", hemorrhagic blebs or blisters are seen in the canal. They are of various size and shape, may be single or multiple and may involve the drum. They are probably inflammatory in origin. When occurring on the drum, they should not be mistaken for a bulging and opened, because an infection may be introduced thereby into the middle ear. The treatment is that of influenza. The canal should be kept dry, two per cent silver nitrate applied topically, followed by heat under a 500 W. Mazda, or infra red lamp. Opening is indicated to control the pain or prevent enlargement of the blister.

In conclusion: There is a definite relationship between the anatomy and diseases of the external auditory canal.

Aqueous solutions are to be used with caution in diseases of the external auditory canal, and after their use the canal must be thoroughly dried.

Typical cases are usually easily diagnosed, but frequently they are complicated by co-existing infections, then an accurate knowledge of the anatomy and pathology are essential in making the diagnosis and instituting treatment.

(South-western Medicine, Vol. XIX. No. 7.)

SOME DENTAL EMERGENCIES.

R. S. TAYLOR.

"General Practice," January-March, 1935.

"Some of these emergencies can be dealt with by fairly simple measures, while others require a high degree of skill and a knowledge of general surgery.

"The acute alveolar abscess is the most common emergency met with in dental practice, the symptoms being too well known to require description.

"The treatment of the condition can be summed up in a few words. Removal of the cause and drainage. Both of the objects can be obtained by extracting the affected tooth.

"The anæsthetic to be employed in the case of an acute abscess is important. There are certain objections to injecting into the area of the abscess, and general anæsthesia is usually employed. The objections put forward against the use of local anæsthesia can be overcome by the employment of the supraperiosteal injection as described by Posner in the case of the upper jaw.

"The injection is made into the mucoperiosteum in the region of the tooth in front of the one to be extracted, care being taken that the point of the needle rests on the periosteum over the apex, but does not pierce it.

"In the lower jaw a similar injection serves for the incisors and premolars, but a nerve block of the inferior dental is required for the lower molars.

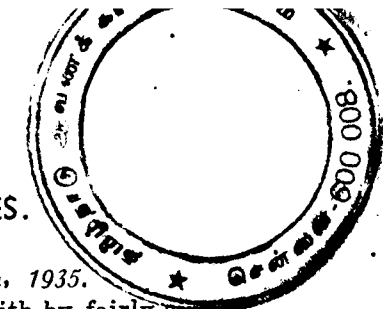
"In those cases in which the infected tooth refuses to come out, or the crown breaks, leaving the roots firmly embedded in the bone, success can be achieved by turning up a flap of mucoperiosteum on the outer side and resecting the outer alveolar plate. The tooth can then be tipped out in an outward direction.

"In cases in which the abscess is pointing on the outside of the face, an external excision is required. This excision is made in the direction of the muscle fibres and is enlarged with a pair of sinus forceps after the method of Hilton. A piece of rubber dam is inserted as a drain.

"The post-operative treatment of an acute abscess consists of getting the bowels to act, and in using hot mouthwash at four-hourly intervals.

"Acute suppuration of the lymphatic glands sometimes occurs in connection with a septic tooth or root. This tooth or root may or may not be the site of an acute alveolar abscess. The abscessed gland is opened up by Hilton's method and a drain inserted. The faulty tooth is extracted.

"It is not always easy to decide which tooth is at fault, but consideration of the group of glands affected, coupled with a careful



examination of the teeth, combined with X-ray examination, may indicate the cause. The faulty tooth may have definite signs of caries, or perhaps a filling. It is sometimes tender to percussion, X-rays may show rarefaction at the apex, or the presence of a root filling.

Haemorrhage following tooth extraction can cause a lot of trouble or may be a source of considerable discomfort and danger to the patient. The principles of general surgery hold good as regards dental hæmorrhage, and the most satisfactory method of control is by the application of pressure. The most convenient way to apply pressure is by the use of sutures.

"Primary hæmorrhage can be controlled by inserting a suture in the gum in such a manner as to draw the soft tissues together over the socket.

"Reactionary hæmorrhage is the type that gives rise to most trouble; it occurs some hours after the extraction, when the patient has recovered from the shock of the extraction, and the effect of any local anæsthetic that may have been used has worn off. The usual time for the patient to seek assistance is during the night (when the dentist is seeking repose from his labors), and the patient, in his kindness of heart, frequently calls upon the services of his medical attendant.

"The usual line of treatment for reactionary hæmorrhage is to plug the socket with some material soaked in a styptic. In the majority of cases this causes the patient much pain without stopping the bleeding.

"Suturing of the socket brings about a speedy cessation of the hæmorrhage in the majority of cases.

"Septic hæmorrhage is more difficult to control by suturing as the tissues are friable and the stitches tend to cut out, but even in such cases it may be possible to employ sutures in such a manner as to gently draw the soft tissues together. A mould of composition is then placed over the affected part in such a manner that pressure is applied by the patient closing the jaws.

"In the case of a hæmophilic patient suturing will retard the bleeding but not stop it. The administration of horse serum intravenously in doses of 10 c.c. every six hours is sometimes successful. In other cases a blood transfusion will bring about coagulation. A composition mould can be employed as in the case of septic hæmorrhage.

"*Trismus or Closure of the Jaws.*—Results from reflex irritation of the motor nerve supplying the muscles of mastication. The most usual source of irritation is sepsis in the region of the upper or lower molars, and need not be associated with the formation of pus.

"Buried wisdom teeth can cause difficulty in opening the mouth, such difficulty is not usually as well marked in the absence of pus as it is when suppuration is present.

"Injury to the temporo-mandibular joint and fracture of the jaw is also associated with trismus.

"The presence of trismus demands prompt treatment, and prompt treatment demands accurate diagnosis.

"A history of injury, combined perhaps with signs of external injury, would suggest either fracture or joint damage. Absence of such history, especially in young patients, points to an infective cause. Impacted teeth are a common cause in adults:

"Fractured jaws are generally associated with misplacement and inability to articulate the teeth. The continuity of the bone is disturbed and the condyle is not displaced; the two latter features help to distinguish it from dislocation.

"Inflammation round a partly erupted wisdom tooth is generally associated with pus formation. Completely buried wisdom teeth are diagnosed from the absence of the tooth from the arch and from the X-ray pictures.

"It is desirable to confirm the diagnosis by X-rays, especially in the case of fractures and buried wisdoms.

"Excessive laceration occurs sometimes during dental operations; the mishap is most commonly seen in association with extractions under gas, and is usually the result of trying to do too much in the time available. It may result from the slipping of an instrument such as a dental drill. It gives rise to profuse bleeding at the time of occurrence; the later results are pain and sepsis as the result of necrosis, exposure of nerve endings or exposure of bone.

"The immediate treatment consists of suturing the damaged tissues after removing all tissue so badly damaged that it cannot be expected to live.

"In those cases which come under observation some days after the occurrence of the injury, all dead and dying tissue is removed and the wound irrigated with acriflavine. The wound is then sutured, drainage being provided for by the insertion of a piece of rubber dim, if conditions seem to indicate the necessity.

"*Broken Needles.*—Hypodermic needles are occasionally broken during the injection of the anæsthetic fluid. The measures to be adopted towards preventing the occurrence of such an accident are well brought out in Mr. Steadman's book. He recommends the use of short-hubbed needles, and suggests that a fresh needle be used for each injection. The keeping of a pair of pliers at hand for the purpose of grasping the exposed end of a broken needle is another wise precaution.

"If a broken needle is embedded in the tissues instinct suggests that it should be removed as quickly as possible; what would happen if it were left it is hard to say, but apart from the ill-effects that might occur the mental outlook of the patient demands treatment.

"The needle that is most usually broken is the long needle used for the mandibular injection; it is also the most difficult to remove as it is embedded in muscle, and is in a most inaccessible region.

"In removing a needle broken during a mandibular injection certain factors must be considered; the position of the foreign body must be located. This is best done in the presence of the person who is going to do the operation. The X-rays should be taken shortly before the operation as much time may be lost as the result of the moving of the needle. Two X-rays are taken, one a lateral to show the anterior posterior position of the foreign body, the other an anterior posterior exposure to show whether the needle is inside or outside the ramus.

"The use of local anaesthesia is recommended by the majority of American surgeons for the removal of a broken needle. The approach is only practical from the inside of the mouth as the close proximity of the cervical vertebrae makes it difficult to see the foreign body when working from the posterior aspect of the ascending ramus.

"In operating from the inside of the mouth a vertical incision is made into the mucous membrane about half an inch behind the internal oblique line. Each layer of tissue is incised and retracted until the scalpel is felt to be against the needle as will occur provided location has been correct. Having felt the needle a pair of fine artery forceps is used to grasp it. The needle is pushed forward until it projects through the tissues, when it is grasped with another pair of artery forceps and removed. The wound is then washed out with acriflavine and the tissues are sutured.

"*Acute Suppurative Osteoperiostitis.*—This occurs as the result of:

(1) Acute inflammation round the tooth, or as the result of an acute dental abscess.

(2) Following the extraction of teeth. It is said to be more common after the use of local anaesthesia than general.

(3) Following fracture of the jaw.

(4) As a complication of acute specific fevers. The condition is not a common one and is apt to be overlooked in its early stages. The symptoms complained of are:—

(1) Pain which is of an acute nature.

(2) Swelling which is usually diffuse.

(3) A raised temperature.

"It is more common in the lower jaw than in the upper. In the early stages X-ray appearances are not helpful as it takes about ten days for marked bone changes to become established. In the later stages the X-ray picture gives a mottled appearance of the bone.

"The picture presented by a typical case is that of a patient who looks ill, complains of pain in the jaws, or teeth, and gives a history of recent injury, or operation in the affected region.

**An Operation is not free from Risks !
Save your Children from Operation !
Miraculous Effect Within a Week !**

TONSILS

Cure Without Operation Guaranteed.

**Many Acute, Chronic and given up Cases
Undertaken and Cured.**

**Tested and Recommended by many Doctors and High Officials.
Awarded Gold & Silver Medals and many certificates of merit.**

**AMRUTHA RATHNAKARAM PHARMACY,
53, Govindappa Naick St., G.T., MADRAS.**

Consult:—

Dr. D. Appa Rao, L.I.M. (Regd.)

TONSILS SPECIALIST.

Consulting Physician & Surgeon.

A few out of the many Testimonials.

Sir Vepa Ramesam Pantulu Garu, Kt.,

Retired High-Court Judge Madras and Director, Reserve Bank of India, Madras writes:—

Mr. D. Appa Rao, L. I. M. has been treating one of my daughters for tonsillitis.*** In my daughter's case the complaint is completely cured. Seeing how dangerous an operation for tonsils is (I have known two cases of deaths in Madras by the operation) I think any case of tonsillitis should be first tried by some treatment before resorting to an operation and Dr. APPA RAO'S medicine may conveniently be tried for the purpose.

(Sd.) V. Ramesam.

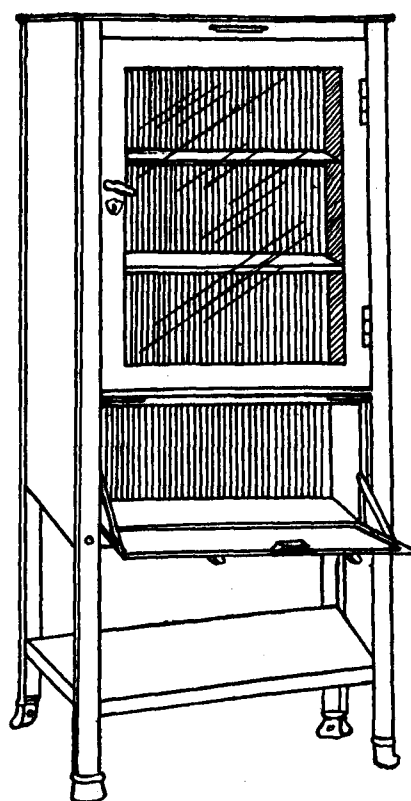
Sami Venkatachalam Chetty Garu, M.L.A.,

Councillor, Corporation of Madras writes:—

Having learnt from several friends of mine that Dr. D. APPA RAO, L.I.M. is an expert in curing "Tonsillitis", without any operation. My nephew aged about 9 years was placed under his treatment. His medicines acted miraculously and the boy is now free from the trouble. I recommend the Doctor to all sufferers of tonsillitis to first try his treatment before an operation.

(Sd.) S. Venkatachalam Chetty.

When ordering please mention *Medico-Surgical Suggestions.*



Aseptic Instrument Cabinet

Strong and sturdy, finished in white enamel, with plate glass on all sides, with two round edged plate glass shelves. A Lock-up fall front compartment underneath for dressings etc.

Hebbar Brothers, Ltd.,
246, Thambu Chetty Street,
MADRAS.

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 ST., SOWCARPET,

MADRAS.

When ordering please mention *Medico-Surgical Suggestions*.

"The pain is not definitely localised but the patient sometimes complains of a particular tooth or teeth, and these may be removed without recognising the true significance of the condition present. The soft tissues are swollen and tender to palpation.

"Treatment: Drainage should be provided by free incisions, and the teeth in the affected region are better removed.

"In the upper jaw intra-oral incisions are generally sufficient. The muco-periosteum is reflected from the bone, and the pus gently syabbed out, the wound is washed out with acriflavine and dried, loose pieces of bone are removed, the wound is then packed with acriflavine and glycerine solution for five minutes. The soft tissues are sutured together, drainage being provided for by inserting some rubber dam between the edges of the incision.

"In the lower jaw intra-oral drainage is only suitable for those cases in which the condition is very localised. In diffuse osteoperiostitis drainage is best provided for by means of external incisions.

"The incision is made along the line of the inferior surface of the mandible. The soft tissues are reflected from the anterior surface of the mandible, the periosteum being included in the flap. The attachment of the tissues to the lower border of the mandible are preserved so as to prevent septic material finding its way between the facial planes. The bone is cut into several places to allow full drainage of the cancellous portion. Flavine solution is used freely as an irrigating fluid, and all loose pieces of bone are removed. The wound is dried and packed with flavine and glycerine solution 1:1,000. Drainage tubes are inserted and the edges of the wound are brought together by a few silkworm gut sutures.

"The drainage tubes are left in while the discharge is profuse, as the discharge lessens they are shortened and can eventually be removed.

"The progress of the case is controlled by X-rays taken at intervals. As soon as the separation of a sequestrum is noted it must be removed. This is most easily done on the lines of the operation performed for drainage.

"*Ludwig's angina.*—This condition usually arises in association with dental sepsis. In the series of fifteen cases described by Houser in the *Archives of Otolaryngology*, September, 1932, in only one case was it possible to exclude dental infection.

"The clinical picture is that of a patient having a temperature and complaining of headache, with swelling of the floor of the mouth and submaxillary region. The swelling tends to spread rapidly downwards giving rise to a state of bull neck, respiration becomes embarrassed, either as the result of involvement of the glottis, or from pressure by overlying cervical tissues, and the patient may be killed by suffocation unless a tracheotomy is performed. The process

spreads along the facial planes until it reaches the mediastinum with rapidly fatal results.

"Treatment: Free incisions in the early stages is the only thing that offers a chance of saving the patient's life.

"Houser, recommends intra-oral incisions in the early stages of the disease. It must be remembered that there is no hard and fast rule between an acute inflammatory swelling of the sublingual tissues and a proper angina. The difference is one of degree only, and this must be kept in mind when considering treatment.

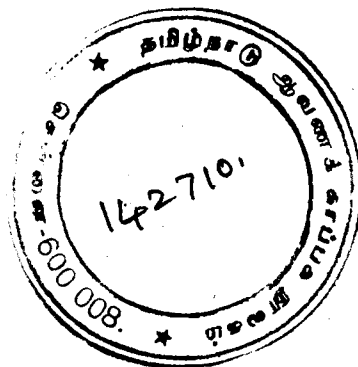
"In those cases in which the swelling has reached the submaxillary region, the submaxillary triangle is conveniently drained by the method described by Blair. An incision is made in the mid-line of the neck, from the symphysis of the mandible to the mid-point of the hyoid bone. This can be safely carried through to the skin fascia and raphe of the mylohyoid, and can be deepened and enlarged into the tissues forming the floor of the mouth by means of blunt dissection in the mid-line.

"Other incisions are carried backwards from the mid-point of the hyoid bone towards the angle of the jaw; the superficial tissue being incised and the flap so formed reflected upwards so as to explore the anterior belly of the digastric muscle. This incision runs across the line of the facial artery and vein, which may have to be ligatured and divided, if it is decided to carry the incision to its full length. The anterior bellies of the digastric and the mylohyoid muscles are divided and search is made for any pus pockets by blunt dissection.

"The wound is lightly packed with gauze soaked in hypertonic saline and then covered over with absorbent material.

"It is recommended by some surgeons that in those cases in which the submaxillary tissues are reflected a supraclavicular incision is made and that the layer of fascia between the sternomastoid and the deep muscles of the neck be dissected with the object of causing adhesions to form and so interpose a barrier to any possible spread of the cellulitis into the thorax."

(The General Practitioner Vol. VI, No. 5)



Extracts

THE USE OF SANOCRY SIN IN THE TREATMENT OF PULMONARY TUBERCULOSIS.

(G. G. KAYNE : *Proc. Royal Society of Medicine*, Sept. 1935.)

The indications for sanocrysin therapy are :—

(1) Recent lesions (*i.e.*, those associated with symptoms of not more than 3 or 4 months duration) of the exudative type (showing fluffy edged soft x-ray shadows). When cavitation is present, sanocrysin may be used, but an artificial pneumothorax should be induced without delay.

(2) A recent exudative lesion occurring in association with old standing disease. If this arises in the contralateral side, sanocrysin may be used to eradicate the recent lesion before collapse measures are attempted on the more chronic side, or to deal with a recent exacerbation when the other lung is already collapsed. Fresh spreading disease on the same side as an old lesion may be detected by x-ray and sometimes controlled by means of sanocrysin.

(3) An indication, offered tentatively is the use of sanocrysin for patients in whom suggestive shadows are found during routine examination (e.g. students, nurses) in the absence of definite clinical evidence of activity, to whom one does not feel justified in recommending a long period of rest which may interfere with their professional career. Observation may be combined with judicious ambulatory gold therapy.

Contra-indications to sanocrysin therapy are old-standing fibrotic cases, or cases showing severe symptoms, showing marked toxæmia, or severe tuberculous lesions elsewhere.

Dosage :—The method of a large initial dose appears to be dangerous in view of the severe and occasionally fatal re-actions. In a disease which is rarely sufficiently acute for a few days' delay in treatment to matter, there is everything to gain and little to lose by commencing with a small dose, say 0.05 gram, and gradually increasing it by 0.05 gram, and then by 0.1 gram till a dose of 0.5 gram is reached. About 2.5 grams are administered during the first month, and the total course of about 5 grams is repeated afterwards.

With regard to re-actions, Saye classifies into 3 groups:

(1) Small or single rises of temperature, slight transient albuminuria, and fleeting erythemas are to be regarded as focal reactions and the next dose given after disappearance of the symptoms.

Handwritten notes: JL, L:4:7m N31M N36.5:10

(2) Gastro-intestinal disturbances, dermatitis, and persistent albuminuria indicate metallic intolerance and call for an increased interval and the same or a smaller dose afterwards. Repetition or multiplicity of intolerance symptoms are due to metallic saturation and compel cessation of treatment.

(3) If no obvious improvement has occurred after 4 or 6 weeks, or about 4 grams, of sanocrysin, there seems little justification for continuing this treatment.

THE TREATMENT OF ABORTION.

(J. L. REYCRAFT & S. F. MOORE, Jr.: *Surg. Gyn. & Obst.* June 1936).

The authors have reviewed 445 cases which were observed at the Cleveland City Hospital from July 1, 1932 to January 1, 1935. These patients are divided into 325 incomplete abortions 50 complete abortions and 70 inevitable abortions.

When the various types of cases are considered, it will be seen that in the presence of fever and malodorous discharge, to empty the uterus without too much delay will possibly be of great benefit in certain cases; foremost of these are the instances in which haemorrhage may be so profuse as to be an immediate danger to the life of the patient and the removal of the products of conception allows the uterus to contract and the bleeding to cease. Many patients entirely fail to respond to palliative measures and the removal of the necrotic infected material in the uterus frequently stops the absorption of toxic material and causes a spectacular crisis with a rapid return to normal.

Although it is desirable to complete an inevitable or incomplete abortion as soon as possible, it should be recognised that invasion of the uterus in the face of active infection is not without certain danger to the patient. It is probable in certain situation only that this added risk is justifiable.

Most of the patients admitted to this hospital are in serious condition usually, many being severely exsanguinated, extremely toxic, or even moribund. First attention is always directed to supporting the patient generally. Usually, unless it is thought that the abortion is only threatening, oxytocics are administered at once. As a rule the patient is given every opportunity to complete the abortion spontaneously.

Afebrile abortions: Often the abortion is spontaneously completed within 48 hours; otherwise the uterus is emptied by the least traumatising procedure, usually without further dilating the cervix and without using the sharp curette.

Infected abortions: The patient who shows slight or no fever, low blood pressure which cannot be explained by blood loss, feeble pulse and extreme prostration, almost always responds poorly to all therapy. These cases should be suspected of infection by

virulent streptococci, and all intra-uterine manipulation should be avoided and treated conservatively. If haemorrhage is not severe and the patient responds satisfactorily to palliative measures, time is allowed for the temperature to subside. Frequent small transfusions of whole blood have proved excellent supportive treatment in patients with severe infections. When the fever has been lower than 100.4 degrees F. for 24 to 48 hours and it is felt that the uterus is not empty, operative completion is done. Occasionally a case is seen in which it is felt advisable to empty the uterus in spite of an existing febrile state. Not infrequently the responsible is favourable, but such a step definitely increases the patient's chances for morbidity, and must not be undertaken unless it is felt that the patient's general condition warrants such a risk.

Inevitable abortion:—These cases are peculiar in that an effort should be made to save the pregnancy if possible.

Discussing the morbidity and the type of operative procedure, it is noted that this morbidity was seen in patients who were afebrile for at least 24 hours before operation. Those cases in which the least was done showed the lowest morbidity in spite of the fact that these were most often the recently infected cases. When the uterus was emptied without dilating the cervix and without using a curette, the morbidity was only 3.5 per cent. Dilatation of the cervix and curettement of the uterine wall gave a morbidity of 7.7 per cent. Dilating the cervix carries with it a higher morbidity than gently curetting the uterus. The optimal time for completing an abortion is when the patient has been afebrile for 48 to 72 hours, and nothing is to be gained by delaying longer, and to invade the uterus earlier carries a greater risk for the patient.

It would appear from this study that the mortality and morbidity in accidental or criminal abortion could be reduced materially by more intelligent management of each case from its on set.

Medical News and Notes

MEDICINE AND POLITICS. Medical men and chemists were asked to boycott all German preparations, drugs and instruments, sometime back. Referring to a similar move in South Africa, the *South African Medical Journal*, May 23, 1923, says as follows: Apart from the fact that trade rivalry is largely responsible and lies at the base of such movements, we feel sure that no member of our profession, after reviewing the matter carefully, will be likely to respond to this impudent suggestion. No matter what our individual opinion is or what our opinion in the mass may be of what another country does in the way of ruling its own people, we should, so long as we subscribe to democratic principles that permit the majority of voters to call the tune, refrain from interfering in the internal

affairs of our neighbours. That has been the guiding principle for nations throughout the centuries. and it would be an ill day for all concerned if it is departed from. South Africans would take it very hard if other nations boycotted this country because of its repressive class legislation against natives and Hindus, class legislation that is as flagrant a denial of individual liberty as any that has been placed on the statute book in Germany or Italy. The suggestion that we should make our political feelings rule our common sense in prescribing what we think best for our patients is an impudent and impertinent one, and should not receive the slightest consideration from either medical men or chemists.

THE TRICHINOPOLY DISTRICT MEDICAL ASSOCIATION. A monthly meeting of the above Association was held at 5 P.M., on Sunday the 27th September 1936 in the E. R. High School, Teppakulam, Trichinopoly when about 25 members were present. Dr. T. V. Swaminatha Shastry, L. M. & S., presided and Dr. Mrs. D'Costa, L.M. & S., was 'At home'. Dr. T. N. Subramanyan, L.M. & S. delivered an interesting lecture on 'Laboratory as an aid to diagnosis'; in the course of which he said that though clinical methods are essential for proper diagnosis yet the Laboratory was useful to confirm or correct the bad side findings and appeal to medical men to make more use of Laboratory methods.

Dr. Raghavan gave his experiences mostly of cases in which the Laboratory diagnosis was contrary to clinical findings and treatment based upon Laboratory findings are invariably correct as shown by the results. In his concluding remarks the Chairman stressed upon the need of a well equipped Laboratory in such a place like Trichinopoly and hoped that Medical men will make use of Laboratory methods for correct diagnosis of cases.

DISTRICT MEDICAL ASSOCIATION, CUDDAPAH. The annual meeting of the District Medical Association was held, 27th September 1936 in the District Head-quarters Hospital, with Rao Bahadur K. Raghavendra Rao, District Medical Officer, in the chair.

The report for 1935-36 was read and adopted. Office-bearers for the coming year were elected :—Dr. K. R. Sitarama Iyengar, Assistant Surgeon, Proddatur, read a paper on "The Value of Modern Treatment of Peptic Ulcer", illustrating a case of Gastro-Jejunostomy operation which he had recently done at the Government Hospital, Proddatur.

The members of the Association bade farewell to Rao Bahadur K. Raghavendra Rao, who is under orders of transfer to Vizagapatam, Dr. K. R. Sitarama Iyengar spoke about the chief guest of the evening. Dr. Raghavendra Rao replied suitably.

DIABETES & VITALITY

I am prepared to undertake cases, either Diabetes or Vitality and work in co-operation with qualified medical men.

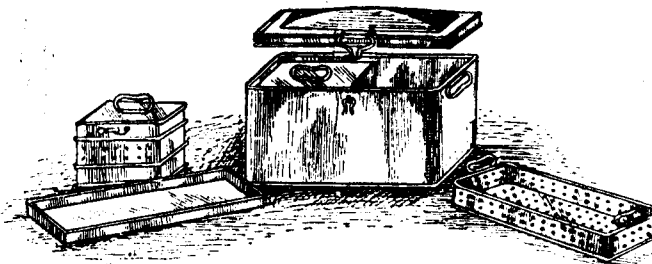
DR. JEAN F. STRANDGARD,
Vitality & Diabetes
SPECIALIST, BANGALORE.
Booklets Posted Free.

Reach the
Medical
Profession

EVERY MONTH
By Advertising

IN

Medico-Surgical
Suggestions.



Sterilisers for instruments and dressings combined, with one instrument tray and two dressing drums heavily nickel plated. Instrument tray and dressing drums are carried in one case for convenience sake. These are very compact for surgeons to carry about them to patient's house. These sterilisers may be made to order with electrical or gas heating.

Illustrated catalogue and price list sent on application.

HEBBAR BROTHERS, LTD.,
MANUFACTURERS OF
Surgical Instruments, Aseptic Hospital Furniture
246, Thambu Chetty Street,
G. T. MADRAS.

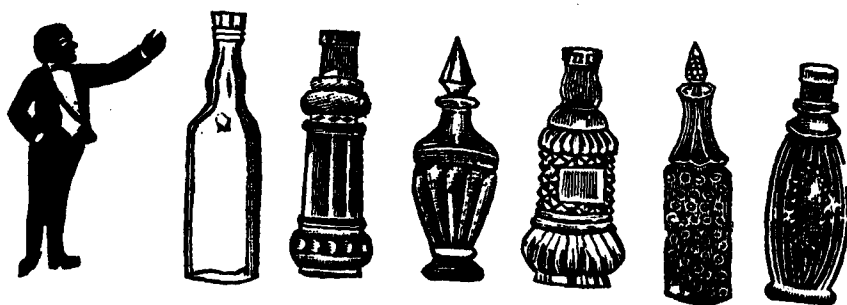
When ordering please mention *Medico-Surgical Suggestions*.



R. K. Mehta Bottle Stores.

The premier firm dealing in :

Empty glass bottles, dispensing bottles, stoppered bottles, menthol screw bottles, corks, capsules, measure jugs, glasses and cylinders, test tubes, test tube stand and holders, watch glasses, beakers, aspirators, display bottles, enamel and glass funnels, horn spoons, perfumes of all varieties and artistic labels.



Prices moderate.

Prompt and careful execution of Mofussil Orders.

A trial order is solicited.

Messrs. R. K. Mehta Bottle Stores,
2-4, Malayaperumal Street,
G. T., MADRAS.

When ordering please mention Medico-Surgical Suggestions.

JOURNAL OF THE INDIAN MEDICAL ASSOCIATION

EDITED BY

SIR NILRATAN SIRCAR, KT., M.A., M.D., D.C.L., ETC.

WITH THE HELP OF

A STRONG ALL-INDIA EDITORIAL BOARD

The Official Monthly Publication of the Indian Medical Association.

FEATURES

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

Published on the First Day of the Month

Annual Subscription : Rs. 6/- post free

Free to members of the Indian Medical Association

AN EXCELLENT MEDIUM FOR ADVERTISEMENT

For particulars, write to Secretary,
67, Dharamtala Street, Calcutta.

H. B. SERVICE BUREAU

246, Thambu Chetty Street, Madras.

The articles appearing in these columns are certified genuine and satisfactory. They are issued for publication only on the suggestion of a committee of investigators as to their utility for the medical profession.

Physicians and surgeons desiring to sell their goods and practice are requested to send details of information the clients may require and avoid heavy correspondence. In all cases the names of vendors and vendee will be strictly confidential and in no circumstances will they be made known to each other.

When situations are required, a printed form will have to be filled in giving various details which will be treated equally confidential.

FOR SALE.

KNAPS latest model trachoma forceps and a cataract knife. Unused.

RS. 75/- net in cash will bring you one Dental branch practice chair. Brand new.

ONE electric water steriliser 3 gals. capacity and an electric instrument steriliser 12" x 8" x 4". Renovated and replated.

ONE complete set of midwifery instruments. Unused and brand new condition. Enquiry solicited.

FOR SALE.

Electric Ophthalmoscope (Weiss) with two spare bulbs. Five years old, but in good working order.

Operating auroscope (Allenbury's), with two spare bulbs and two ear pieces. Four months old.

Four cells battery for use with any of the above. In good working order.

Tonsil haemostat guillotine (Weiss) Brand new. Not used.

When ordering please mention Medico-Surgical Suggestions.

**The
CALCUTTA
MEDICAL JOURNAL**

Annual Subscription Rs. 5 only
inclusive of postage.

*The Journal year commences
from July.*

Circulated to and read by almost
all medical men of India, Burma,
Ceylon and abroad.

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

For rates apply to the Manager,
The
Calcutta Medical Journal
62, Bowbazaar Street, Calcutta.

**THE PATNA
JOURNAL OF MEDICINE**

*Published by the
Patna Medical Association, Patna*
**The most modern and up-to-date
Quarterly in Asia**

*Supervised by
Some of the most eminent men
in the Profession*

*Edited by: R. K. PAL,
D.Sc., M.B., M.R.C.P., F.R.S.E.,*
Price Re. 1-4. Annual Rs. 4-6.
Inclusive of Postage

Specimen Copy sent free on application
**Best Medium of Advertisement for
Medical and Scientific Instruments
and appliances, Drugs, Chemicals,
etc., etc.,**

Rates specially favourable
Write to the Manager,
Patna Journal of Medicine
Bankipore, Patna.

**THE INDIAN
& EASTERN
DRUGGIST**

*The only Journal cate-
ring exclusively for the
Drug and Allied Trades
in Eastern Markets.*

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

Advertisement rates sent on request.

Indian & Eastern Druggist

Published by
LEONARD HILL LIMITED
17, Stratford Place, London W. 1.
ENGLAND

REPLATING

Instruments

and

Sterilisers

with

Nickel or Silver.

Guaranteed work

Low Price.

Hebbar Brothers, Ltd.,
246, Thambu Chetty St.,
MADRAS.

When ordering please mention *Medico-Surgical Suggestions.*

A. H. HAROON SAIT.

(ESTD. 1900.)

The Premier Firm of its kind dealing in:

EMPTY GLASS BOTTLES, CORKS, CAPSULES, MEASURE

JUGS, GLASSES & CYLINDERS; TEST TUBES;

TEST TUBE STAND & HOLDERS; WATCH

GLASSES; BEAKERS; ASPIRATORS;

DISPLAY BOTTLES; ENAMELLED

FUNNELS & HORN SPOONS,

ETC., ETC.,



Certificates of merit from the customers for our
careful packing are available for inspection.

Client's satisfaction is our gratification.

A trial order is solicited.

Phone No. 3126.
Grams: GLASS.

A. H. HAROON SAIT,

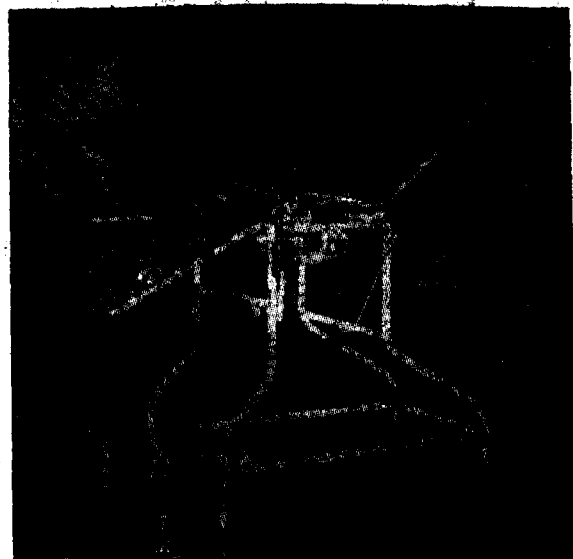
PROPRIETORS,

ADAM SAIT & SONS,

2/2, Malaiperumal Street,

MADRAS.

When ordering please mention *Medico-Surgical Suggestions.*



GENITO - URINARY EXAMINATION AND OPERATION TABLE.

Specially made for

Venerial Department of Government General Hospital, Madras, made of steel tube frame oxy-acetylene welded with polished pure zinc sheet top, head and foot plate to raise and lower, the central seat portion cut for drainage to a douching tray. This portion is arranged to raise and lower to any angle by means of rotary gear easily worked by means of a handle. The metal foot step can be folded back out of surgeon's way. The frame rests on two gun metal stumps and two cone bearing fibre-castors. Complete with adjustable leg rests. All movable parts are heavily-nickel plated. Finished in white enamel.

HEBBAR BROTHERS, LTD.

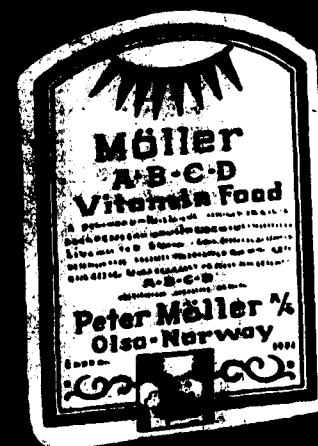
MANUFACTURERS OF

Surgical Instruments, Aseptic Hospital Furniture

.246, Thambu Chetty Street.

MADRAS.

When ordering please mention *Medico-Surgical Suggestions.*



IN ALL
CASES OF
**VITAMIN
DEFICIENCY**

Moller's A.B.C.D. Vitamin Food is a combination of Cod Liver Oil of extra high Vitamin potency, with high grade Malt Extract and the concentrated juice of Oranges rich in Vitamins. It is recommended for those whose dietary is deficient in any of the four- A. B. C. D. Vitamins.

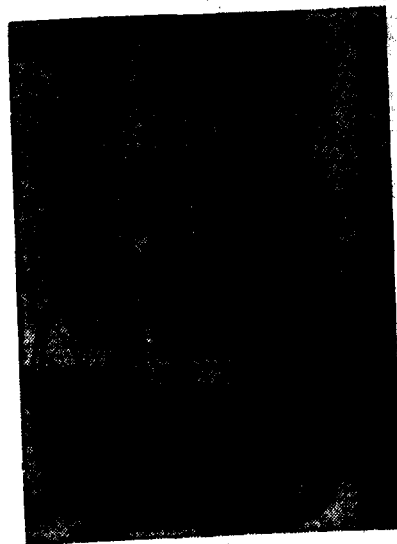
Sole Agents :

The South Indian Mercantile Co.,
12, Mannaru Street, P. T., Madras.

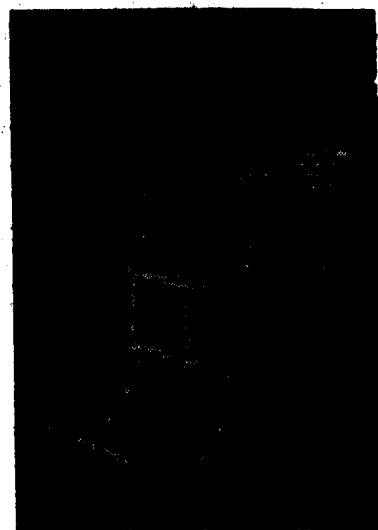
**Möller's
A-B-C-D
Vitamin Food**

When ordering please mention *Medico-Surgical Suggestions.*

"CORAL" INVALID CHAIRS



WOODEN CHAIR



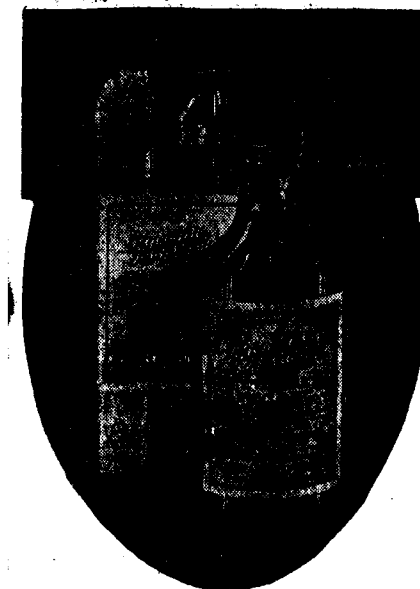
ALL-METAL CHAIR

These invalid chairs are strongly framed, suitable for all ages. Mounted on 24" x 1" best strong rubber tyred wheels with or without polished hand-propelling wood rims. The foot-rest can be used whenever necessary. A very comfortable easy-running chair. Both patterns have been supplied to the Government General Hospital, Government Hospital for Women and Children Madras and King George's Hospital, Vizag etc.

HEBBAR BROTHERS, LTD.,
MANUFACTURERS OF ASEPTIC HOSPITAL FURNITURE.

Showroom:—246, Thambu Chetty Street,
Works:—107, Thambu Chetty Street,
and 45/46, Armenian Street,
MADRAS.

When ordering please mention *Medico-Surgical Suggestions.*



For Simple or Chronic Coughs

THE GLYCODIN TERP VASAKA

is composed per Fluid drachm of:—

Antimony Tartarate	1/160 gr.
Terpene Hydrate	1/8 gr.
Codeine Phosphate	1/8 gr.
Menthol	1/24 gr.
Syrup Tolu	15 min.
Syrup Vasaka	Sufficient.

The antimony in it liquifies the viscid mucus which is the cause of tight cough, terpene promotes effective expectoration, codeine allays unnecessary cough, and vasasine checks vagal irritability and counteracts any spasmodic element that may be present. It does not check secretions and does not cause constipation.

Sample on request

GLYCODIN TERP-VASAKA

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

When ordering please mention *Medico-Surgical Suggestions*

What the Doctors say about

Neo-Riodine & Laxanthine Astier.

Dr. P. KRISHNASWAMI,
MADRAS.

I have great pleasure in writing to you that I used your LAXANTHINE ASTIER IN A CASE OF RHEUMATIC ARTHRITIS with remarkable success. The patient is a lady of 30 years, Temperature 102 to 103.5 with swellings of the right knee first and later the left also. I was giving her soda salicylas mixture as well for her pain all over the body.

I was daily giving her one 5 c. c. ampule of Neo-Riodine intravenously. After four injections the patient is completely cured. Swelling disappeared altogether. The temperature came to 100.8 the second day, and touched normal on the fourth day; and she is alright now.

I think I can safely recommend your LAXANTHINE ASTIER & NEO-RIODINE for Rheumatism and other infections.

The Urine was also cloudy and full of sediments which disappeared after three or four day's use of Laxanthine Astier. It became clear and free from Phosphate and other sediments.

Yours Sincerely,
DR. P. KRISHNASWAMI.

Treatment of a case of Elephantiasis.

By Prof. NOCUER MORE.

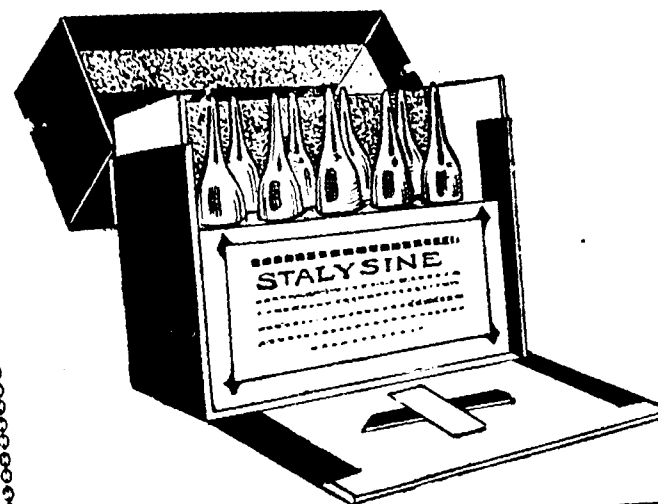
Chief of the Dermatologic Service.

Hospital de la Santa Cruz.
BARCELONA (Spain.)

Professor Noguer More of Barcelona observed, some time ago, a case of chronic oedema, progressive and localised in the foot of a woman 38 years old, which oedema was neatly and anatomically turning into elephantiasis.

NEO-RIODINE intravenous injections, administrated every two days, (10 to 15 c. c.) got quickly over the elephantiasis process.

The lymphatic vesicles started decreasing, and after them, the oedema and the hypersarcosis-which evolutions allowed the patient to walk normally a few days after.



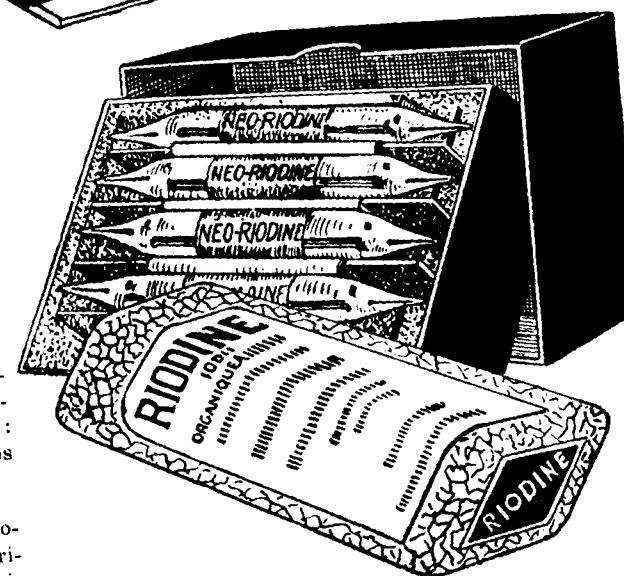
STALYSINE

A curative Vaccine, invaluable in the treatment of Staphylo-cocci infections, can be administered by mouth, and by injections.

NEO-RIODINE

Neo-Riodine of Dr. Astier laboratories is an aqueous solution of Iodine and a safe remedy for the rapid and effective treatment without signs of Iodism. This can again be given by mouth or by intramuscular & intravenous injections: (Riodine Capsules for oral use)

Indication: Arterio-Sclerosis, Rh-arthritis and lymphatic troubles.



Dr. P. Astier's Laboratories, Paris.

Sole Distributors:—

Messrs. DEWANSON,
No. 4, Purashawakam High Road,
VEPERY.

Phone No. 3585.

Messrs. APPAH & Co.

" DADHA & Co.

" RAJA D. MAWNEY & Co.

Messrs. K. S. METHA & Co.

" HEBBAR BROS. LTD.

" J. BALU BHAI & Co. ETC.

Available in all Chemists.

A black and white illustration of a three-tiered metal rolling cart. The cart has a sturdy frame with four legs, each ending in a small wheel. It features three horizontal shelves. On the top shelf, there is a rectangular storage cabinet with two doors, each having a handle and a lock. The middle and bottom shelves are open. A small, dark, rounded object, possibly a container or a piece of equipment, is placed on the bottom shelf. In the upper left corner, a spotlight is shown, casting a beam of light towards the cart. The background is plain white.

—CONSISTING OF—

- Two Glass Shelves
- One Glass Cabinet
- One E. N. T. Lamp
- One Spittoon

For particulars apply to :—

HEBBAR BROTHERS, LTD.,
246, Thambu Chetty Street, G. T. Madras.

Edited & Published by Dr. K. P. Rama Hebbar & Printed at the C.C.P. Works, Ltd., Madras.

[illegible]