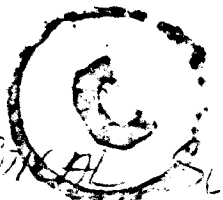


MEDICO.  SUPERNAL SUGGESTIONS

VOL. VI

NO. 8.

Aug 1937
REGISTERED

JL
-4:7mN31M0.
W37.6.8

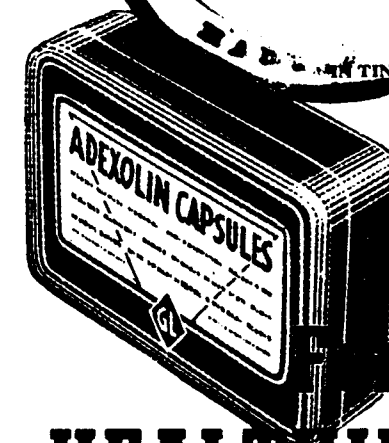
142702

MEDICO-SURGICAL SUGGESTIONS

Vol. VI

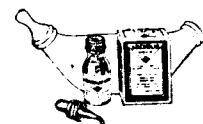
OFFICE OF THE REGISTRAR
AUGUST 1937

No. 8.



HEALTHIER PREGNANCY

Administration of one Adexolin Capsule (or 20 drops of Adexolin Liquid) daily during the last three months of pregnancy often brings about a very marked improvement in the general physical condition of the mother. Continuing it into the puerperium makes convalescence shorter. The improved resistance conferred lessens the liability of the mother to develop infections during the puerperium, and equips her to meet the strain of lactation. Further, the vitamin D in Adexolin helps to preserve her teeth from decay, and to promote normal skeletal development in the infant.



As a safeguard against infections and rickets 2 drops of Adexolin Liquid should be added to every bottle-feed.

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.

ADEXOLIN

VITAMINS A & D

HEBBAR BROTHERS LTD.,

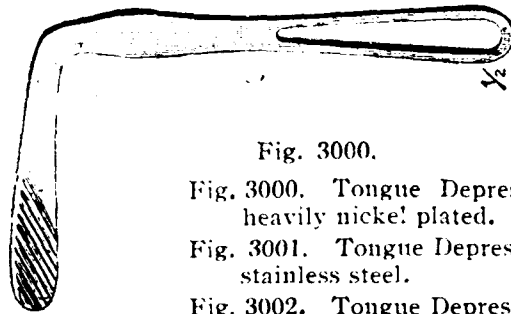


Fig. 3000.

Fig. 3000. Tongue Depressor, Hartmann, made of steel, heavily nickel plated.

Fig. 3001. Tongue Depressor, as above, superior quality stainless steel.

Fig. 3002. Tongue Depressor, folding aseptic.

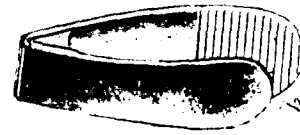


Fig. 3002.

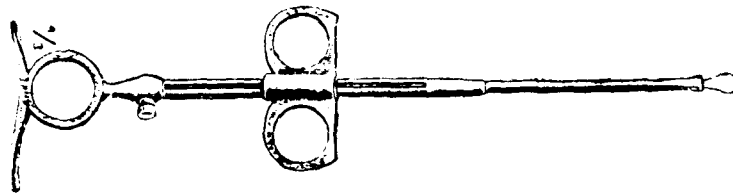


Fig. 3003.

Fig. 3003. Tonsil Snare, Eve's, heavy pattern, simple slide action.

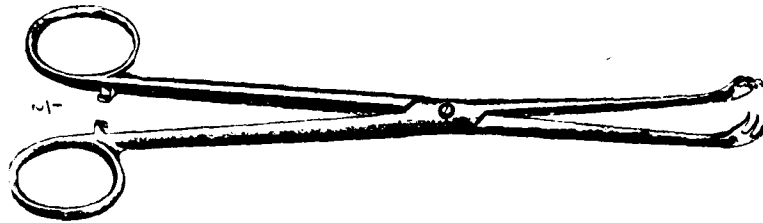


Fig. 3004.

Fig. 3004. Tonsil Vulsellum Forceps with side jaws and catch heavily nickel plated.

Fig. 3005. Tonsil Vulsellum Forceps as above. Stainless Steel.

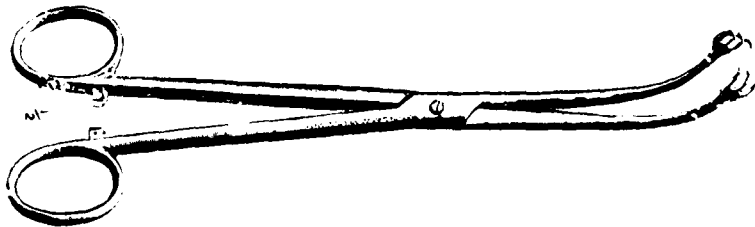


Fig. 3006.

Fig. 3006. Tonsil Vulsellum Forceps, curved on flat, steel nickel plated.

Fig. 3007. Tonsil Vulsellum Forceps, same as above. Stainless Steel.

Fig. 3008. Button Vulsellum Forceps as used in General Hospital. Steel Nickel plated.

Fig. 3009. Button Vulsellum Forceps, same as above. Stainless Steel.



For Hernia, Abdominal Belts and other
Deformity Appliances.

Always consult or write of

International Surgical Co.,

Sandhurst Road, Bombay 4.

Direct importers of Surgical Instruments, Sick-room and
Hospital Requisites etc.

Telephone : 42135.

Telegrams : Splintwork.

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

INOTON OINTMENT

(French Government Laboratory, Control No. 482-4)

COMPOSITION	INDICATION
PRIMARY SULPHO SCHISTON TITANIC OXIDE COLLODIAL ORTHO TITANIC SECONDARY ACTIVE PRINCIPLES	All forms of Eczemas Ulcers Pruritus Burns Moist wounds
[PLES DISTILLED EXTRACT OF FRESH ZINC OXIDE [HAMAMELIS	Irritations and lesions of the [skin All sorts of inflammations
Incorporated in an excipient with marked soothing and decongestive properties.	

INOTON
French Government Laboratory
Control No 482-60
Antiseptic Soap

Made from purest ingredients!
Contains powerful antiseptic!!
Keeps the skin free
from germs!!!

INOTON
French Government Laboratory
Control No. 482-3
**Medicated
Talcum**

Recommended for Babies
and Children!

ALSO FOR:—

PRICKLY HEAT,
DHABI'S ITCH,
SORES OF THE FEET,
CHAPPED SKIN, AND
SUNBURNS.

Sole Agents:—

French Medicines Agency,
Post Box, No. 88, 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. VI

AUGUST 1937

No. 8

CONTENTS

ARTICLES—

	PAGE.
Recent Advances in Proctology—By Garnet W. Ault M.D.	225
Acute Mastoiditis—By M. P. Spearman, M.D., and W. E. Vandevere, M.D.	238
A Choice of Anesthesia—By H. B. Stewart, M.D.	240
The Difficulties of Pharmaceutical Industry in India—By Raj Mitra Bhailalbai D. Amin, B.A., M.S.C.I. (LON.)...	245

EXTRACTS	248
MEDICAL AND NOTES NEWS	253

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.



CHERACOL

(UPJOHN) — ALCOHOL 3%

Each fluid ounce contains :

Potassium Guaiacol Sulfonate ... 8 grs.
Ammonium Chloride ... 8 "
Antimony and Potassium Tartrate. 1/12 "
Codeine Phosphate ... 1 "
Chloroform ... 2 mins.

In a vehicle of White Pine and Wild Cherry Bark.

CHERACOL is a cough preparation whose purpose is to allay cough without checking expectoration. Cheracol (Upjohn) is free from the heavy nauseous qualities of old fashioned syrup. Its features are small doses of expectorants in such balance as to secure the lenitive effect of the narcotic without narcotism, and the loosening action of the "Nauseant" expectorants without nausea.

The Fruit-like Flavor is Characteristic and Unique.

Manufactured by:

THE UPJOHN CO.,
U. S. A.

Sole Agents:

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

Branches:

5, Sunkurama Chetty Street, G. T.
12, Dalhousie Square,
123, Bunder Road,
124, Anarkali,
65, Tacekai Mg. Taulay Street,

MADRAS.
CALCUTTA.
KARACHI.
LAHORE.
RANGOON

MEDICO-SURGICAL SUGGESTIONS

VOL. VI

AUGUST 1937

NO. 8

RECENT ADVANCES IN PROCTOLOGY.

GARNET W. AULT, M.D.

Professor of Proctology, Georgetown University School of Medicine.

During the past several years there has been an increasing and noteworthy effort to place before the medical profession many new and excellent procedures in the treatment of ano-rectal disorders. Physicians who are not intimately familiar with ano-rectal disease are often given a false sense of security by the glowing reports of the enthusiast who admits of no failure. In contrast, a method may receive the unqualified condemnation of an individual who has been unable to duplicate the feats of its originator. As a result, we are all confronted with the problem of selecting the method of choice to be used in our individual cases or series of cases. Therefore, in presenting this subject to you due regard is given to the therapy that produces the most constant satisfactory results in the hands of the greatest number of individuals. In addition, some attempt will be made to individualize the management of certain disorders.

Before we consider the individual subject matter it would seem pertinent to remind you that the man in general practice is the individual who is often first consulted for "piles" and that the ultimate fate of the patient is, to a great extent, in his hands. He may have "piles" or he may have cancer. The diagnosis can be made only by examination, not by history. If the medical profession, the medical student and the laity could be impressed, to a greater degree than heretofore, that bleeding by rectum is due to a malignant lesion until proven otherwise, much would be accomplished. When proper examination has been made and the diagnosis has been established, the physician who makes judicious use of the recent additions to the armamentarium of proctology will be rewarded with an increasing incidence of excellent and permanent results. Thus, the misdirected use of the various methods will be avoided and the procedures will not fall into disrepute with either the laity or the profession.

HEMORRHOIDS.

This condition attains first rank among ano-rectal diseases, since it may be stated safely that approximately 12 per cent of individuals have hemorrhoids.

The phase of the treatment of hemorrhoids that has been brought to our attention for many years is the controversy being waged relative to the injection versus the operative treatment. No attempt will be made here to settle that dispute. However, attention will be drawn to the fact that we are inclined to be enthusiastic about something that is an economic blessing to our patient. I refer to the ambulatory injection treatment of hemorrhoids. We are inclined to swing too far to extremes, and today the injudicious use of the injection treatment of hemorrhoids is productive of considerable dissatisfaction, and even harm, to a great many patients. The number who receive injection treatments for hemorrhoids, in the presence of undiagnosed cancer, has been given as 10 to 30 per cent by various authorities. Surgical hemorrhoidectomy is also guilty of the same error in approximately the same percentage of cases. Therefore, it behooves us to take inventory of ourselves if we have, in any way, contributed to this group of unfortunate cases.

INJECTION TREATMENT OF HEMORRHOIDS.

The injection treatment of hemorrhoids aims, by the process of chemical inflammation, to be productive of 3 effects upon the tissues injected: (1) To induce an inflammatory sclerosis of the tissues; (2) to thereby obliterate the vascular spaces of the hemorrhoidal mass; and (3) to produce such a physiological ligation of the tissues that shrinkage fixation and atrophy of redundant tissues occurs.

The histopathological changes occurring in the injected tissues have been known for many years. It has taken considerably longer to evaluate the results of therapy and, in retrospect, to state the type of case suitable or unsuitable for injection. We are prepared to make very definite statements regarding these groups as the ultimate outcome of these patients is known from many years of follow-up study.

1. *Group Suitable for Injection.* It is universally accepted and taught that the uncomplicated internal hemorrhoid is the only hemorrhoid which is not only suitable for injection, but that it is also the only one that responds with any degree of permanent result to the injection. This soft vascular pile should protrude little if at all. Protrusion or extension of the mass external to the sphincter renders it less amenable to the injection treatment. The soft, pliable, vascular mass which is about the diameter of an ordinary lead pencil, or less, responds favourably to the injection treatment. Marked inflammation, erosion or ulceration, if present, should be decreased by temporary palliative measures such as sitz baths or retention

enemas of warm oil. In the presence of complicating fissure, ulcer, fistula, polyp, etc., the hemorrhoids are best treated by operative procedures aimed to correct the complicating condition and hemorrhoids at the same time.

2. *Group Unsuitable for Injection.* There are many cases of internal hemorrhoids of long duration that have attained considerable size. This is probably the case that presents itself to you with an anus and lower rectum encircled by a mass of hemorrhoidal tissue. In contrast it may be the case that has 1 or 2 large thumb-sized internal hemorrhoids and the rest of the anal canal is not involved. In the early stages these hemorrhoids prolapse and return spontaneously to within the rectum. Later the prolapse requires manual reduction of the pile mass and by this time the sphincter has become markedly atonic. These cases are unsuitable for injection therapy because the temporary cessation of hemorrhage and the shrinkage of the mass is transient and recurrence within 6 months to 2 years is common. Many of these cases may develop a hard fibrotic tumor mass that will readily prolapse through the sphincter and produce considerable discomfort and pain which may be more severe and disconcerting than the original lesion. Prolapse, thrombosis and edema have been known to develop after injecting this type of hemorrhoid, and the resultant painful, ulcerating, sloughing mass is truly "an attack of piles." These cases of massive internal hemorrhoids should be recognized as unsuitable for injection treatments except as a palliative measure in exceptional instances.

Fibrous internal hemorrhoids or polypi of any type are unsuitable for injection.

External cutaneous and external varicose hemorrhoids should never be injected under any circumstances at any time. Painful, disastrous and disabling results will follow upon the injection treatment of external hemorrhoids.

The last group, the combined internal and external hemorrhoid, in general is unsuitable for injection therapy. In these cases of combined hemorrhoids both the patient and the physician should be aware of the limitations of the injection treatments. There are many who make a practice of injecting the internal portion of this type of hemorrhoid. The amount of sclerosis, shrinkage and obliteration that takes place in the internal portion of the hemorrhoid is frequently sufficient to produce a diminution in size of the external mass, due to a loss of venous anastomosis between the two areas. Symptomatic relief of hemorrhage is attained and if this has been the most troublesome symptom, the patient and the physician are satisfied. The cautious use of injection therapy to this type of hemorrhoid is urged from a conservative standpoint. Both the patient and the physician are inclined to expect too much

from a needle and a syringe filled with solution. I think that it is a matter of record that the injection treatment of this type of hemorrhoid is responsible for the unsatisfactory results reported from time to time. This is indicated by the variations noted in reporting the incidence of hemorrhoids suitable for injection.

We have statistics indicating that from 80 to 90 per cent of hemorrhoids are suitable for injection. I feel that this is a clear case of enthusiasm that will be dampened by proper follow-up of these cases, as recurrence is usual. The reported high percentage of injections is not in keeping with the observations of such authorities as Yeomans, who states: "Only about 50 per cent of cases of internal hemorrhoids are suitable for injection," and Gabriel, who "estimates that the allocation of treatment at the present time (1932) is about 50 per cent injection and 50 per cent operative." It is pointed out that earlier (1929-31) Gabriel, in his enthusiasm for the injection treatment of hemorrhoids, had previously reported on 800 new cases of hemorrhoids in which the injection treatment had been used in approximately 75 per cent. Referring to combined internal and external hemorrhoids Gabriel further states: "That as a result of increasing experience I have become extremely cautious about injecting this type of case." The above authors, and others in authority, have indicated that the incidence of cases of internal hemorrhoids that are suitable for the injection treatment is closer to 50 per cent than to the higher figures. My own personal experience leads me to believe that for desirable permanent results, the injection treatment of internal hemorrhoids should be restricted to less than 50 per cent of cases. If temporary alleviation of symptoms is to be the goal of the treatment, then a greater number than 50 per cent of cases may be injected, but in fairness to both physician and patient, the limitations of this mode of therapy should be known.

Technic of Injection. A complete procto-sigmoidoscopic examination is indicated before any treatment is administered. All agencies and physicians interested in cancer have repeatedly urged that we eliminate malignancy of the rectum and pelvic colon as the first cause of rectal bleeding.

The anoscope is inserted full length, the obturator removed and under direct vision, aided by good illumination, the anoscope is gradually withdrawn. The hemorrhoids will protrude into the lumen of the instrument as it is withdrawn, and all hemorrhoidal masses above the anorectal line are identified. The mucosa of the upper pole of the hemorrhoid is swabbed clean. Antiseptic applications are not necessary. The needle is inserted into the submucosal tissue and a painless infiltrating injection of solution is made. According to the choice of the operator 5 per cent phenol in

vegetable oil or 5 per cent quinine and urea hydrochloride in sterile distilled water are used. An average of 2 or 3 cc. of solution is injected. Injections are given at 3 to 5 day intervals, and several weeks are allowed to elapse before a given quadrant or mass is re-injected.

The details of the injection should be scrupulously followed. The injection should be made slowly into the tissues and just enough solution used to produce moderate distention of the mass. Blanching of the mucosa indicates that the injection is too superficial or that too much solution has been used. Slough will follow either technical error. A properly placed injection, above the anorectal line, is painless, and the patient should note only a slight sense of fullness or pressure in the rectum. The injection should be placed at the upper pole of the hemorrhoid.

Results. The immediate results of the injection treatment of hemorrhoids are most satisfactory to the patient and to the physician. Pain, prolapse and bleeding are immediately controlled in properly selected cases. As a palliative measure in pregnancy, advanced cardio-renal disease and in other conditions, the injection treatment has considerable merit. The permanency of results will vary and one should give considerable thought to this phase of the method. In general, the injection treatment of hemorrhoids is considered to be safer from many standpoints than the operative treatment. Recurrence is definitely more frequent after injection than after operation.

In conclusion, we may consider that the uncomplicated internal hemorrhoid of small or moderate size may be permanently cured by the injection method. The larger internal hemorrhoid will recur. Injection of the internal portion of the mixed internal and external hemorrhoid is of no value except as a temporary measure in a few properly selected cases. These results may be obtained only if the physician properly evaluates the limitations of the injection treatment of hemorrhoids.

FISTULA.

The treatment of fistula is rarely if ever an ambulatory management. This constitutes a hospital procedure which is best carried out under the influence of an anesthetic which relaxes all of the muscles of the pelvic outlet, including the sphincters and the levator ani. We are all familiar with the patient who has had several "preliminary" operations. If we search for the cause of these "preliminary" operations we will be led to the conclusions drawn by Hirschman, Dudley Smith, Buie and others. In many cases it is due mainly to a confusion in nomenclature and an error in the conception of fistula in ano, and it, therefore, seems wise to briefly discuss the main etiological factors in this condition.

An understanding of the point of origin of fistula will be attained if one will briefly recall that the junction of anus and rectum is marked by a definite anatomical structure, the anorectal line. The anal crypts of Morgagni are in this area. They average 6 to 12 in number and they are the point of origin of over 90 per cent of all fistulae. Tracing the course of the infection, it will be seen that from this crypt or pocket, the infection spreads downward and outward. The course of the infection will vary in relation to the sphincters and to the minute anal glands which have recently been demonstrated by Tucker and Hellwig. The course of the infection may be superficial to the sphincter or it may involve it. Eventually the burrowing process appears on the skin surface as a perianal abscess. It may point in the ischiorectal fossa where it is commonly designated as an ischiorectal abscess. Rupture or surgical incision complete the process and a blind sinus or abscess pocket is converted into a fistula with both an internal and an external opening. Multiple tracts and sinuses may eventually develop but the point of origin of all may be traced back to an internal opening in a crypt of Morgagni.

MANAGEMENT OF FISTULA.

A wider dissemination of the knowledge of the 3 cardinal principles in the management of fistula is indicated. These are as follows: (1) The identification of the internal opening, (2) the conversion of all fistulous tracts into open ditches which will be allowed to heal in and approximate from the base outward; and (3) the removal of all packing within 48 hours after operation.

The identification of the internal opening of all fistulae is best done at the time of operation. The injection of pastes or dyes through the external opening is a useful adjunct and is of considerable help in many cases. The paste or dye is identified as it escapes from the internal opening. The numerous ramifications and minute branchings of the fistulous tract are very easily identified if they are stained. However, it should be kept in mind that all tracts may not become stained and diligent search should be made for any unstained pathologic tissue.

Regarding the probing of these tracts, there are those who probe from inside out and those who probe from outside in. Let me urge you to learn to probe from inside out. Identify the internal opening, either with or without the aid of a dye. The probe should be a bluntpointed, annealed silver instrument, and if it is gently inserted into the internal opening and worked through the main channel of the fistula the rest should be easy. No false tracts or openings into the anorectum are thus created, as does occur with those who probe from outside in. Probing into blind pockets, sinuses and the ramifications of the fistula from the outside constitutes a great insult to

relatively normal tissues. More often than not a false opening into the anorectum is created and frequently the true internal opening of the fistula is lost. I feel sure that those who probe the fistula from the internal opening have fewer recurrences than those who probe from the outside in.

The idea of converting all fistulous tracts into open ditches which will be allowed to heal in and approximate from the base outward is based upon the principle of the healing of wounds about the anus. In general, suturing in an attempt to obtain healing by primary intention is unwarranted. Wounds and incisions about this area heal best by second intention and granulation. The soiled, infected field will heal satisfactorily if it is left open, but closure of the majority of wounds in this area is followed by stitch abscess, retention of pus, delayed and deformed healing. If we suture a fistulous wound the surface of the wound is prone to "bridge over" the tract, and with delayed healing of the deeper portion of the wound there is often a recurrence of the fistula. If we make a trench-like or saucer-like wound when removing the fistulous tract we should allow the wound to heal from the base upward. This approximation of healthy granulation tissue from the base upward assures us that no new tract is formed, and that the resultant firm scar, if severance of the sphincter was necessary, will act as a new bed of anchorage for the muscle.

The removal of all packing within 48 hours after operation is essential. Prolonged packing of the fistulous wound prevents wound approximation as outlined in the previous paragraph. When the sphincter has not been involved an anal canal which is prone to allow the escape of oil or liquid stool may follow. This is not a true incontinence but rather the result of a deep sulcus that cannot be completely effaced by muscular action. When the sphincter has been involved, the wide separation of its fibers from the resultant wound will be productive of a total muscular incontinence. Both of these conditions can be avoided by removal of the packing or dressing within 48 hours after operation.

In view of the foregoing it is felt that the management of anorectal fistula should be along the following lines. When a physician is called to open an anal abscess he should do so immediately, and further, he should consider it to be the external opening of a fistula until it is proven otherwise. Following drainage and collapse of the cavity an effort should be made to determine whether an internal opening is present. Another type of case that may be encountered is the patient who presents himself to you after the abscess has ruptured. He may give a history of recurrent accumulation of pus accompanied by pain which is followed by a discharge of pus and a cessation of the pain. This may be a recent event or it may have been going on for some time. It is mandatory upon the physician to

seek out the cause of the abscess in either case, and, if he will consider the lesion to be a fistula, the correct diagnosis will be arrived at in a rather high percentage of cases.

FISSURE.

Evidence points to the occurrence of this lesion in approximately 8 per cent of all anorectal disorders. This painful affliction of adult life may be indeed incapacitating, and the pain experienced at defecation may prostrate the patient. It is practical to divide fissures into 2 classes both from the standpoint of the morbid anatomy encountered and the treatment advocated.

ACUTE FISSURE.

These relatively recent fissures may be a simple break in the anal skin or they may commonly appear as a friable postanal commissure, that cracks and bleeds at stool. Very little induration of the immediate area occurs and no granulation of the surface is noted. Frequently one will encounter small varicose buds whose skin covering is thin and friable. This type of fissure is really a recurrent skin cracking which is often brought on by the passage of a harsh abrasive stool or an irritant watery diarrhea. Within recent years the injection treatment of fissure has been advocated, and the methods used by Gabriel, Gorsch, Margan and others are herein presented.

Technic of injection of a Postanal Fissure. The patient is placed in the desired position and after preliminary skin sterilization a novocain wheal is raised in the skin about 1 to 2 inches posterior or distal to the anal margin. Five to 10 cc. of one of the new oil-soluble anesthetic solutions is injected into the deeper area. With the finger as a guide in the anal canal the postanal area is infiltrated with the oil-soluble anesthetic. A total of 5 to 10 cc. may be used. An even distribution of the solution is most desirable and pooling of the solution is to be avoided. The anesthesia and fixation will last from several days to 2 to 3 weeks, during which time the tissues will have improved their vascular supply and the fissure will have healed. This method of treating the acute fissure is a noteworthy contribution to the progress of proctology.

CHRONIC FISSURE.

The chronic fissure is not only characterized by recurrence but also by its persistence. It is a chronic, ulcerated, indurated lesion with or without a sentinel pile at its lower pole. This infected tab of granulation tissue not only indicates chronicity and inadequate drainage of the area but it also indicates the type of treatment to be instituted for the adequate and permanent cure of the lesion. Surgical excision, rather than incision, is the treatment of choice.

Treatment of Chronic Fissure. Spinal, caudal or sacral block anesthesia are the anesthetics of choice, although infiltration anesthesia

may frequently be employed in dealing with the smaller lesion. The entire mass should be removed by whatever method gives the best result in the hands of the individual physician, but the large excisions which remove the infected varicose tissue down clean to the muscle, represent the better method of caring for these lesions. The large triangular or racquet-shaped excision of the area will remove all of the pathologic tissues, and the internal or apex portion of the wound will heal before the external portion. Drainage is thus facilitated and bridging of skin or pocketing of tissues at the anus is avoided. Secondary fissure, ulcer, abscess, sinus and even fistula are avoided. These complications are known to follow when adequate drainage of the wound is not provided by the excision. This adequate removal of all the pathological tissue will result in a smooth anal margin.

PRURITIS ANI.

The present status of pruritis ani is reflected in the voluminous literature available on this condition. Nearly all articles contain an elaborate classification of the causes, such as, systemic, general, remote, reflex, allergic, toxic, and so forth. The list is always the same and it is published and republished year after year with the order and arrangement changed a little.

At this time I wish to state that, in the light of our present knowledge, it is my firm opinion that all cases of true pruritis ani are due to a local pathologic condition in or around the anorectum. Furthermore, these patients will be found to comprise four rather distinct clinical groups that will be encountered in actual practice, as follows: (1) Cases with morbid anatomy that is productive of abnormal anal moisture, discharge or uncleanliness; (2) parasitic infestations of the anorectum; (3) dermatological lesions (fungi, etc.); and (4) chronic pruritis ani of obscure origin (infectious).

MANAGEMENT OF PRURITIS ANI.

All patients should be studied and observed with sufficient diligence so as to eliminate them from the first 3 groups before they are placed in group 4. Time will not permit a detailed discussion of the procedures advocated, but a few points of interest will be mentioned. All infected hemorrhoidal tissue, infected sinuses, ulcers and fissures, and infected crypts are productive of a moist anal discharge. These lesions should be carefully evaluated and treated. The aid of a dermatologist may be necessary to determine the significance of a fungoid dermatosis. There are times when a vaginal discharge or a gynecological condition is responsible for a severe perineal and perianal irritation and the services of a gynecologist are indicated.

In dealing with patients with a pruritis of obscure origin, it seems obvious to even the most casual observer that the patient has

already tried all the fancy salves, pastes, lotions, etc. To this effect we must eliminate, as a secondary factor, a dermatitis medicamentosa which has been added to our original process. The elimination of the drugs is indicated whenever possible. The recent investigations of Hirschman, Tucker and Helwig, and others have emphasized the role of the anal crypts and ducts in infection of the perirectal tissues in particular and in focal infections in general. I would like to emphasize that many of these intractable cases of pruritis ani should be investigated regarding a local diffuse low-grade tissue infection which has originated in the anal crypts and glands. No single organism is the causative agent in the light of our present knowledge. Further details on theory and experimental work are omitted for the sake of brevity.

Our present method of treating these cases belongs to the field of injection therapy, and with our present impressive array of solutions advocated for pruritis ani we should select with extreme discretion and caution the one best suited to our needs. We are confronted with the question of choice of procedure and choice of solution to be used. In this respect I feel that the injection of some of our newer oil soluble anesthetics is of considerable value. In contrast to the alcohols and acids they exhibit a less frequent tendency to slough, and although their effects are often not as permanent nor as efficient they are probably the safest solutions now available to the general practitioner.

Technic of Injection and Results. The general technic of using the oil-soluble anesthetics in treating pruritis ani will be given. It will, of necessity, require modification to meet the requirements of the various solutions available.

After preliminary skin antiseptics a novocain wheal is raised either about 1 to 1½ inches distal to the anal margin or just external to the line of demarcation of the pruritis. By dividing the area into segments 1 to 6 sites of injection are used. The first site is probably best located in the posterior commissure. No oily solution is to be injected intradermally if we are to avoid skin slough. A fan-shaped smooth infiltration of the solution is done into the deep subcutaneous and cellular tissues so that approximately 1 to 3 cc. of solution is injected in a given area. "Pooling" of the solution is to be avoided as this is liable to produce localized suppuration. The injection is relatively painless depending upon the individual reaction. New areas are injected at subsequent visits to the office and old areas are not to be injected again within a month to 6 weeks. The duration of the anesthesia and the extent of the obliteration of the tissue spaces with the oil-soluble anesthetics will vary with every case. Anesthesia may last longer than 3 weeks, and the relief of the pruritis will vary. Many cases are permanently relieved of their itching but it seems wise to point out that we should not expect more than

80 per cent of our cases to be cured by this procedure. Recurrence should be treated accordingly. Complications are uncommon with the oil-soluble anesthetics but they do occur in the form of abscess, sloughing and painful induration. The first 2 should be afforded free and adequate drainage and the latter should be treated along palliative lines.

ELIMINATION OF POSTOPERATIVE PAIN.

The elimination of pain following rectal operations has been the quest of numerous investigators and we now have some occasion to feel hopeful that patients will be spared some of their undue suffering. Anorectal operations have enjoyed undesirable notoriety for years and it is common knowledge that patients will defer operation, or even consultation, rather than be subjected to the painful sequences of anorectal surgery.

If one is accustomed to do the ligature operation for hemorrhoids in which the base of the hemorrhoid is tied off and the remaining hemorrhoidal mass is excised leaving an open wound to heal by second intention, the following has considerable merit.

At the conclusion of the operation a small piece of gauze is soaked in a solution of eucupine base. This is a relatively nontoxic topical anesthetic of prolonged action which has, in addition, considerable bacteriostatic action. This topical application must be done before the general or spinal anesthetic has worn off. The gauze or cotton is pressed into wound and the solution is applied every 3 hours for 4 times following operation. Prolonged use may delay healing. The surface anesthesia thus produced is welcomed by the patient, and although its action will vary slightly it is an excellent addition to this field.

The deep infiltration of one of the oil-soluble anesthetics has considerable value following hemorrhoidectomy and operations for fissure and fistula. A perianal infiltration is used and 5 to 10 cc. of the solution is spread around the anus and under the open wound areas. It should be carefully used in the presence of suppuration, as in fistula. The solution may be injected either at the beginning or at the end of operation according to the choice of the operator. The general rules and technic as already mentioned under pruritis ani are applicable.

With the topical application of eucupine to open wounds and the infiltration of one of the oil-soluble anesthetics adjacent to the field of operation we have at our disposal 2 excellent procedures aimed at the elimination of post-operative pain. The patients are extremely grateful for these additions to this field. A very high percentage of them did not request or require a hypodermic of morphine or other narcotic for the relief of pain, although the order for such was left to be used freely as desired. No complication or untoward sequella has been encountered to date in a recent series of cases.

CARCINOMA.

In presenting the use of electrocoagulation in the treatment of carcinoma of the rectum to either physicians or patients, the advocate of its use should make himself perfectly clear lest any misconception of this form of therapy should occur in the minds of either the physician or the patient.

I feel that surgery, in the form of radical removal of the growth, continues to offer the patient the greatest chance of complete cure. In this respect we are constantly and impressively reminded of the number of individuals who lead an active and economically secure existence following radical removal of the rectum. The attitude toward colostomy is changing, and rightfully so, for a clean functioning colostomy is preferable to a leaking incontinent perineal anus. Especially is this true when, in the light of surgical experience, abdominal extirpation of a malignant lesion is preferable to incomplete perineal excision.

Although the status of radiation therapy in the treatment of carcinoma of the rectum and pelvic colon is constantly changing there still remains certain inherent difficulties incident to the treatment of malignancy in this region by either X-ray or radium. The selection of cases for radiation therapy must be determined by the physical condition and age of the patient, the size and location of the cancer, the grade of malignancy and its radiosensitivity, the structures invaded and the extent of metastasis. In return, the results may be evaluated upon these same principles and, in addition, in terms of duration of life and comfort of the patient. That there are some cases of malignancy of the rectum that are better off without either surgery, X-ray or radium is attested by the experiences of men like Binkley of Memorial Hospital in New York, Lockhart-Mummery of London, and others. A recent report by Daland on 100 untreated cases of rectal cancer is interesting in this same respect and you are respectfully referred to this interesting paper. The visualization of any malignant lesion of the rectum and pelvis should be accompanied by biopsy and the lesion should be graded, if possible, according to the method of Broders. While the radiosensitivity or radioresistant nature of a neoplasm, as determined in this way, is not an infallible guide to treatment, it does give us some basis for our future management of the case. Further discussion of the grading of malignancy belongs to the field of pathology and will be omitted for the sake of brevity.

Electrocoagulation has considerable to offer certain selected cases as we know that cancer cells are sensitive to heat. It is of value in treating malignant lesions in the aged and inoperable patients that now constitute the large group for whom nothing except an uncared-for colostomy is performed. Many individuals with other physical impairments contraindicated radical removal of the growth

may be enabled to spend their days in comparative comfort without the performance of a colostomy. The ideal that is hoped for in the conservative proper use of electrocoagulation is that properly selected cases, especially malignancies of grades 1 and 2, may retain the use of their anus until death from metastasis or some intercurrent disorder supervenes. It is possible to remove a considerable portion of the lesion invading the lumen of the bowel which has been producing partial or even complete obstruction by the use of electrocoagulation. In addition, the bloody purulent discharge with its attendant toxicity is greatly improved without any untoward local or systemic reaction sometimes encountered following radiotherapy. This process of "keeping the lumen open" is a useful procedure in the management of certain cases of rectal cancer. I am unable to subscribe either to its enthusiastic use in treating all malignant lesions of the rectum nor to its unjust condemnation by those unfamiliar with this field of therapy. The field of application is not wide; it is best adapted to cancers of grades 1 and 2, and in the light of our present knowledge it should not be extended to include the early operable lesions.

Let us consider the use of electrocoagulation in the elderly patient with an inoperable rectal cancer. The lesion has existed for some time and while obstruction is not imminent, considerable bloating and gaseous distention are present. The patient may be wearing a diaper during the day because his "piles" were bleeding. In addition, the patient may state that toward morning, around 4 or 5 o'clock, it is necessary for him to get up and go to the toilet where considerable mucus and bloody material are passed. Some will even have an involuntary passage in bed. At examination the lesion is found to have involved over two thirds of the circumference of the bowel and the lumen admits a bougie the size of a lead pencil. Biopsy reveals it to be of low grade. This patient is a candidate for a colostomy which will forestall any obstruction and which will also side-track the fecal stream. We are familiar with the decreased toxicity that follows as a result of this procedure. However, a considerable number of these patients will not be relieved of their discharge or their bleeding. Here, I believe that the judicious use of electrocoagulation is of considerable value. The removal of a large necrotic fleshy mass is followed by a decreasing discharge and an improvement in the patient's condition. The individual can be rendered free of his discharge and its attendant toxicity. He no longer wears a diaper and the nocturnal discharge and bleeding stops. The most important feature is that we are able to maintain a patent lumen and to avoid a colostomy in many of these cases until death occurs. Cure is neither attempted nor considered, but rather the maintenance of the normal route of defecation and the alleviation or eradication of some of the distressing symptoms are the aims.

The full value of electrocoagulation in the treatment of carcinoma of the rectum will be determined when sufficient time and experience have elapsed in its use so that it may be compared with other forms of treatment. If we evaluate our results in terms of duration of life and comfort of the patient, then this valuable adjunct in the treatment of rectal cancer should be accorded a definite place among the recognized fields of therapy.

—(*Medical Annals of the District of Columbia Feb. 1937*).

ACUTE MASTOIDITIS

BY M. P. SPEARMAN, M.D., AND W. E. VANDEVERE, M.D.,
El Paso.

(From Otolaryngology Service, El Paso-City County Hospital.)

Acute suppurative mastoiditis is practically always secondary to a suppurating middle ear. While it is taught that primary mastoiditis may occur as the result of tuberculosis, syphilis, traumatism, or following typhoid or pneumonia, it is rare indeed that the tympanum has not been involved. What are some of the causes of middle ear disease that may in turn lead to mastoiditis? Acute rhinitis undoubtedly leads the list. Scarlet fever, diphtheria, measles, influenza and typhoid fever often give rise to otitis media.

Early recognition and treatment of the acutely inflamed tympanum will many times prevent the occurrence of mastoiditis. When such symptoms as fever, pain in the ear and restlessness are coupled with signs of a reddened, bulging ear drum prompt intervention is indicated. Logical treatment consists in promoting thorough drainage of the infected middle ear cavity. Tympanotomy should be done and the resulting surgical wound, together with the external auditory canal should be kept open until drainage has ceased. No acutely inflamed ear drum should be allowed to rupture spontaneously, for by the time the tissue layers of the drum have necrosed, the infectious process may have passed on into the mastoid area.

Acute mastoiditis is an acute inflammatory process that originates in the antro-tympanic cavity and spreads from there to the mastoid cells proper. The inflammation passes through 3 fairly well defined stages: vascular engorgement and cellular infiltration, purulent state and osseous necrosis. These stages exhibit a wide variance in time of development. Thus, one case of mastoiditis may pass through these stages in a few days, while another may require weeks.

Common points in the diagnosis of acute mastoiditis are pain or tenderness in the mastoid region, associated insomnia, an elevation of temperature, quantitative changes in the aural discharge, such as abrupt cessation or sudden copious increase, bulging of the posterosuperior wall of the external auditory canal, slight to moderate leukocytosis, an increased to a complete cell destruction, as revealed by x-rays of the mastoid area, and auricular displacement—usually anteriorly, and found more often in children than adults. The proper interpretation and evaluation of these factors will point out the course of treatment indicated in the individual cases.

Measures of treatment of acute mastoiditis may be non-surgical or surgical. If non-surgical therapy is elected in a given case, dry heat applied to the mastoid area is vastly more correct than the application of an ice bag. Cold does not control the suppurative process—it only masks the symptoms. Tympanotomy, anodynes, rest in bed, and high fluid intake are other measures that may be adopted before one decide to operate. When surgery is decided upon, the simple type of mastoidectomy is the operation of choice in acute mastoiditis. The radical operation is usually reserved for more chronic inflammations of the mastoid or for eradication of neoplasms in the middle ear, and certain other well-defined indications.

The following case is cited principally because of its typical nature.

A Mexican female age 14, was admitted to the hospital complaining of pain behind the left ear of 4 days duration, and a foul, copious discharge from the left auditory canal, of one month duration.

About 5 weeks prior to admission the patient had severe cold, complicated by an earache. The ear was not examined by a physician at that time. During the course of this illness the ear-drum ruptured with purulent drainage. At times during the following 4 weeks the drainage nearly ceased, only to begin anew. At the time of admission the amount had been steadily increasing. Four days before admission there appeared a moderate amount of swelling behind the left ear, with a severe pain. The patient was seen by the family physician at this time and ordered to the hospital.

Findings on admission included temperature 101, pulse 120, leukocytosis of 14,200, 79 per cent polymorphonuclear cells, extreme pain and swelling of the left mastoid area, with no auricular displacement, copious foul purulent discharge from the left external canal and destruction of the left mastoid cells—revealed by the roentgenogram.

A simple mastoidectomy was done within a few hours after admission. The mastoid cells were completely necrosed. The area was bathed in a thick purulent exudate. A drain was inserted. The patient was discharged on the 10th post-operative day, completely healed.

SUMMARY.

The more common etiological factors in acute mastoiditis are reviewed, together with points in diagnosis of this condition. Brief mention is made of methods of treatment. A typical case of acute mastoiditis is cited.

—(*South Western Medicine*, Jan. '37.)

A CHOICE OF ANESTHESIA.

BY H. B. STEWART, M.D.

Tulsa.

As the title of this paper suggests, there is really and truly a choice to be had in this day of advanced medical science, when an anesthetic is selected for a proposed surgical operation. Anesthesia has kept pace with the other medical specialties in their rapid evolution and development of more scientific methods, drugs and technique. Indeed, it is a fact, that in very few branches of medicine has there been the remarkable improvement that has taken place within the speciality of anesthesia during the last two decades. The patient no more is compelled to take chloroform or ether without any alternative and the anesthetist has ceased to be limited to one or two anesthetic agents. Today we have many and varied substances from which to choose and our needs are more and more being satisfied in having a suitable anesthetic for most occasions.

In discussing this subject I shall speak from the trained anesthetist's point of view and with proper consideration for the surgeon and the medical man. I shall keep the patient's welfare in mind and at the same time make allowance for the surgeon's preference of certain types of anesthesia. I shall speak of the general practitioner's duty to his patient in preparing him for an anesthetic. I shall stress the fact that too often the family physician, the surgeon and the anesthetist choose an anesthetic to their own liking rather than one suited to the patient and the type of operation anticipated. And I want to emphasize, too, the truth that a patient does not always know the kind of anesthetic best suited for him and therefore should not always be allowed to dictate.

My experience has taught me that in dealing with children under six and eight years of age, nitrous-oxide induction with the addition of varying amounts of ether is the anesthetic of choice. In very small infants it is often desirable to give open drop ether. The reasons for ether with children are many. In the first place it is impossible to premedicate them as one does an older child or adult.

The high metabolic rate together with the rapid respiration make smooth relaxing gas anesthesia almost impossible. The fact that we do not like to give small children narcotics post-operatively is another reason why ether is desirable. The acute pain following surgery when a child awakens suddenly at the termination of an operation is quiet considerable. If some ether has been added with or without nitrous-oxide or ethylene the child will sleep long enough to be over the immediate shock and pain. There are exceptions to all rules and that applies here. Rib resections and the like, following immediately after some acute pulmonary process are best done under local novocaine or with light and short gas anesthesia. Paracentesis of an ear drum or the reduction of fractures of small bones are best done under gas alone, because these are not followed by pain but on the contrary by relief.

In older children up to the ages of fourteen or fifteen where pre- and post-operative narcotics can be given in sufficient amounts to produce desired results, I believe nitrous oxide and ethylene are the anesthetics of choice. The older the child and the nearer they approach the adult, the greater the incidence of pulmonary complications following ether anesthesia. There may be one exception here and that maintains with open mouth operations such as tonsillectomy. Ether given in such operations seems to be followed by less disagreeable after effects. Allow me to express myself here when I say I do not believe as some few maintain that chloroform is ever indicated in children, much less to be the anesthetic of choice for any surgical procedure.

As stated at the beginning when it comes to abdominal surgery in the adult, we to-day have many agents and combinations of agents which are highly satisfactory. They all have their indications and their contra-indications and have their field of selectivity. Here we must remember that in speaking of a choice of anesthetic we must necessarily refer to our own individual opinion on the matter and not the combined consensus of many men. We should keep in mind that each surgeon has his own personal likes and dislikes for different anesthetic agents—that medical men and others lean strongly toward some and very much abhor others. That is only human.

Acute surgical abdomens are practically always operated most successfully under spinal anesthesia. Novocaine is the agent of choice although spinocaine, nupercaine and the like are satisfactory in experienced hands. The reasons for the uniform use of spinal in abdominal surgical emergencies are most obvious. Acute infectious processes are always accompanied by varying degrees of muscular rigidity and therefore difficult to relax. A ruptured gastric or duodenal ulcer is characterized by a board-like rigidity of the abdominal muscles which are almost impossible to relax sufficiently under any other type of anesthetic. Lack of usual pre-operative

preparation tends to make the intestinal tract troublesome by being ballooned-up with gas. The tonic contracted state of the gut tract produced by spinal is next in importance only to the muscular relaxation produced. Patients who come to surgery with an acute surgical abdomen often times have food retained in the stomach and vomiting is not infrequently disastrous under inhalation anesthesia. Temperatures above normal and an excited patient are other conditions which make safe general narcosis difficult. When extreme shock with low blood pressure is present, spinal anesthesia should be employed with utmost care. In patients with extensive intra-abdominal hemorrhage and an accompanying low systolic pressure the same holds true. In such instances it is often wise to use a light gas anesthesia with novocaine injected at the site of operation to produce muscular relaxation. Intravenous therapy of saline or glucose solutions just before or during operation may change the risk from a very poor one to a moderately good one.

Abdominal surgery performed on those with chronic or sub-acute pathology present a somewhat different problem for anesthesia. These patients can be well prepared for their anesthetic and hence it is not so imperative that one technique be adhered to. Adequate pre-operative drug therapy can here be employed and the gut tract put in ideal condition. There can be some elasticity employed in selecting the anesthetic and the surgeon's personal preference can be considered. The mental attitude of the patient and the condition of his nervous system here can be properly evaluated. These things are all important in making a selection. Roughly speaking laparotomies can be divided into lower and upper.

I feel very partial toward spinal anesthesia again in surgery involving the pelvis or lower abdomen. Proper exposure is very essential here and the two things which permit this are muscular relaxation and a quiet contracted intestine. Spinal has no competition in producing the ideal conditions for easy, neat surgery in the pelvis. The intestine is handled very little and the post-operative course is certain to be smoother. If the patient seriously objects or if the operation is expected to take an unusually long time, avertin supplemented by gas is highly satisfactory. Avertin gives considerably added relaxation over straight gas and its post-operative effects are quite pleasant. Lack of nausea and early pain are its chief attributes here. But avertin does not contract the gut and its relaxing effect is quite variable. I feel that ether anesthesia for most any abdominal surgery has many bad features and certainly no redeeming ones except that most anyone can administer it with a reasonable degree of safety.

Upper abdominal surgery involving operations on the stomach and gall bladder require a different technique from pelvic surgery. In many instances spinal anesthesia is satisfactory but there are

several features which often present themselves and are disagreeable. Retching and straining are most common among these. Actual vomiting often occurs when pressure is made in the epigastrium. These things cause delays and imperfect exposure. Here is a perfect place for avertin, supplemented by ethylene. Very little gas is needed, the patient is kept nice and pink and the relaxation is usually highly satisfactory. The long sleep following avertin is the one factor which reduces the post-operative vomiting in these cases to a minimum and that alone is worth while. Avertin is contra-indicated in cases with serious liver damage or impairment of function. In poor surgical risks for high abdominal surgery I can recommend nitrous-oxide-ethylene supplemented by one-half per cent novocaine infiltrated in the recti muscles and peritoneum. If you have never tried it I would say you have a pleasant surprise in store for you.

Operations on the breast, the chest, wall or the pleural cavity are best done under nitrous-oxide or ethylene. Relaxation is not so important here and the advantages of gas over ether are too numerous to mention. Intra-thoracic surgery should be done with gas under positive pressure to prevent the accident of pulmonary collapse. There is one exception here as in children, namely, that rib resections for recent infectious processes should be done under novocaine field block. Nervous and apprehensive patients who fear general anesthesia can be given small doses of avertin previous to coming to surgery.

Surgery about the mouth and face where the application of a mask is awkward can be well done under avertin. Such operations as resection of the tongue, extensive lacerations of the face and plastic repairs are included in this group. Brain surgery can be done best under local anesthesia and where co-operation cannot be obtained avertin is a valuable aid. I should like to sound a warning against the use of avertin where blood is liable to slowly run down the trachea and make a pulmonary complication possible.

Spinal anesthesia is surely the anesthetic of choice in transurethral resections and operations upon the kidneys. Inhalation anesthesia is always more or less hazardous where the high frequency current is used. Those who have done nephrectomies and removed difficult stones under spinal with its extreme relaxation will tell you that they are loathe thereafter to work under any other type of anesthesia.

Short surgical procedures can nicely be done under sodium evipal. This anesthetic, administered intravenously, offers quick loss of consciousness, a short deep sleep, considerable relaxation and a sudden uneventful return to consciousness without any complications or sequelae. It is especially advantageous in emergencies and when application of a mask to the face would hamper the operator. If you want to get enthusiastic about it just give about seven and a

half grains to the patient suffering with a large peritonsillar abscess. In such cases an inhalation anesthesia is contra-indicated because of the frequent fatalities where serious impairment of the airway is present. It is highly recommended because of its ease of administration and its uniform good results.

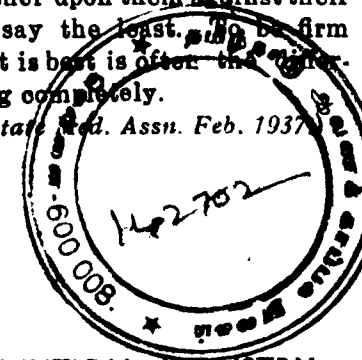
To gather together the remaining few odds and ends of surgical procedures I should like to say that the operations on the extremities are well done under nitrous-oxide or ethylene anesthesia. Caesarean operations are quiet satisfactory under the same technique. Rectal work not requiring profound relaxation should be given one of the gases. Low spinal or even caudal is advantageous in overcoming a resistant muscle.

Everyone has read and heard patients discuss the subject of some of the more serious post-operative results of spinal anesthesia. I believe most of them are greatly exaggerated and some of them are out and out myths. This procedure, like another technique, requires some skill and precision to prevent getting into trouble. High spinal punctures are dangerous and reckless, promiscuous jabbing at the canal may produce paralysis, paraesthesias and the like. I believe, that considering the large number of subarachnoid blocks done everywhere and by every sort of anesthetist, you will agree this procedure has about as low a rate of complications following it as any other technique in use today. To inject a patient and then walk away and leave them unsupervised is to be mentioned only to condemn it. Oxygen and carbon-dioxide inhalations are often helpful and occasionally intravenous therapy is necessary as elsewhere. Therefore it behooves the physician to disabuse the patient's mind that he does not have the same chance under spinal that he does under general narcosis.

I would not feel satisfied unless I said a word or two in closing directly referable to the general practitioner and surgeon. Lengthy and promiscuous discussion with a patient about their anesthetic usually brings about trouble and puts the patient "up in the air" so to speak. Often times the mere mention of the word "spinal" at some thoughtless moment will abuse the patient's mind about the procedure and ruin your chances of giving the patient the anesthetic of your choice or the one best suited for his operation. In these days when patients are prepared with barbituric acid derivatives and opiates before coming to surgery they seldom are aware that the anesthetic has been given and regard the procedure as a part of the operating room technique. If they do not insist upon knowing what anesthetic you propose to use I see no good reason for getting them stirred up by explaining it to them. If they do ask it seems to me the sensible thing to do is to explain briefly and tact-fully, leaving with them the thought that you are going to do the best thing for their welfare. Instead of putting the proposition before a patient in

the form of a question if you will just state that you are going to give them such and such, they will frequently never offer any argument. To assure them that any procedure you decide upon will be done with skill and comparative ease is to sell them upon the anesthetic you have in mind. To force one kind or another upon them against their will is poor psychology and practice, to say the least. ~~But~~ be firm however in insisting that you know what is best is often the difference between putting it across and failing completely.

(Journal of the Oklahoma State Med. Assn. Feb. 1937)



THE DIFFICULTIES OF PHARMACEUTICAL INDUSTRY IN INDIA.

BY RAJ MITRA BHAILALBHAI D. AMIN, B.A., M.S.C.I. (LON.),
Managing Agent & Director, The Alembic Chemical Works Co., Ltd.,

If there is any industry in India which does not receive the slightest encouragement from the Government of the Country, it is the Pharmaceutical Industry, though by general admission this industry is primarily based on public health which should be the first concern of Government. I have been connected with this industry for nearly thirty years now and I may state from long personal experience that the attitude of Government has been positively discouraging.

The Alembic Chemical Works Co., Ltd., of which I happen to be the Managing Director has specialised in the manufacture of spirituous pharmaceutical preparations and I desire to mention here some of the difficulties we have had to contend with from the start to establish ourselves firmly in the field. The policy of Government has been very unsympathetic all along; and it is only by a miracle that an industry can survive against it.

The first difficulty of an indigenous manufacturing firm arises from the prejudices of Government Medical Officials. The higher officials have been mostly Britishers and they started with the belief that Indians could never be able to manufacture medicines of the necessary quality and purity. From the very first, therefore, they insisted upon the use of imported medicines only in hospitals and dispensaries, and that policy was systematically followed to the detriment of the Indian industry.

It was indeed a long and uphill task for the indigenous industry to convince these Government Medical officials that reputed Indian firms were capable of producing medicines of high quality, and my

SL
L: 4 : 7m N3140 N37.6.8

firm the Alembic Company, though it spent continuously large amounts on research to perfect the products, and secured the best testimonials from the highest authorities, was put as it were in the black list of Government for a considerable time.

The position even now has not entirely cleared. Under one pretext or another, the Government hospitals are purchasing all their requirements of medical stores from the Government Medical Stores, instead of from private manufacturers of proved repute. Even in the case of non-Government public and charitable dispensaries and hospitals, whose purchases are controlled by Government Medical Officers systematic efforts are made to give preference to manufactures produced by the Government Medical Stores.

The Alembic Company has been agitating long for the removal of this disability and succeeded to some extent after a great deal of effort. Rules are framed continuously by Government to put obstacles in the way of manufacturers and restrict their market by monopolising the market controlled by Government for Government Medical Stores. The latest instance of this kind is the Rule framed by the Bombay Government compelling all charitable hospitals and dispensaries to purchase their requirements of narcotic medicinal drugs from the Government Medical Stores only.

The Government Medical Stores was started years ago by Government for the manufacture of medicines of various sorts, and in the early stages when there were practically no private manufacturers in India it did fulfil a purpose. But as private industry grew and developed, there was less and less reason for the Government to continue their own venture. The Indian Drug Enquiry Committee which went into this question during the years 1930 and 1931, clearly recommended that Government should purchase their stores from the private manufacturers and should steadily restrict the activities of their own enterprise. But this recommendation is observed more in the breach than in the observance.

It is interesting to note that because Government Medical Officials were prejudiced against medicines manufactured by Indian firms, private medical practitioners for a long time have laboured under the same prejudice. No industry can survive unless it finds outlet for its products, and as long as such prejudice exists against Indian-made products, the Indian industry has no hope. The Alembic Company has had to pass through severest times and the hardest stresses, and has been fortunate enough to survive for special reasons. Who knows how many firms with the best prospects and deserving success, have gone down under these difficulties?

This then is one aspect of the question and every new enterprise in the pharmaceutical industry will have to contend with it. But even if this prejudice of Government is overcome, there remains the excise policy of Government which plays havoc and has been

the source of the chief troubles of the Industry. I shall explain what I mean.

The excise policy of Government was originally framed to apply to potable drinks. The manufacture of spirituous medicines as such did not exist at the time. But even after the industry grew, the same policy is applied to spirituous medicines also as if they are potable drinks.

The excise policy, when it is applied to spirituous medicines should undergo material modification. The first principle to be observed is that the excise duty on these spirituous medicines should be as low as possible. If it is high, medicines of standard quality and the requisite strength are rendered costly and are therefore beyond the purchasing power of the people. They are thus driven to use inferior and adulterated medicines because they are cheap. Traffic in such adulterated medicines has increased greatly of late, in this country, and public health has suffered.

Excise is a provincial subject and provincial Governments have not given sufficient attention to this question. Some of the provincial Governments, for example the Bombay Government, have levied high excise duty on a large number of spirituous medicines and have thereby taken them beyond the consumption of ordinary people. It is generally held that the excise duty on spirituous medicines should not exceed Rs. 5 per proof gallon but it is as high as Rs. 25-10-0 in Bombay.

Then in regard to the excise restrictions on the transport and movement of these spirituous medicines. As each provincial Government has its own set of excise rules, the transport and movement of spirituous medicines between province and province is not free but is governed by a strictly enforced system of import permit. That is to say, no man can import medicines from one province to another without first securing an import permit from the Excise authorities of his province, and for securing this permit he has to prepay the excise duty on them by himself stating in the application the proof strength and spirit content of the articles he wants, which it is hardly practicable for him to do. Moreover, the consignments are verified at the place of destination. The whole procedure is very vexatious and dilatory and forms the greatest impediment to business.

In this lies the greatest check to the industry. Compare with this, the treatment given to the products imported from overseas. Once the tariff duty is paid on them at the port of entry, they can move freely throughout India. Our own indigenous products must enjoy a similar privilege and must be put on the same footing as the imported products.

I have always held that with a view to achieve this object, the excise policy regarding spirituous medicines must be uniform

throughout India, and after trying all constitutional methods with the provincial Governments, I finally approached His Excellency the Viceroy, Lord Linlithgow with an appeal to take the matter in hand and bring about uniformity in excise policy. I also submitted to him a comprehensive Memorandum on the Industry discussing its needs and difficulties.

The wheels of Government are moving very slowly, and continuous efforts have still to be made. But I am not a man to be disappointed and to give up the situation as hopeless. I have passed through worse times and seen light, and I am sure we shall similarly see light as we persist in endeavours. The fruits of the agitation I have been carrying on are slowly becoming visible.

My only regret is that though this is a general question affecting the whole of the industry as such, I am not getting co-operation from others, and I have to fight as it were, single-handed. If all those engaged in this great industry were to combine and make concerted efforts, success will not be long in coming. But while all others equally interested in the industry stand aside, it is indeed an uphill task for one man or one firm to stand all the stress and the strain of the mighty efforts that alone can bring the goal nearer day by day.

Extracts.

TREATMENT OF SPRAINS BY INTERLIGAMENTARY INJECTION OF NOVOCAINE.

RENE LERICHE AND G. ARNULF.

American Journal Surgery, XXXII, 45, April, 1936.

The authors advocate local injections of novocaine into the ligaments of joints which are the seats of injuries or post-operative strains. They believe that a sprain is the reflex consequence of trauma, and specifically is the result of a distortion of the nervous apparatus present in articular ligaments. The technique is injection of ten to twenty cubic centimeters, according to the importance of the articulation, of a one per cent solution of novocaine into the region of the traumatized ligament at the spot of maximum tenderness. Care should be taken to inject the ligament itself. In the case of the hip, a long, flexible needle is carried to the femoral neck and withdrawn about one centimeter, and the injection is then made. In this manner more rapid and complete restoration of function can be obtained. Best results are obtained in cases of simple sprain with articular impotency and the after-effects of sprain, such as pain and muscular atrophy, and in cases of operative sprain of ligaments following orthopaedic operations or manipulations.

TUMORS OF THE OVARY. A STUDY OF 1,101 CASES OF OPERATIONS FOR OVARIAN TUMOR.

BY PHINEAS BERNSTEIN, *New York.*

American Journal of Obstetrics and Gynecology, December, 1936.

This is a very detailed report made from the material at the Mount Sinai Hospital during the period from 1924 to 1935. The following conclusions well summarize the extensive statistical information in the body of the article:

"1. A single complete analysis of clinical and pathologic data from a large number of ovarian tumor operations is warranted, since no such report appears in the literature. The facts, of interest to the surgeon and clinician, justify publication.

"2. *Frequency*: The simple and dermoid cysts are first and second in order of incidence. Papillary serous cancer occupies a position of hitherto unreported high frequency, namely third; it constitutes eighty per cent of all ovarian cancers, and is four times more frequent than its benign form. It is fourteen times more frequent than the pseudomucinous cancer of the ovary.

"3. *Malignancy Incidence*: 17.3 per cent of all ovarian tumors are malignant; ninety-five per cent of these are cancer and five per cent sarcoma.

"4. *Age Incidence*: Fifty-eight per cent of all ovarian tumors are in patients between twenty and forty years; thirty per cent are over forty years and twelve per cent under twenty years.

"Sixty-seven per cent of cancer and seventy per cent of sarcoma were in women over forty years; twenty-two per cent of cancer was in patients between twenty and thirty years. Sixty per cent of benign serous tumors are in patients over forty years.

"The fourth decade contains thirty-one per cent of ovarian tumors, the third decade twenty-seven per cent and the fifth decade nineteen per cent. Simple cysts predominate in all three decades.

"5. *Marital Status and Parity*: Seventy-five per cent of tumors of the ovary are found in married patients; eighty-one per cent are benign and nineteen per cent malignant; forty-three per cent of married women with ovarian growths were parous; thirty per cent of malignant tumors were in parous women.

"6. *Menses*: Normal menses occur in 54.3 per cent of patients with ovarian tumors; hyperfunction bleeding in 26.5 per cent and hypofunctional bleeding in 17.9 per cent.

"In view of the present knowledge with regard to the ovarian effect on menstruation, the high incidence of normal menses is notable.

"Eleven per cent metrorrhagia, 12.3 per cent menorrhagia, and 3.3 per cent menometrorrhagia; and 12.3 per cent menopause, three per cent secondary amenorrhea, and two per cent oligomenorrhea, are the figures obtained.

"In fifty-eight per cent of menopause patients malignancies were found. Thus a climacteric patient with an ovarian tumor has a fifty-eight per cent possibility for cancer. Eighty per cent of all malignancy occurs in menopause women.

"7. *Dysmenorrhea*: The incidence of this symptom was only fifteen per cent.

"*Metastases* are noted at operation in seventy-six per cent of ovarian cancer patients; eighty per cent of these are due to papillary serous cystadenocarcinoma. The insidious character of an ovarian malignancy is indicated by this figure, as well as the difficulty in an early diagnosis.

"Twenty-six per cent of metastases are found in the gastrointestinal and peritoneal systems. The gynecologic tract and omentum contain sixteen per cent and eleven per cent, respectively. Lymphatics, genito-urinary and respiratory systems, and various organs are found to have the remainder of foci.

"Ascites incidence is fifty-four per cent in malignancy; ninety-five per cent of this finding is caused by papillary serous cystadenocarcinoma; seventy-one per cent have clear fluid, twenty-two per cent bloody, and seven per cent purulent fluid.

"9. *Symptoms* Pain constitutes forty-four per cent of all symptoms; seventy-five per cent of ovarian tumor patients have this complaint. It is not usually severe even in the late stages of carcinoma of the ovary, and is twenty-five per cent more frequent among the benign tumor cases.

"Gastro-intestinal symptoms, principally nausea and vomiting, constitute only nineteen per cent of complaints; eighty per cent of these occur among the benign tumor patients; eighty-eight per cent of intestinal obstruction is produced by cancer.

"Sixteen per cent of all symptoms and signs, totaling 1,814, are represented by abdominal manifestations; seventy-two per cent are in benign tumors. Twenty-one per cent of patients had an abdominal mass, thirty-five per cent of which was attributed to cancer.

"Respiratory symptoms are due only to the cancer metastases, and bladder complaints are caused by benign tumors in sixty-eight per cent of instances.

"Eighty per cent of all signs and symptoms are due to benign tumors.

"10. *Site of pain and tumors*: Seventy per cent of pain was in either the right, left, or bilateral lower quadrants; eighteen per cent was bilateral, the remainder was divided equally among the right and left lower quadrants. Twenty-one per cent of tumors are bilateral, forty-four per cent right and thirty-five per cent left; fifty-five per cent of malignant tumors are bilateral.

"Thus, sixty-one per cent of right side and seventy per cent of left side tumors cause homolateral pain, while eighty per cent of bilateral tumors cause bilateral pain.

"11. *Sedimentation Time*: The significance of this test is stressed in inflammatory, degenerative, and infective processes."

Comments: Statistical studies are frequently not interesting reading and are apt many times to be misleading, but the report on this large group of ovarian tumors contains much valuable information for the individual who carefully studies it.

LOCAL MEDICATION OF UPPER RESPIRATORY TRACT.

Clyde A. Heatly, Rochester, N. Y. (Journal A.M.A., December 1936), declares that the use of local medications by the general practitioner in the treatment of diseases of the upper respiratory tract should be restricted for the most part to acute infections. It is to be emphasized that attempts to treat chronic disorders by such measures are fraught with serious danger until the diagnosis of the underlying pathologic condition has been thoroughly established. This as a rule requires examination by a specialist in this field. All too frequently cases are encountered in which local medications have been carried out over long periods before a serious underlying infection or new growth has been discovered. The resulting loss of time commonly leads to serious or even fatal consequences. In the early stages of acute pharyngitis the local application of silver nitrate (from five to twenty per cent), mild protein silver (ten or twenty per cent) or Mandl's solution often gives relief. Vigorous swabbing, however, should be avoided. Gargles, so frequently prescribed, are often useless, especially in children, because the contraction of the tongue and pharyngeal muscles prevents the solution from reaching the inflamed parts. They may, however, be used in the form of salt and soda, one-half teaspoonful each in a glass of warm water or Dobell's solution, 2 tablespoonfuls in a glass of warm water. In the more severe infections the use of hot salt and soda irrigations will be more effective. Lozenges containing small quantities of menthol, camphor, guaiac and codeine, orthoform tablets or calcidin-anesthesin troches lessen the discomfort in mild cases. In acute tonsillitis the most effective local treatment consists in irrigation of the throat every two hours with a warm solution containing one teaspoonful of sodium chloride and sodium bicarbonate in one pint of water. Warm dextrose solution (fifty per cent) made

with "Corn Syrup" one part and water two parts is also effective. When irrigations are not possible nor well tolerated a similar warm solution of salt and soda, potassium permanganate (1:5,000 solution) or acetylsalicylic acid (five tablets crushed in a glass of water) may be used as a gargle. The practice of frequent and vigorous swabbing is decidedly not recommended. In the common acute infectious disease fusospirochetal angina, silver nitrate (from ten to twenty per cent), tincture of iodine, chromic acid (five per cent), copper sulphate (ten per cent), gentian violet, methylene blue, acriflavine base and mercurochrome have all been used successfully. The therapeutic indications in acute laryngitis require the control of inflammation, the release of spasm and the relief of obstructive dyspnea. Steam inhalations to which compound tincture of benzoin (one teaspoonful to a pint of water) is added constitute the most helpful local treatment. Menthol (0.65 Gm.) may be similarly employed. These may be given directly at three hour intervals and a steam kettle should be kept going constantly in the room. Few ear conditions are suitable for treatment by the general practitioner. In acute external otitis (boils) the external auditory canal may be gently cleaned with alcohol and then packed lightly with a narrow gauze wick soaked with aluminum acetate (saturated solution), ichthammol in glycerin (ten per cent) or mercuricin (prescriptions E, F and G). Heat should be applied as constantly as possible and gives great relief. Vaccines may be of value in recurrent cases. Fungus infections (otomycosis) are best controlled by daily instillations of a two per cent solution of salicylic acid in alcohol (seventy per cent) together with the administration of potassium iodide by mouth. Infections caused by *Bacillus pyocyaneus* respond to acetic acid (two per cent solution). When earache is due to an acute catarrhal inflammation of the tympanic membrane, warm drops of phenol in glycerin (from five to ten per cent solution) repeated if necessary at three hour intervals for two or three doses often give relief.

Medical Notes and News

XIV ALL INDIA MEDICAL CONFERENCE.

It has been decided to hold the 14th session of the All-India Medical Conference, this year, at Madras during X'mas week (probable dates being 26th to 31st December '37). The aim of this conference is to bring together medical men from all over India on a common platform, to discuss and formulate their views, on matters of vital importance to the medical profession.

THE CONFERENCE WILL HAVE THREE SECTIONS.

1. *The General Section*: In which matters relating to Medical Education and Medical Relief, Public Health and Sanitation, Medical and Medico-social legislation etc. will be discussed.
2. *The Scientific Section*: In which purely professional and scientific papers will be read and discussed, thus affording an excellent opportunity to members to exchange views with their medical brethren from all over India.
3. *The Exhibition Section*: In which, firms dealing in Surgical goods and Hospital requisites, Drugs and patent medicines. Health and sanitary wares etc. will be afforded an opportunity of displaying their goods.

It is our ardent desire that this Conference, which is the first of its kind to be held in Madras, should be an unqualified success. To achieve this end, we appeal to all medical men and medical Associations, in the city and in the mofussil, to join the Reception Committee in large numbers and to contribute scientific papers on general subjects or on their specialities.

For this purpose, it is proposed to hold a meeting of all medical men of Madras and mofussil on the 28th Aug. 37 at 5-30 P.M. at "Gana-Mandir" No. 10, Thambu Chetty Street, G. T., Madras. At this meeting, the Reception Committee will be formed. Members wishing to join the Reception Committee are requested to send to The Secretary, Indian Medical Association (Madras Branch), 20, Thambu Chetty Street, their names and membership fee of Rs. 10/- before the 21st Aug. 37. The election of the Chairman and other Office bearers of the Conference will take place at this meeting and only those who are members of the Reception Committee will be entitled to vote for these elections.

The various medical Associations are requested to send in their representatives to be present at this meeting and express the views of the respective Associations.

M. SUBRAMANIA IYER, M.B., C.M., V. D. NIMBKAR, F.R.C.S.

President, South Indian
Medical Union.

President, Indian Medical
Assn. Madras.

U. RAMA RAU, M.L.C.

President, All-India Medical
Licentiates' Assn. Madras Branch.

A. LAKSHMANASWAMI MUDALIAR,
B.A., M.D., F.C.O.G.
President, Madras Medical
Association.

THE TINNEVELLY DISTRICT MEDICAL ASSOCIATION, PALAMCOTTAH.

(Affiliated to the Indian Medical Association).

*Reception to the Honourable Dr. T. S. S. Rajan, L. R. C. P. (Lond.).
M. R. C. S. (Eng.), Minister in charge of Medicine and Public Health
by the Tinnevelly District Medical Association.*

The Tinnevelly District Medical Association gave a Reception to the Hon'ble Dr. T. S. S. Rajan, L. R. C. P., (London), M. R. C. S. (England), Minister in charge of Medicine and Public Health with the Government of Madras, on Sunday the 8th of August 1937, at 5-30 p. m. at the St. John's College, Palamcottah.

The function began with a Tea Party given by Lieut. Col. T. S. Shastri, I. M. S., the President of the Tinnevelly District Medical Association and about one hundred members of the Medical Profession including 76 members of the Association attended the meeting. Dr. K. Narayanaswami Iyer, L. M. & S., Civil Surgeon, Tuticorin, and many of the members of the Independent Medical Practitioners' Association of Tinnevelly also attended the function on invitation. Among the non-medicals the following gentlemen attended the meeting :—

Mr. V. Ramakrishna, I. C. S., Collector of Tinnevelly,
M. R. Ry. Rao Bahadur I. C. Iswaran Pillai Avl., and
Mr. Daniel Thomas, B. A., and the Commissioners of
the two Municipalities of Tinnevelly & Palamcottah.

During Tea, Lieut. Col., T. S. Shastri, I. M. S., took the Hon'ble Minister round and introduced every member to him.

Dr. L. Mahadevan, M. B. B. S., (Madras), D. O. M. S., (London), one of the members of the Association entertained the gathering with Music on "Gottuvadyam". Then Lieut. Col., T. S. Shastri, in a short speech welcomed the Hon'ble Dr. T. S. S. Rajan. In his speech he made mention about Dr. T. S. S. Rajan's abilities as a Medical Man and his services to the Country. He also gave a short sketch of his career from the time of his College Studies upto his becoming the Cabinet Minister in charge of Medicine and Public Health.

Then the Hon'ble Minister Dr. T. S. S. Rajan, delivered his address. He mentioned that Surgery is the easiest thing to practice, if one knows what he is doing and what to do when he is encountered with difficulties. He laid emphasis on a clear knowledge of practical Anatomy, before one takes to Surgery. He again mentioned that Surgery is the cheapest thing to practice as the capital investment is not more than Rs. 1,000 to start with. He laid stress on the self-confidence of the person who practices. Surgery, without which very little can be done. He said he has taken up the Cabinet Ministership with great reluctance because he liked Surgery much more, and that he would like to continue to do surgery as long as his

hands can hold the scalpel steadily. But he said the call of the Country has got a greater claim, and so he had to respond to it. He referred to some of the common surgical ailments like strangulated hernia and appendicitis, which any man of proper medical training must be able to tackle successfully in any village, depending on boiling as the means of sterilisation.

Then Dr. T. N. Govinda Iyer, M. B. & C. M., proposed a hearty vote of thanks to the Hon'ble Dr. T. S. S. Rajan, for his readiness in accepting the invitation of the Tinnevelly District Medical Association. He also thanked Colonel Shastri, I. M. S., for his kindness in organising this most enjoyable function and entertainment and also proposed a vote of thanks to all the members and other medical men and non-medical guests.

CHANGE IN ATTITUDE OF THE SERVICES.

HELPFUL CO-OPERATION FROM GOVERNOR—DR. RAJAN'S SPEECH AT MEDICAL UNION.

The Members of the South Indian Medical Union accorded a reception on 5th Aug. to Dr. U. Rama Rao and Dr. T. S. S. Rajan at the Madras Medical College grounds. The function was attended by a large number of Medical Practitioner.

Dr. M. Subramania Ayyar, President of the Union in welcoming the guests referred to their great sacrifice in the service of the motherland.

Replying to the welcome, Dr. U. Rama Rao said that he believed that medical men should take a greater interest in public life than they did at present and if a large number of them got into the Legislatures, the interests of the profession could be safeguarded. He was glad that Dr. Rajan had been made Minister of Public Health and Medicine and they could look forward to great improvements during his period of office.

DR. RAJAN'S REPLY.

Dr. T. S. S. Rajan, replying stated that the felicitations that he received from the members of the medical profession encouraged him very much.

Proceeding Dr. Rajan said that before accepting office they had thought that there would be tremendous opposition from the members of the Services, because they imagined that they were trained to a particular form of discipline and perhaps might not adjust themselves easily to new circumstances. Experience of half-a-month in the Cabinet had shown him how adaptable the Services were and given the right view how well could they adjust themselves to the new task that had devolved upon them. His Excellency the Governor had assured the Cabinet of every co-operation and sympathy and he was not letting out any secret of the Cabinet in informing them that His Excellency had been their friend, guide and philosopher during the fifteen days they had been in office. He

was sure that the atmosphere now prevailing would conduce to the best conditions for vast progress in the country. If any evidence of good-will were at all wanting the interview of Mahatma Gandhi with His Excellency the Viceroy would show how political life in this country was shaping. They were very safe in the decision in having accepted Cabinet responsibility. Dr. Rajan assured the Services that they would have the best and fairest treatment they could expect at their hands.

ASSURANCE TO PRIVATE PRACTITIONERS.

Continuing Dr. Rajan said that private medical practitioners were a growing number whose claim for a share in the Services of the country had got to be recognised. They should be given all the opportunities for service which public institutions, like hospitals could afford. With the sympathy support and advice of the Departments concerned, they were hoping to tackle the problem to the best of their ability. Service codes, claims of other departments and needless red-tape had prevented the building up of hospitals particularly at a time when the Government had Rs. 16 to 18 lakhs in their pockets to give away to Hospital buildings. It was a sad thing that having had money in their pockets and having had a person able to carry out the work in Sir Frank Connor, nothing was done for four years. That was the tragedy of the situation which he wanted them all to understand. If they did that they would realise what a poor Minister's position was in the constitution to day. He hoped that with a substantial elected majority and with a Cabinet absolutely united to a man and having as the head of the Province one who completely understood them they would be in an advantageous position. He was therefore confident to do more than what had fallen to the lot of Sir Frank Connor.

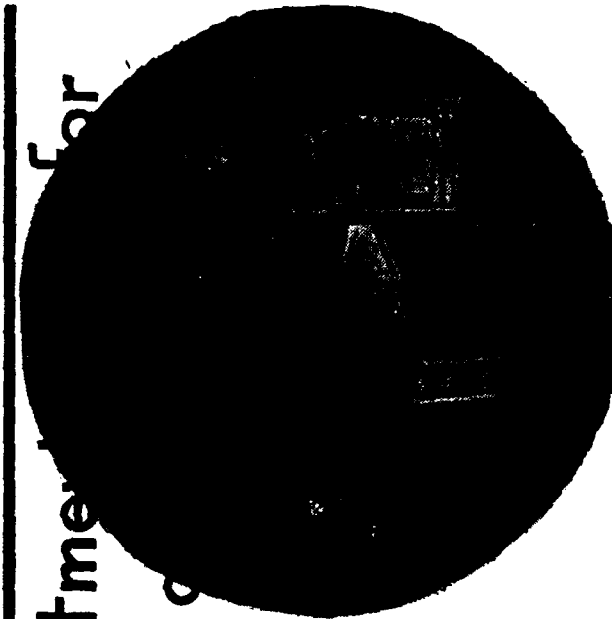
With a vote of thanks proposed by Dr. T. Satagopan, the function terminated.

RE-ORGANISATION OF I. M. S. CALCUTTA PROTEST.

The following resolution was passed at a special general meeting of the Calcutta Medical Club in connection with the proposed re-organization of the I. M. S. :—

The Calcutta Medical Club strongly condemns the policy of the Government of India underlying the proposed re-organisation of the I. M. S. as it involves the pernicious principle of highly objectionable racial distinction in the administration, resulting in practical elimination of the Indian members and perpetuation of the European element in the service.

When the treatment is for
a preparation of



Alembic ELIXIR VALERIAN BROM
is a soothing and hypnotic preparation
that may be used in every day practice.
It is not so dangerous as the hypnotics
of the Barbitol group. It is useful in all
excitable conditions of nervousness
such as Epilepsy, Hysteria etc.

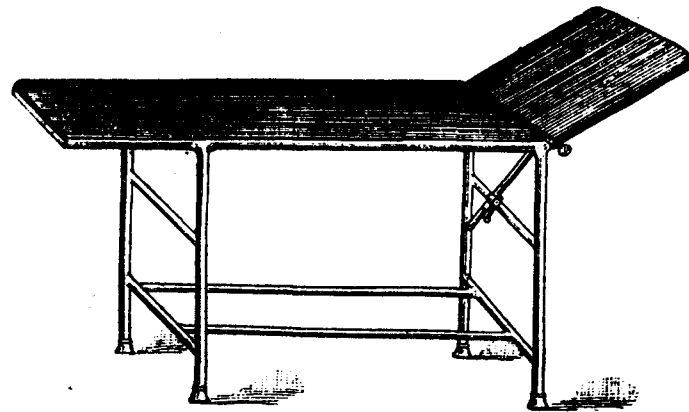
Alembic

ELIXIR VALERIAN BROM

Alembic Chemical Works Company LTD.
BOMBAY BARODA MADRAS

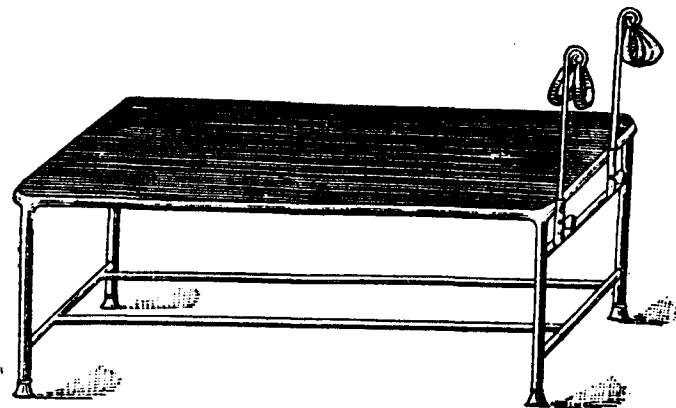
When ordering please mention *Medico-Surgical Suggestions*.

HEBBAR BROTHERS, LTD.,



Aseptic Ophthalmic Operation Table.

Made of tube steel, oxyacetylene welded and white enamelled with adjustable head piece. The top is fixed with pure polished zinc sheet. This table may be used as an out-patients' Operation Table or Dressing Table.



Aseptic Maternity Board.

Made of tube steel, all joints oxyacetylene welded and white enamelled, with pure polished zinc sheet top and heavily nickel plated leg rests at one end of the board.

HEBBAR BROTHERS, LTD.,

MANUFACTURERS OF

SURGICAL INSTRUMENTS AND ASEPTIC FURNITURE

246, THAMBU CHETTY STREET, G.T. MADRAS.

When ordering please mention *Medico-Surgical Suggestions*.

**Reach the
Medical Profession
Every Month
By Advertising**

In

MEDICO-SURGICAL SUGGESTIONS.

(Wanted Agents to Canvas Advertisements.)

NOBEL 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 Anaemia."

"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.

For samples and literature apply to :—

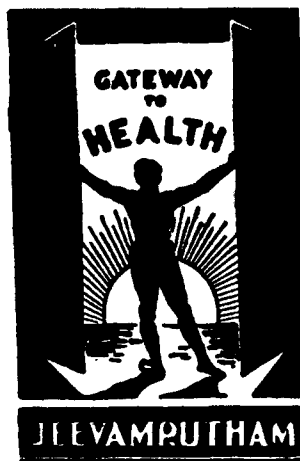
YASMIN & Co.,

10, Churchgate St., Bombay.

When ordering please mention *Medico-Surgical Suggestions*.

Jeevamrutham.

(The Perfect Health-giver.)



Weakness, nervous debility, Anæmia, Loss of Vitality, Palpitation of heart, Loss of Vigour, Bloodlessness, are all dispelled by this ideal tonic restorative. JEEVAMRUTHAM opens the gateway to Health. Eminent physicians of both systems prescribe this for successful results.

Available with your Chemist
in two sizes.

Bala Bhaskara.

(For Children's Liver & Spleen Disorders.)

Enlargement of Liver and Spleen in Children with every other allied abnormal symptoms find a radical cure with this unparalleled specific. Indicated in cases of deranged and congested Liver, Inflammation of the abdomen, Oedema, Jaundice etc. The only successful treatment found by many medical men. A product of Pandit D. Gopalacharlu.



Available at all chemists in two grades.

Manufacturers :

AYURVEDASRAMAM,

Post Box 287.

MADRAS.

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 under the auspices of the
PATNA MEDICAL ASSOCIATION*

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

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

With an Editorial Board Consisting
of Eminent Members of the
Profession

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

INLAND.	FOREIGN.
Per Copy Re. 1-0-0.	sh. 1/6.
Annual Rs. 3-0-0.	sh. 4/6.

**Best Medium of Advertisement for
Medical, Surgical & Scientific Pro-
ducts, Instruments and appliances,
etc., etc.,**

For further particulars apply to :

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

THE INDIAN & EASTERN DRUGGIST

*The only Journal cat-
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.

Hebbbar Brothers, Ltd.,

246, Thambu Chetty St.,

MADRAS.

When ordering please mention *Medico-Surgical Suggestions.*

JL
L:4 : 7m N31 M0 N37-6-8

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.

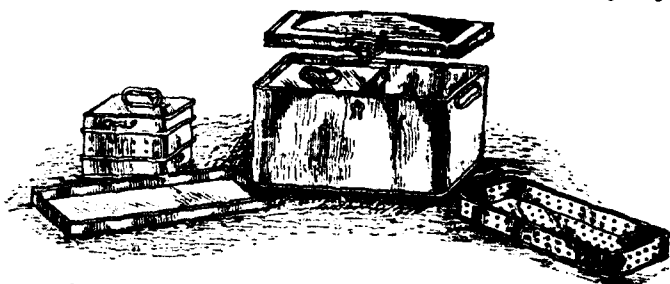
Published on the First Day of the Month

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.*



Sterilisers for instruments and dressings combined, with one instrument tray and two dressings 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.

HEBBAR BROTHERS LTD.,

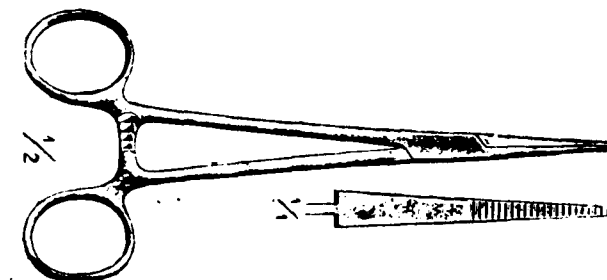


Fig. 3010.

Fig. 3010. Tonsil artery Forceps Berket's as used in General Hospital. Steel nickel plated.

Fig. 3011. Tonsil artery Forceps Berket's Stainless Steel.

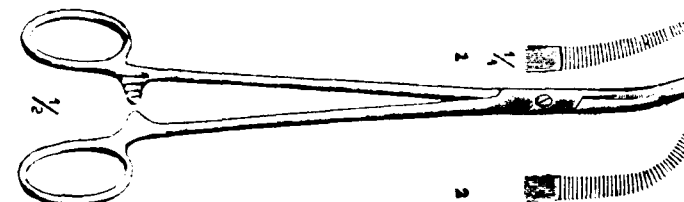


Fig. 3012.

Fig. 3012. Tonsil artery Forceps curved on flat, 1 or 2. Steel nickel plated.

Fig. 3013. Tonsil artery Forceps curved on Flat, 1 or 2. Stainless Steel.



Fig. 3014.

Fig. 3014. Tonsil Dissector, Durham, fine double ended, Steel nickel plated.

Fig. 3015. Tonsil Dissector same as above, Stainless Steel.



Fig. 3016.

Fig. 3016. Tonsil Dissector and pillar retractor, Steel nickel plated.

Fig. 3017. Tonsil Dissector and pillar retractor, same as above. Stainless Steel.



Fig. 3018.

Fig. 3018. Tonsil Dissector Forceps, Waughs—Steel, nickel plated 8" long.

Fig. 3019. Tonsil Dissector Forceps, Waughs—Stainless Steel 8" long.

246, Thambu Chetty Street, Madras.

Indispensable for
E. N. T. SURGEONS.

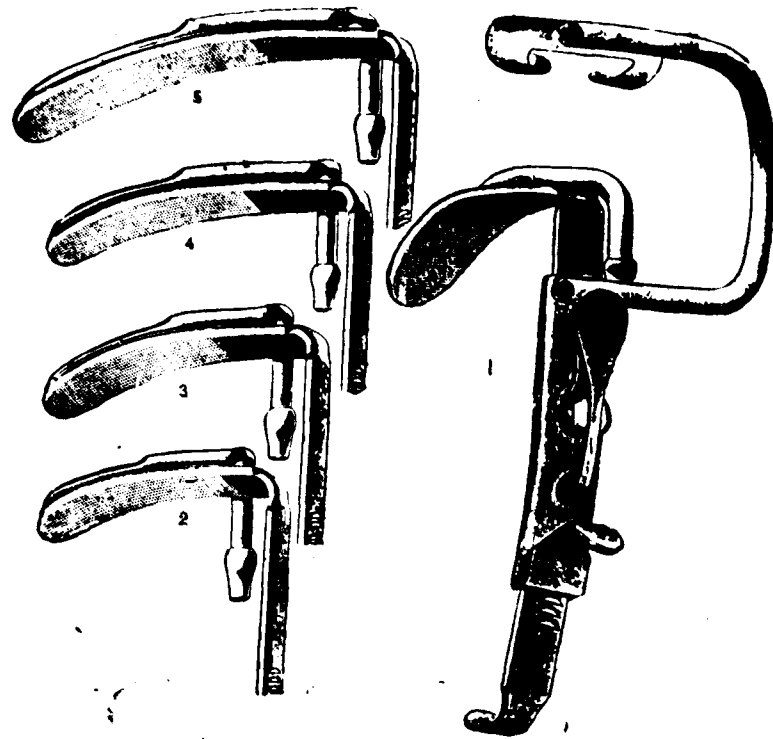


Fig. 3020.

Fig. 3020. Mouth Gag and Tongue Depressor, Boyle Davis—combined, complete with five assorted tongue Depressors, each fitted with tube for Anæsthetic Vapour, as used in General Hospital. Steel heavily nickel plated.

HEBBAR BROTHERS, LTD.,
MANUFACTURERS OF SURGICAL INSTRUMENTS AND
ASEPTIC HOSPITAL FURNITURE.
246, Thambu Chetty Street, Madras.