

MEDICO SURGICAL SUGGESTIONS.

VOL VIII,



FEB - 1939.

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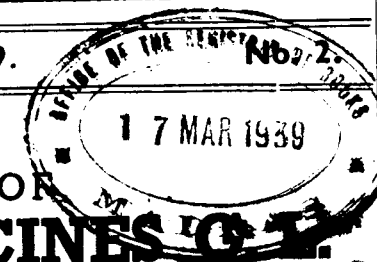
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Vol. VIII.

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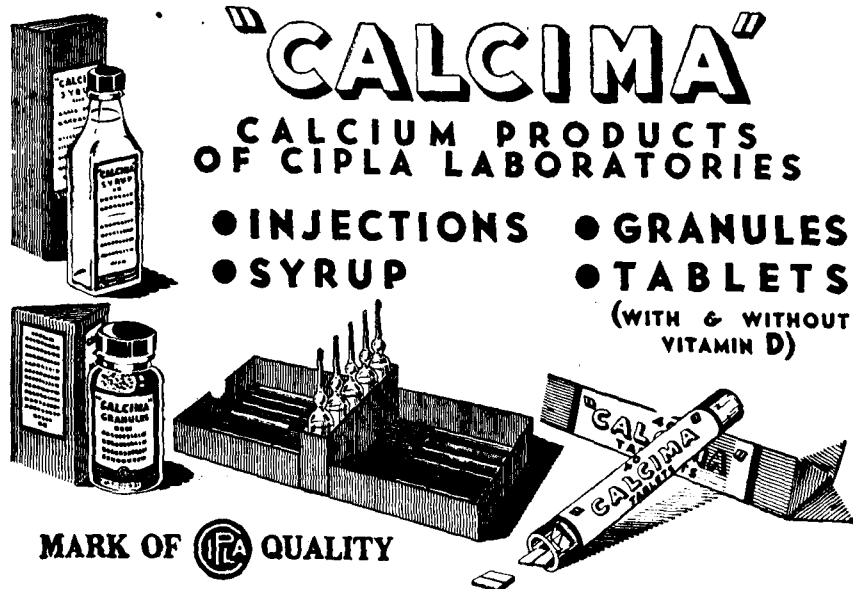
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MEDICO-SURGICAL SUGGESTIONS

VOL. VIII

FEBRUARY 1939

NO. 2

Original Article. " DYSMENORRHOEA."

BY DR. S. K. GUPTA, B.D.S.C., B.O.

Laboratory Clinic (Analyst),

Railway Road, PASRUR, District Sialkot (Pb).

DEFINITION.

Dysmenorrhoea or difficult menstruation means sufficient pain and scanty condition of the menstrual flow to interfere with woman's work or pleasure during menstruation.

ONSET.

It begins at the early period of puberty or womanhood.

HISTORY.

Dysmenorrhoea, according to the Psychiatrists, is an "anxiety neurosis." It causes pain sufficiently marked either owing to unaccustomed occurrence or to its degree to be attended by marked nervous or constitutional disturbances.

The pain associated with menstrual function is still in many respects a perplexing problem. Although the female sex physiology has advanced a good deal and the functions of the ovary thyroid and post-pituitary etc. have been thoroughly investigated still the application of this knowledge in the relief of dysmenorrhoea is not satisfactory. Of all symptoms pain is the most unreliable and pain sense varies a great deal in different individuals. It always depends on individual idiosyncrasy. Over and above a woman is educated of the pain during menstruation as is the custom of abstinence from all household duties during the period. In some women pain during menses with scanty flow is a hereditary condition. Psychological influence and mental suggestions have a great influence on this kind of pain when endocrines are in a state of unbalanced condition.

The term dysmenorrhoea is very often wrongly applied. A slight exaggeration of the symptoms of normal menses is not dysmenorrhoea. Headache and pain in the lower limbs depend on the hyperesthetic index of the individual. Neither should pain due to gross disease of the pelvic organs, e.g., pelvic cellulitis, displaced uterus, uterine fibroid etc., be labelled as dysmenorrhoea.

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SYMPTOMS.

The usual symptoms of Dysmenorrhoea are pains in the back, groin and abdomen; burning heat and often intense itching in the parts; and a heavy, dragging feeling in the pelvis. Various general symptoms are frequently present, as vomiting, headache, irritability of temper, restlessness, and great general debility.

FLOW OR DISCHARGE.

Very frequently the discharge is small, escaping by drops; sometimes it is composed of clots and in some cases it may be quite free and almost natural.

CAUSES.

The definite causes of Dysmenorrhoea are not as yet well known. It frequently disappears on marriage and very often after pregnancy; but the same conditions that give rise to dysmenorrhoea also act against pregnancy, and, as a consequence, child-bearing does not often occur when the disorder is present.

CLASSIFICATIONS.

1. Psychological.
2. Mechanical—Extrinsic or acquired or secondary or congestive.
3. Endocrine or Intrinsic or true dysmenorrhoea.
4. Membranous.
5. Gross pathological.

These classes of Dysmenorrhoea may be described, separately, as thus:

1. *Psychological*: As pointed out above, the education of pain, mental suggestions, idiosyncrasy etc. are common symptoms. This is the most common variety found in young school girls and newly married educated ladies. Here the husband himself is to a great extent responsible for the education of pain, mental suggestions etc.

2. *Mechanical, extrinsic, acquired, secondary or congestive*: In this group menstruation is associated with the diseases and mal-development of the genitals, e.g., uterine polarity, congenital uterine defects, such as conical cervix and adolescent long cervix.

3. *Endocrine, Intrinsic or true Dysmenorrhoea*: Here the act of menstruation is painful without any demonstrable lesion of the pelvic organs. The true dysmenorrhoea falls under this head and it depends on endocrine disbalance the true nature of which is still under investigation. Over stimulation of the stroma cells of the endometrium is due to excessive leutien activity of the ovary. This again is probably due to pituitary B-hormone. The exacerbation of pain due to this cause is separation of large flakes of uterine menstrual decidua. Over and under action of hormone and over and under production of osterine is responsible for some cases.

4. *Membranous*: Here menstruation is accompanied by the passage of a cast or large pieces of endometrium. Some authorities

describe another as "Moliminal." It is found in women who are anaemic, constipated, badly fed and who do not exercise.

5. *Gross Pathological*: Pain due to salpingo—oophritis, endometrioma, pelvic appendicitis and uterine fibroids is better put under the head of menorrhagia; they do not really fall under the head of dysmenorrhoea.

CAUSES OF PAIN.

A. *Uterine contractions*: The part played by contractions of the uterine muscle in menstruation is an important one; sufficient contraction is necessary to dilate the cervix, to expel the products of the menstrual abortion into the vagina and finally to assist in arresting the bleeding. Under normal conditions these contractions are rhythmical and not ordinarily painful. In some cases, they become spasmodic or tetanic and, as is the case with cramp in voluntary muscles, severe pain will be produced. Spasmodic contractions may result from:

(a) Inadequacy of the uterine muscles either due to congenital imperfect development or hypoplastic condition. Macroscopically it is found with small badly developed uterus, with a long conical cervix, pin-hole external or, undue anterior bend, curled or cochleate uterus, etc.

(b) Existence of partial obstruction to the outflow of blood through the cervix.

(c) Disturbed polarity of the uterus—i.e., when the body of the uterus is relaxed the cervix is constricted and rigid and *vice versa*.

(d) Increased tension in the endometrium due to congested vessels—practically, it is found that removal of endometrium by curette leads to more lasting cure than simple dilatation. Sterility often accompanies this condition of intrinsic or true dysmenorrhoea.

B. *Intra-uterine clotting*.

C. *Abnormalities*: Abnormal development of decidual cells in the endometrium is an important factor in some cases. Wiesner and Johnstone (Edinburgh) suggest that it is associated with lack of balance between the oestrin producing and luteinising hormone of hypophysis.

D. *Vasomotor disturbance*: When the Vasodilator action of the menstrual hormone is exerted upon the pelvic circulation in pathological condition, the resultant effect may be an extreme degree of congestion, sufficient to produce severe pain.

E. *Neuro-muscular mechanism*: Dr. Bloss and Kennedy suggest that pain is the result of defect in the neuromuscular mechanism of the uterus (central, ganglionic, or myometrial). They suppose that a perversion of the ovarian hormone may adversely affect the cervical ganglia and through them the uterine contractions.

The extrinsic or congestive type is not a true dysmenorrhoea because pain is premenstrual. It is an acquired symptom after

pregnancy or infection e.g., uterine congestion, endometritis with backward displacement, salpingo-oophoritis and pelvic peritonitis. This ultimately leads to sclerosis of the surface of the ovary and prevents or makes difficult the rupture of the graffian follicles. The treatment of these cases should be according to the causes.

The membranous type may be mistaken for other types. A decidual cast is composed of compact and spongy masses of decidual cells without fibrillated tissue but containing well-preserved glands and showing some blood extravasation. In abortion, chorionic villi are present in addition to cell masses. Blood clot consists of fibrinous meshwork with red and white corpuscles, no stroma, no connective tissue, no decidual cells, no glands. In the membranous type only operative treatment is successful.

DIAGNOSIS.

A thorough examination of the pelvic and genital organs and a careful study of the endocrines and the mental and psychological condition of the woman may help in finding out the cause.

PROGNOSIS.

It depends on the cause and its proper detection and treatment.

TREATMENT.

(1) *General Hygiene*: Regulate the bowels by aperients before menstruation; the patient should be advised to take warm bath a week before and during the menstrual period; regular exercise should be done. Dyspepsia should be treated.

(2) *Drugs*: For the relief of pain, Mathews Duncan suggests mistura guaiaci or guaiacum resin gr. 10 in tablet or pills, thrice daily for a couple of months, later on for a week before each period. Atropine gr. 1/200 to 1/100 for two days before expected date of menstruation. Venn Dinn suggests atropine with luminol gr. 1/2, pyramidon gr. 5. ext. hyoscyami gr. 1 in catchet. American writers are in favour of giving benzoated soda gr. 20. with 20 per cent alcoholic solution. When dysmenorrhoea is attended with profuse menses Mag Sulph in big doses before the onset of menses and when endocrine defect is suspected oestrine, anterior pituitary or thyroid gland are to be tried or compound gland products (female) may be resorted to.

Most authors condemn the use of alcohol and morphine for fear of habit formation; if necessary, morphine suppository by rectum may be given. Some advise antispasmodics, e.g., phenacetin, antipyrin, etc. Locally hot fomentation or hot mustard bath is helpful.

(3) *Physiotherapy*: Laudeker used to treat with ultra violet rays. Dr. J. Wilson applied diathermy externally at one end over the symphysis pubis and at the other end under the sacrum.

(4) *Endocrine Therapy*:—W. P. Kennedy recently suggests "Oestrin" treatment.

(5) *Surgical Operation*: Dilatation followed by thorough curettage of the endometrium is good. 40 to 50 per cent cases are successfully cured. It is also helpful to married sterile women.

Leitts Murry used Hawkin's amber type of dilatation. United States' gynaecologists support this method, while some advise laminaria tent.

(6) *Injection Therapy*: Dr. Blohn treated by injecting 5 c.c. of 70 per cent alcohol with 5 per cent novocain on each side of the cervix.

CONCLUSIONS.

Treatment of Dysmenorrhoea should be regulated according to the cause. Suggestive and psychological treatment should always be tried along with other treatments. It is the treatment of psychical variety of cases.

Intra-uterine application of radium is said to be useful in some cases. Hysterectomy in cases where all other treatment fails. Mechanical cases are treated with surgical interferences to remedy the defect. Binet recommends resection of pre-sacral nerves with excision of the sympathetic nerves between the common iliac arteries.

Symptomatic treatment with analgesics, uterine sedatives and hypnotics is to be carried out where the cause cannot be found. For gross pathological cases every case must be treated according to the cause.

REFERENCES.

1. C. S. Whitehead and Charles A. Hoff—The New Eugenics.
2. Jellet—Manual of Gynaecology.
3. Medical Annual, 1932.
4. Obstetrical Monographs etc., etc.

Modern Methods of Treatment.

TREATMENT OF GONORRHEA IN THE MALE*

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CHAPTER IV.

ADJUNCTS TO TREATMENT

As has been mentioned in previous chapters, an early recovery from gonorrhea depends not so much on what specific local therapy is administered, but an equal responsibility rests on the patient as regards the hygienic care he exercises. If one could formulate on a percentage the importance of these two factors so far as cure is concerned, one would err little in allowing twenty-five per cent for the doctor's efforts and the balance to the patient. The patient should be constantly impressed with the fact that it is his co-operation in conjunction with the physician's treatment that an early cure is obtained. This co-operation from the patient must be gained, else the physician's efforts will be futile.

Probably if one could tabulate in relative importance the various cautions the patient must exercise in his daily life, the leading one would be sexual attitude. Sexual stimulation is probably the most potent factor of all, producing annoying relapses, complications, and disappointing chronicity of the disease. It must not be emphasized once but many times the necessity for the patient to refrain from all sexual stimulation, even to the point of controlling lascivious thoughts. Intense engorgement of the parts incident to erotic stimulation is the enemy of early cure. Self-discipline in this respect should continue until he is without question cured. Obviously, in the case of the married, separate beds is the only practical method of achieving this end.

Often one sees patients who manage very satisfactorily with their diseases for the first six weeks and seem to be conquering their infection splendidly. Then sexual relations are indulged in, or as it happens in more instances, they allow themselves to become stimulated without completing the act with the result that there occurs a flaring up of the infection which requires several extra weeks of treatment to abate.

*Second installment of the serial "Treatment of Gonorrhea in the Male. The first installment appeared in the January issue of The Journal.

Alcohol seems to have a serious detrimental effect on the individual who is suffering from gonorrhea. The drinking of several bottles of beer has been observed to be followed by a sudden activation of the infection even in cases that appear presumably cured. Acute posterior urethritis has often followed the imbibing of liquor by affected individuals. Certainly there is sufficient clinical experience at hand to place the taboo on all intoxicating beverages for at least the first few months of the disease.

Regular meals, regular hours, sufficient sleep, moderate but restricted exercise, and a placid, unworrying morale are obvious hygienic instructions which aid in fortifying the individual's resistance toward all chronic diseases. The diet probably plays little importance in the cure of gonorrhea with the exception of counseling against those substances which in the process of excretion irritate the urethral mucosa. Peppers and highly seasoned sauces had best be abolished, but otherwise the diet differs little from the ordinary routine, provided it is taken with some regularity and of correct quality and quantity.

Urine is a very efficient irrigating medium that effectually keeps the urethra free from accumulations of pus. Copious quantities of water by mouth not only keep the urethra flushed by the frequent urinations, but it may aid in a few cases in preventing backward extension of the infection.

Alkalization of the system by the administration of citrates, bicarbonates, etc., has many adherents. It doubtless has little effect on the ultimate outcome of the case; however, there seems to be an impression somewhat substantiated by clinical experience in acute stages of the disease, they help in acute stages of the disease, they help in maintaining urinary comfort.

Drugs administered for the purpose of making the urine antiseptic have been found for the most part to be of little value in the treatment of gonorrhea. A few doctors and many pharmaceutical houses advise their use, but the general experience has been found disappointing. Caprakol, pyridium, serenium, and methylene blue are a few of the more common examples. Methenamine, a very potent drug in the treatment of the majority of non-specific infections of the urinary tract, is definitely contra-indicated in gonorrhea. The liberation of formalin, incident to its excretion, is extremely irritating in gonorrheal infections.

However, despite the disappointing results obtained by mouth medication for gonorrhea, there has recently been introduced a drug which seems to hold a very distinct therapeutic value. This is sulfanilamide, or it is better known as prontosil. This drug was originally presented because of its curative effect on streptococcal infections. It was also found to be efficacious in meningococcal infections and due to the close morphological similarity to the

gonococcus it was felt a clinical trial in Neisserian infections would prove beneficial.

The drug is administered in doses of twenty or thirty grains daily; one or two five-grain tablets may be taken with a large glass of water after each meal and at bedtime. It seems to be relatively non-toxic with the exception of some gastric disturbance complained of on the part of a few taking the larger dosages. Symptoms such as nausea, vomiting, headache, dizziness, and sometimes an unexplainable slight rise in temperature are a few of the toxic manifestations. The production of sulphemoglobinemia has been reported as a rare complication. All of these disturbances seem to disappear promptly when the drug is stopped. The headache, vomiting and dizziness have been explained on the basis that sulfanilamide lessens the alkali reserve of the blood, producing an acidotic state. It has been recommended that if a mild antacid be given in conjunction with it, the symptoms are somewhat abated.

A brief clinical experience with sulfanilamide has shown results which are very satisfactory but not conclusive. In a few cases of acute gonorrhea in which it has been given, some have obtained marked improvement in their infections as observed by a cessation of the penile discharge and a clearing of the urine within three to four weeks of the onset of their disease. Six patients having chronic prostatitis of long duration who have been given the drug showed variable results; in two, the prostatic secretion became free of pus within ten days; two more stated they had gained marked relief from the perineal and back pain with which they had been previously bothered, however, examination of the prostatic secretion showed no marked change in the amount of pus as compared to past examinations. The results in two were unsatisfactory, and the type of medication was abandoned. In four instances of acute posterior urethritis incident to gonococcal infection, there was a marked relief from the frequency and stranguary soon after prescribing the preparation. There was also a lessening in the amount of pus in the voided urine specimens.

An investigation is now being made at the University Hospital, which will be reported later, on the bactericidal value of the drug when excreted in urine. Preliminary data indicate it has very definite bactericidal value in many of the commoner organisms that effect the urinary tract. This, however, does not explain its curative action in gonorrhea. Doubtless, following its administration there is some systemic effect on the defense mechanism of the body which inhibits their growth.

It must be emphasized the drug is yet in an experimental state, and its place, as well as limitations, are undefined. Further clinical observation is necessary to thoroughly evaluate its therapeutic status in the treatment of gonorrhea.

Sandalwood oil is another drug that seems to be of more than doubtful value in the relieving of distressing urinary symptoms incident to the disease. Many have observed that when it is given in gonorrheal infection which is attended by excessive urethral irritation, especially on urination, it aids in alleviating these painful symptoms. Certainly it has no specific effect on the clinical course of the disease and should be used only for symptomatic relief.

The use of foreign protein therapy, which includes mercurochrome intravenously, dilute hydrochloric acid, milk preparations, seems to hold a definite place in the later stages of the disease, but it is difficult to see their rationale in the acute phases of the infection. For the first six weeks during which the patient's body is struggling with an excess antigen in the form the virulent gonococci they are best left out of the therapeutic regime.

As regards the care of the parts affected, the patient should be advised to keep the penis as clean as possible. The pus exuding from the urethra is at times extremely irritating to the mucosa of the glans penis and foreskin; annoying swelling of these parts results from carelessly allowing it to stay in contact with the tissues too long. The penis should be washed frequently and the discharge allowed to collect in a loose-fitting gauze dressing. One will find a most perfect device for this purpose in the well known tobacco sack dressing which is easily available in more convenient forms at drug stores, marketed as a sanitary dressing.

Before closing, a therapeutic adjunct useful in all stages of the disease is quite often forgotten but holds tremendous value, not only as a measure in obtaining relief from pain, but seems to be of possibly some curative value. That is the use of hot tub baths and hot soaks to the penis. The antiphlogistic effects of moist heat have been verified by numerous observers in the past. It cannot be emphasized too much that it should be used often, especially during the early stages of the disease. The good results from hot sitzbaths is specially evident when any hyperacute condition prevails. It relieves congestion, allays pain and makes the patient much more comfortable than he would otherwise be.

CHAPTER V

TREATMENT IN THE LATER STAGES OF THE DISEASE

Unfortunately, not all gonorrheal infections of the urethra yield to simple anterior injections. Obviously an infection limited to the anterior urethra presents an excellent outlook for early cure. One must realize, however, that simple anterior urethritis throughout the course of the disease is a rarity; posterior invasion at some time or other is the rule.

The physician must not be too pessimistic as regards a satisfactory outcome even when he observes the posterior structures involved. Due to the relatively less vulnerability of the posterior

urethra towards the gonococcus, as compared to the anterior urethra many cases spontaneously go on to complete recovery in a reasonable length of time with the treatment previously described. For this reason we do not advise early treatment of the posterior urethra even when infection seems grossly present. The instillation of medicine in the posterior urethra too early before sufficient immunity has been developed, encourages an exacerbation of the infection with the consequent result of deeper tissue involvement. It is better to continue with the routine therapy of the anterior urethra at the same time watching the progress of the case by the daily two-glass test until three or four weeks have elapsed. If the second glass shows a lessening in the amount of pus, the indication for posterior treatment becomes less definite. However, in a few there comes a time when one must recognize the necessity for treatment in this region in order to expedite recovery from the disease.

To dogmatically advise a definite time following the onset of gonorrhea before initiating posterior treatment is probably an error. The physician must be guided in this respect not only by the patients' response toward previous treatment, but also the appearance of the infection. Any tendency toward undue acuteness of the inflammatory process means treatment is definitely not indicated. A few may appear to benefit by local treatment within three or four weeks, and in others it may be advisable to wait twice this long. Possibly one could state as a general rule in most cases if the urine constantly shows cloudiness in the second glass at the end of a month cautious attempts to treat the posterior urethra are indicated.

We achieve this by a posterior instillation of the same medication used in treating the front part of the channel; advising the patient to relax his urinary sphincter during the course of injection, and allowing the medicine to flow into and bathe the posterior urethra and bladder neck. A slight bit of pressure on the rubber bulb of the syringe will help in overcoming the tonic resistance of the sphincter muscle. Assuming the recumbent position will also be found a helpful aid in allowing the medicine to pass easily into the bladder. One may begin with only a syringe-ful but as time progresses several syringe-fuls may be injected. Only one treatment daily is necessary.

This simple procedure is continued for four or five days until it is proven no harmful effect in the form of an aggravation of the disease is likely. We then investigate the prostate for infection. The freshly expressed secretion is examined microscopically, and if more than ten cells to the high power field are found, prostatic massage is added to the therapeutic regime, preferably performed before instillation of the medicine. Massage should be done not oftener than every three to five days in a series of about six or eight

and followed by a rest period of several weeks. This rest period should also include cessation from all local treatment of the urethra. One will find this two weeks' rest period the ideal time for the administration of vaccine.

At the termination of vaccine therapy the active attack on the prostatic infection is resumed. Frequently one will find little urethritis present at this time; the discharge very scant or even absent, and not rarely a clear urine will be present. When no discharge is present and the urine shows only a few shreds, it is probably better judgment to limit the number of urethral injections to a minimum or even abandon them altogether. There is no particular reason to subject a mucosa relatively free from inflammatory reaction to the daily insult of more or less irritating substances. It must be remembered urethral injections alone will at times keep a discharge active. No part of the treatment of gonorrhea is more abused than vaccine therapy. When used intelligently they are of inestimable value, but an indiscriminate application not only proves them disappointing, but productive of harm as manifested by an unyielding, stubborn infection. It must be realized that early in the course of an infection the individual's defensive mechanism is attempting to cope with an overwhelming dose of antigen in the form of virulent gonococci and their products. To give gonococcus vaccine at this time is to add insult to injury and seems to produce an inhibitory action on the normal immunologic response.

The reaction of the tissues toward the bacteria must arrive at a static condition to observe the beneficial effects of vaccine therapy. Administration of small doses of vaccine at such time tends to stimulate the cells to further complete a cure. In the earlier stages of the infection, vaccines should be used made from the pure culture of the organism. However, the older the infection the more value seems to be derived from the use of mixed cultures incorporating the staphylococcus and streptococcus. Practically always these organisms are in the background as contributory agents for chronicity.

Vaccines are always started in small dosages; one to two minims of the regular stock preparations containing 1,000,000 organisms to the centimeter. Each successive dose is increased very cautiously, given every third day until one half centimeter or more can be administered at a time without reaction. One should constantly watch the effect of vaccine and be guided in the amount given by any severe local or systemic reaction. Quite often vaccine injected in larger doses than can be tolerated may flare the local urethral infection to activity, inducing a discharge for a few days. One should strive always to keep the dosage just below the point of tolerance.

Physicians are constantly besieged with various and sundry preparations both of a specific, but more often of non-specific nature which are advocated to be given hypodermically or intravenously for the cure of gonorrhea. Invaluable as non-specific therapy has proved itself as an aid to the cure of many infectious conditions, it must be considered inadequate therapy when used as a sole method for the treatment of gonorrhea judged by our modern day standards. Certainly one can hold no reproach for the physician who for some reason or other desires to use non-specific protein therapy as an adjunct in the cure of gonorrhea, especially in its later stages; but it is he we censure who carelessly advises a course of injections for the treatment of the disease without paying the least attention to the prostate or other infected structures. Injection therapy in itself certainly is less demanding of the doctor's time and for that reason more lucrative to his pocketbook but is either an admission of his ignorance of proper therapy or is professional culpability.

CHAPTER VI

ACUTE POSTERIOR URETHRITIS

There is no more important detail in the care of acute gonococcal infection than the correct management of the case when the inflammatory condition involves the posterior urethra. The persistence of posterior gonococcal infection depends not so much on the disease having progressed to this region, but on whether it has become firmly entrenched there. In the earlier stages of acute gonococcal infection of the posterior urethra, the mucosa, submucosa and lining of the prostatic ducts are the structures that share in most of the inflammatory reaction; the glandular acini escaping disease to a marked extent. However, when inflammation is sufficient to produce signs and symptoms to a severe degree, it may reasonably be assumed that extension of infection has occurred to the deeper tissues of and around the posterior urethra.

Because of the above reasons, it is well for the physician to realize that despite a similarity in signs and symptoms "acute posterior urethritis" and "prostatitis" are not synonymous pathological entities. The prostate becomes infected to an indeterminable degree in many instances of acute posterior urethritis, but it probably escapes severe infection more often than we are accustomed to believe. It is not unusual to find relatively uninfected secretion as determined by microscopic examination following fairly severe acute posterior urethritis. This is a practical point in therapy, as one may by too early or too vigorous massage during or soon after an acute inflammation of the posterior urethra, convert a simple superficial infection to a more deep seated complicated one. Parenchymal infections of the prostate are disappointing in their response to treatment; requiring usually months to cure. Prostatic massage is never

indicated within the first few weeks of a gonorrheal infection, and particularly contraindicated at all times when any acuteness of inflammation is present as manifested by symptoms on the part of the patient.

As is well known simple anterior urethritis is somewhat rare, posterior invasion occurs at some time or other. Providing one is watchful about the second or third week the doctor will notice some haziness in the second glass of urine voided. Frequently no symptoms whatever accompany this finding and not rarely it seems to be of an evanescent nature, lasting but a few days and then disappearing, followed by a clear second glass from then on during the course of the disease. Because of this, the physician should not be too pessimistic so far as an early cure is concerned. It may be repeated, however, that if the inflammation is severe, it will be observed that recovery is less prompt. Therefore, it is the function of the physician in his treatment of the disease to try and prevent those acute complications, and if they perchance occur, attempt to shorten their duration and modify their acuteness.

What is the cause of acute inflammatory reactions of the posterior urethra? It may be stated, for the most part, that this complication can be prevented by a combination of intelligent treatment of the disease on the part of the doctor in conjunction with the faithful co-operation of the patient insofar as his personal conduct and hygiene are concerned. The physician who resorts to strong or frequent local treatments, forcible irrigations of the acutely inflamed urethra, or who passes sounds, catheters, etc., early in the course of gonorrhea will observe this complication many times in his practice. The administration of gonococcal vaccines in large doses as also prostatic massage within the first few days of posterior invasion is particularly dangerous to the development of this distressing condition. All local treatments should be stopped when there is even a suggestion of acute exacerbation of infection in the posterior urethra.

For these reasons the physician is ever alert, even bordering on suspicion in his daily care of the patient and especially so in the first few weeks of the disease. In order to keep the infectious process within bounds, he attempts to forestall acute inflammatory reactions of the posterior urethra early in their course. Because the first day of posterior invasion of infection is particularly dangerous, he inquires of the patient at each visit whether he has had to urinate more frequently or whether urination is accompanied by more pain than usual.

What are the signs and symptoms that seem to presage these acute manifestations? Because the posterior urethra and trigone is the point of origin for the initiation of urination, inflammation in this region will produce what might be called bladder irritability as

active for a long period of time even when the gonococcus itself has disappeared. Quite often these so-called secondary invaders prove extremely rebellious to the ordinary forms of therapy. Their foci must necessarily be removed before a cure can be obtained. The removal of a dead, infected tooth may therefore be a more rational therapeutic procedure than any particular type of urethral injection.

As far as the actual treatment of chronic prostatitis is concerned, the principle followed which holds good as in other infectious conditions is: "good drainage." When drainage is inadequate, infections tend to persist no matter how or what local treatment is rendered. Good drainage as it pertains to prostatic infection means an unhindered pathway from the base of the infected glandular acini to the urethral meatus. Often in the case of long standing infection, the prostatic ducts in the floor of the posterior urethra are obstructed by secondary formations of a cystic or granulomatous character that act as a barrier to the free passage of infected material from the gland. These extraneous formations are merely the end result of tissue stimulation from the presence of an irritating discharge on the urethral mucosa over a long period of time. They must of necessity be removed before progress can be made in the case.

The physician must also search for obstructions along the urethral channel in the form of large or small caliber strictures. The stasis and congestion induced in the posterior urethra by a stricture acts as a potent factor for the chronicity of infection. Small urethral meati fall in the same category as strictures and must be enlarged as an important preliminary treatment. Good judgment must be used in this respect, as there is a tendency to apply meatotomy too frequently even to those of narrow but quite normal size. A meatus of more than twenty French size is in no need of enlargement. One should be mindful there is normally a narrowing of the urethra, as it emerges from the glands, physiologically for the purpose of giving force and direction to the stream. A too large meatus is a handicap to the individual so far as satisfactory voiding is concerned.

Occasionally, but not often, we find actual suppurative cavities beneath the posterior urethral mucosa which drain into the urethra by small calibered openings. These are aptly called "bottle neck" pus cavities, and represent the aftermath of abscess formation resultant from the blocking of a prostatic duct. They may occasionally have to be enlarged cystoscopically in order to provide adequate drainage.

The diagnosis of chronic prostatitis rests not so much on the palpation per rectum of the gland, but more on a careful microscopic examination of the expressed secretion for the presence of

pus. Many infected prostates, if one had only palpation to go on, present no evidence of disease, but when the secretion is examined microscopically, gross amounts of pus are seen. However, each patient should be carefully examined by means of a finger inserted in the rectum in order to note any physical abnormalities present. These may be grouped under four headings: size, consistency, contour and mobility.

The normal prostate is about the size of a walnut and presents little hindrance to the examining finger as it is inserted in the anus. A poorly draining gland may be one or more times larger. Oftentimes even severely infected glands are apparently normal size. Enlargement of the gland is definite where there is a senile prostatic hypertrophy.

The consistency of the normal gland is somewhat firm and resistant to the ball of the finger, giving one a sensation of slight "spring" to the tissues. In chronic infections, a boggy edematous sensation may be elicited. Often, areas of softening surrounded by rather firm infiltration may be discovered and are representative of old prostatic abscesses. The fact that a gland is of a firm or soft consistency does not, however, indicate the amount of infection. Severe infections may accompany even sclerotic prostates.

The contour of the normal prostate is smooth and regular with the median interlobar fissure apparent to the examining finger. Obliteration of this fissure and nodulation of the gland is often observed in instances of long standing infection. When the inflammatory process has extended to the periprostatic tissues, the similarity to carcinoma of the prostate is striking. Induration, nodulation and immobility of the glands are dominant physical characteristics of prostatic carcinoma. A marked nodulation occurring in a young adult also suggests a tuberculous process and a careful examination of the remainder of the genitalia should be made with this diagnosis in view.

Comparatively little secretion can be massaged from the ordinary gland. However, the amount of secretion obtained is no criteria whatever as to the extent and amount of infection. In a poorly draining prostate where there is an accumulation of secretion, one may obtain a rather large amount of material; but in a gland where the drainage is somewhat adequate, one may find a "dry tap" so to speak, even when infection is grossly present.

Pain is an indefinite manifestation of prostatic disease. Certainly we observe pain on palpation of the acutely inflamed prostate and if an abscess be present, the pain is intense. Ordinarily, the careful rectal palpation of the gland should not produce much discomfort to the patient.

The physician who treats chronic prostatitis should employ the microscope not only for a diagnosis, but as a means of following the

infection in order to observe its response toward treatment. The freshly expressed secretion obtained by massage is allowed to fall on a clean slide in the form of a discrete drop. Upon this drop is placed a cover glass and the microscopic examination should be made by means of the high dry lens. Pus may be observed from the presence of nucleated cells, care being exercised to differentiate them from the normal elements of prostatic fluid; lecithin bodies and corpora amylacea. Pus may be found as discrete cells or arranged in clumps. The latter finding has been stated to be found in poorly draining glands. One should count the number of cells to each high power field in an attempt to evaluate the amount of infection. An arbitrary method of grading the severity of the infection is by calling up to ten cells per high power field Grade I; ten to twenty cells, Grade II; twenty to forty cells, Grade III; and over forty cells per high power field, Grade IV. This grading has proved an invaluable system for the written records.

A stained slide should be made by means of the Gram technic and the type of organism, thereby, determined by microscopic examination. Extracellular Gram negative diplococci is suspicious evidence of gonorrhea; intracellular Gram negative diplococci are pathognomonic. Streptococci are especially significant as they suggest a draining foci elsewhere.

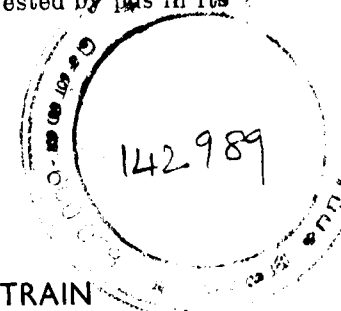
The urine is examined by means of the two glass tests in order to note to what extent the second glass is soiled. When sufficient prostatic secretion by massage cannot be obtained, a convenient method is to collect the urine voided following massage, submitting it to centrifuge and then examining the specimen. Oftentimes the amount of secretion is insufficient to drain spontaneously from the urethra, and this procedure has proven invaluable in these instances in order to provide a satisfactory examination. The presence of turbidity in the second glass of urine passed before massage is indicative of posterior involvement, but it must be remembered also that bladder and upper tract infections will also present this finding. Occasionally, in long standing infections, one will find clear urine in the second glass. This is due to the fact that there is little or no inflammatory reaction of the urethral mucosa.

The symptoms arising from an infected prostate gland depend somewhat on whether drainage is adequate as well as the amount of acuteness of the inflammatory process. The urinary symptoms are in a great measure in proportion to the amount of concomitant posterior urethritis and trigonitis. Frequency, urgency and bladder irritability are specific complaints from disease of these structures. When the posterior urethritis is improved by treatment, these symptoms tend to disappear. Pain may be a prominent symptom of prostatitis with referred distress to the tip of the penis, testicles and perineum, but more often it takes the form of an indefinite backache low in the sacral region.

Chronic prostatitis may occasionally produce sexual disturbances. This may take the form of premature ejaculation which is due to a hyper-irritability of the sexual centers from the congestion around the verumontanum. This symptom, if allowed to persist any length of time, will lead to complete impotency of the individual.

Last but not least, toxic manifestations in the form of arthritis, neuritis, myalgia, iritis, etc., due to the presence of toxin originating from bacteria within the infected gland are extremely common. The prostate in such disorders should be checked thoroughly and repeatedly for the presence of infection as manifested by pus in its expressed secretion.

(To be continued.)



HEADACHES CAUSED BY EYE STRAIN

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The percentage of cases of headache due wholly or partly to eye strain has been variously estimated from 50 per cent to 90 per cent. Headache is common even in young children. Many years ago Theichler stated that one-third of the children attending school in France and Germany suffered from headache. When a patient complaining with headache presents himself of course the first thought that comes to our mind, is the differential diagnosis. Is this particular headache due to eye strain or to some other cause?

To the ophthalmic physician, headache is significant as a product of eye strain, yet many patients with plenty of cause for eye strain proudly allege that they never have headaches; on the other hand ophthalmologists must not think that because a patient has a headache, it is due to the eyes and that glasses are going to do away with it.

Headaches attributed to eye strain are sometimes due to entirely different causes, and it is equally true that headaches attributed to other factors are often relieved by the correction of eye strain. The patient who has been fitted with several pairs of glasses, all pretty much alike, may some day drop in on his oculist and announce that his headache has been finally relieved by having his sinus irrigated. On the other hand, the oculist is going to make a hit when he gives relief, by proper refraction, to some case that has been subjected to nasal treatments for some time without alleviating his headache.

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CAUSES OF HEADACHE

The eye physician must keep in mind other possible causes of headache, in order to suspect such causes as being the guilty party or perhaps acting as an accomplice in the causation of the headache. We must not forget that we are dealing with a patient, not a symptom. Headache may arise purely from general fatigue, although more frequently from general fatigue in combination with eye strain. Anything that reduces the endurance of the neuromuscular system may end in strain, such as debilitating conditions from various diseases, overwork, lack of food or sleep, need of outdoor exercise, type of work or improper lighting and unhygienic surrounding. The eye sees its object much more quickly, sustains its powers of clear seeing much better, becomes fatigued less quickly and suffers less discomfort under daylight intensities than under those found in artificial lighting under present practice. The reserve strength of the ciliary muscle is definitely and quickly influenced by the state of one's general health. Headache associated with neurasthenia in a patient who becomes fatigued easily and shows a weakness of convergence and accommodation might be due to lack of internal secretion, especially the thyroid and ovarian.

In the lowlands where malaria is prevalent, we must remember that malaria can be responsible for a brow ache. Headache is a symptom of most fevers. Headache due to an encephalitis developing after German measles, or to a meningeal complication, a brain abscess, brain tumor or cerebral arteriosclerosis will not be relieved by a pair of glasses.

Recurring nocturnal headache should suggest syphilis.

Tenderness along the distribution of the supraorbital neuralgia. One may be deceived by ocular orbital neuralgia. One may be deceived by ocular neurosis, especially among women. However, pain here is generally complained of too soon upon use of the eyes for genuine fatigue to have developed. Painsstaking inquiry of neurotic patients may reveal a dread of blindness. Many times the patient is actuated only by an unwarranted apprehension of eye strain; less commonly intolerable situations are disclosed, from which inability to use the eyes serves as an avenue of escape.

Among children imminent failure at school or a desire to be made much of at home, may furnish a motive. An exacting parent of a hysterical child and phobias induced by an optician were causes for two very interesting cases recently seen.

Headache may arise from irregularities in diet or disorders of digestion. Nervous headaches occur in persons of very lively emotions and delicate sensibility among those who have the aesthetical and imaginative elements highly developed.

If true migraine cannot result from eye strain, as is contended, a paroxysmal headache so similar as to be indistinguishable occurs

in rare instances. The lancinating pains of tabes may simulate this condition. Glaucoma is another condition which we must always think of in our differential diagnosis. One-sided headache may also accompany herpes zoster ophthalmicus.

Toxic conditions occurring in nephritis, toxemias of pregnancy, diabetes, alcoholics and intestinal disturbances render the eyes less able to carry on the normal visual functions without distress. Especially is this true if a refractive error or muscular imbalance is present. Therefore, with a history of frequent headaches the examination is not complete without an examination of the status of the blood pressure, urine, teeth, sinuses, and other possible foci of infection; the retinal vessels for signs of arteriosclerosis; the blood for anemia; the optic disc and field of vision for indications of increased intracranial pressure or retrobulbar neuritis. Where we have paresis of the lateral rectus muscle, a discharging ear and pain on that side of the head we of course think of a petrositis. We must think of the possibility of allergy causing a localized swelling or vascular spasm in the brain.

TYPES OF EYE HEADACHES

Headache is one of the commonest indications of eye strain. Many disturbances may cause it as:

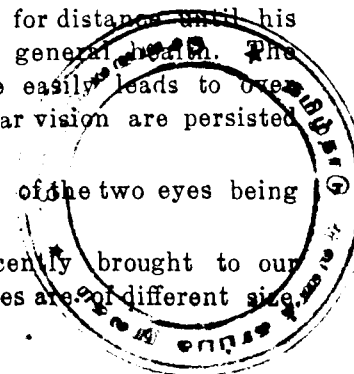
(1) Astigmatism, a condition in which the eye is unable to bring rays of light from the different meridians to a focus on the retina. Astigmatism may be responsible for the most aggravated types of asthenopia and most marked symptoms of eye strain. It may be responsible for all manner of reflex nervous disturbances, vertigo, habit spasm, neurasthenia tachycardia, indigestion, and even constipation. Ocular headache in young people is more often due to astigmatism than any other cause; up to 75 per cent in the accommodative types of ocular headaches.

(2) Presbyopia, where the lens has become sclerosed or hardened so that it cannot respond to accommodative efforts.

(3) Hyperopia, in which condition the ciliary muscle is called upon to accommodate for distance as well as for near, while the normal eye is called upon to accommodate only of distances less than 20 feet. A hyperopic or far-sighted individual with a good reserve of accommodation can see distinctly for distance until his reserve is impaired by local conditions or general health. The reserve is much less for near use and more easily leads to over exertion and tire, and if efforts to secure clear vision are persisted in, ocular headaches ensue.

(4) Anisometropia, the refractive error of the two eyes being unlike.

(5) Anisokonia, a condition more recently brought to our attention in which the images of the two eyes are of different size.



(6) Myopia or near sightedness causes headache less frequently than the other accommodative conditions. In simple myopia the patient just simply cannot see at a distance without proper glasses, but occasionally myopes, especially if they have astigmatism, have headaches. Some of these may be explained as being due to the contraction of the muscles of the eye lids, in the attempt to narrow the palpebral fissure, in order to reduce the blur circles and thus sharpen their distant vision.

(7) Anomalies of accommodation, such as weakness of accommodation which will show itself either (1) by the near point being farther away than it should normally be for the age of the patient or (2) the near point is found at the proper distance corresponding to the age of the patient, but on successive tests the near point recedes further and further.

(8) Muscle imbalance may give rise to definite eye fatigue. I think that this cause of eye complaint and headache is probably overlooked very frequently as many men who are not well trained do not understand the part played by the extra ocular muscles in causing trouble, and they do not even check the muscle balance. Were there is a definite squint and no tendency toward fusion, there should be no strain. The cases which give rise to symptoms are those of heterophoria, *i.e.*, eyes which have a tendency to squint, but which are held in alignment by the desire to fuse the two images. It is the excessive energy necessary to hold the eyes in alignment which gives rise to the fatigue, just as the attempts on the part of the ciliary muscle to overcome refractive errors give rise to symptoms of eye strain.

(9) The most frequent disease of the eye ending in permanent blindness is Glaucoma. Of course the classical picture with an acute attack is readily recognized, but we should be on our guard for those cases of the simple type where there are no congestive symptoms staring us in the face. There may be only a vague feeling of, discomfort possibly headache and dimness of vision is complained of but the tell-tale story of frequent changes in glasses should give us a clue to seek further for signs of Glaucoma.

(10) Faulty habits of reading--poor posture and lighting. Ferree and Rand have shown that harmful brilliances and glaring contrasts in the field of vision cause an unevenness of illumination of the reading page or other working surface, which leads to fatigue of the eye by causing it to see its objects unequally well as it travels over the page, and this tends to induce changes in adjustment to rectify the deficiency. With the exception of changes in the size of the pupil, these changes are maladjustments that work against rather than for clear seeing and tend to fatigue the eye.

ARTIFICIAL LIGHT

If the light which falls on the surface is well diffused by one or more previous reflections and is evenly distributed, the confusion to vision from glare is slight.

A brilliant image falling on the sensitive retina causes a sharp contraction of the pupil, and it is not altogether improbable, too, that a contraction of the pupil so largely in excess of the normal amount puts a strain on the muscles of accommodation because of the automatic tendency of the pupil reaction and accommodation to take place together in a more or less fixed relation.

In the attempt to understand the effects of bad lighting on the eye, one of the most fundamental principles to keep in mind is that the eye is always under a reflex incentive to clear up its vision. This incentive is strong, so strong that it is extremely difficult to oppose it successfully by an act of will or voluntarily to force the eye to make an adjustment detrimental to clear seeing. The eye has grown up under daylight. Under this condition only three adjustments have developed and indeed only three are needed: the reaction of the pupil to regulate the amount of light entering the eye and to aid the lens in focusing the light from objects at different distances, and accommodation and convergence to bring the object on the principal axis of the lens and the image on the fovea, conditions necessary for the formation of the clearest images by the lens and for the best discrimination of these images by the retina. These adjustments take place under a sort of triple bond imposed by their common nerve supply, so strong that if one takes place the others also take place unless the power of separating them has been acquired and even then their separation is accomplished only by great effort or strain. Artificial lighting with its unnatural and unfavorable conditions for clear seeing has come late in the history of the race, and the eye has not developed any reactions or adjustments to meet the conditions imposed. Yet the incentive to clear up seeing remains, and leads to adjustments which, if allowed to take place, serve only further to blur rather than to clear up vision. For example, a change in accommodation which is a change designed to clear up an image blurred by changing the distance of the object is in no sense helpful, only harmful for clearing up an image blurred by bad conditions of lighting; yet so long as unclear seeing is present, due either to a blurring of the image or to unfavorable conditions for its clear discrimination by the retina, the eye will strive by the three adjustments at its command to remedy the deficiency. This striving to clear up its vision by ineffectual maladjustments is the cause of what is commonly called eye strain. The misdirected effort or strain is of no service to vision and leads rapidly to fatigue and exhaustion, to deformities slight in their physical magnitude but great in their functional

importance, to inflammations and congestions and to hypertensions and other conditions not found in a healthy eye. If the eye could only be educated to lie down under the bad conditions of seeing for which it has no specific corrective adjustment, the cause of vision would be just as well or even better served, and the eye itself would be a great deal better off.

VISUAL ACUITY.

The relation between the visual acuity and eye strain is not well understood by many physicians. When a patient has symptoms which might indicate an eye strain, it is a common practice among many physicians to have the patient look at a test chart and if the vision is normal, to cease to consider the eyes as a causative factor. This policy will lead to a great many errors. Excellent vision does not demonstrate freedom from eye strain, since the worst sufferers from headache often show so-called normal visual acuity, due to the ability of their accommodation to compensate for the error of refraction. But the unconscious effort of the ciliary muscle to overcome this error, especially in an individual with a hypersensitive nervous system, frequently results in ocular headache. On the other hand many eyes with very poor vision give practically no subjective symptoms at all. Therefore, if the patient has definite symptoms of eye fatigue; though his acuity of vision is normal, it behooves us to further investigate the case. The patient should be refracted with his ciliary muscle put at rest by a cycloplegic such as atropine or homatrophine.

If the headache is due to eye strain, it is practically invariably made worse by use of the eyes. It is aggravated by close work as reading, sewing, etc., especially if the lighting is poor; by moving pictures, due to the glare of the light and to the slight flicker of the objects; by riding in an automobile or shopping trips due to the constant focusing of the eyes on moving objects and people.

FEATURES OF OCULAR HEADACHE.

As to the character of ocular headache, there is no pathognomonic feature, but it is suggestive, when associated with other signs or symptoms of ocular disturbance. The headache may be constant or periodic, of long duration or of shorter periods, or occur at regular or at irregular intervals. The personal and family habits often are of great value, though usually one finds that ocular headaches are associated with eye use. We cannot get away from the fact that we are dealing with functional conditions where we have a great variation not only in the powers of different individuals, but also at different times and under different conditions in the powers of the same individual. An error of refraction which will cause much discomfort of various sorts in one person will in a subject with a more stable make-up produce no symptoms worthy of notice.

The location of headaches of ocular origin is most frequently supraorbital. The complaint may be of an ache in or around the eye-ball, the headache may be referred to the temporal or parietal region. Those cases that suffer due to muscle imbalance usually locate their headache in the occipital region and sometimes this may go down the neck and even between the shoulders.

There can be no question that many lives have been made miserable by manifestations of uncorrected eye strain, especially in the form of headache. Too often is this fact overlooked by careless refractionists. The incidence of headache due to disturbed ocular functions being high, renders it advisable to thoroughly examine the eye and its adnexa as a possible cause even to applying the therapeutic test of a proper lens correction.

(*Southwestern Medicine Feb. '38.*)

Extract.

CARE OF THE SKIN OF THE NEWBORN INFANT.

The skin of the newborn infant frequently shows irritative and other lesions that make it a problem, and Heyworth N. Sanford, M.D., gives a six-year study of 3,500 newborn infants in "Journal of Pediatrics" for July, 1937.

The irritations include erythema neonatorum (so universal that it may be dismissed as of normal occurrence), erythema toxica, and the intertrigos. Erythema toxica includes erythematous macules and papules, which rarely last longer than three days, and leave no residuum. However, it may worry the mother or prove a field for the development of pyodermic lesions. The intertrigos are erythematous patches occurring in skin folds, and are presumed to be due to a certain predisposition of the infant plus irritation with vernix, faeces, or urine.

The second group may be termed the pyodermias. These pustules, or vesicles, usually appear after the third day, and may be located anywhere except on the palms and soles. The outcome of this type of lesion under treatment is favourable, but it should be regarded as infectious.

Pustules with exfoliation, sometimes leading to pyodermic abscesses, are very serious, highly contagious, and frequently fatal. Here the pustules and vesicles increase rapidly in size and number and extend over the surface of the body; exfoliation leads to denuding large areas of skin of the epidermis.

The present study was undertaken in an effort to determine the best means for caring for the skin of the newborn.

Each year since 1930 we have used different methods, namely : (1) ammoniated mercury 2 per cent. at birth, daily baths with water and castile soap thereafter ; this method was modified after a time by substituting an improved nursing technique for the usual central type, and the improvement was carried through the later experiments ; (2) ammoniated mercury at birth, olive oil thereafter ; (3) no antiseptic at birth, only olive oil used ; (4) no antiseptic at birth, only commercial baby oil used ; (5) no antiseptic at birth, equal parts olive oil and mineral oil used ; (6) wiping of the excess blood on the skin at birth and not touching the skin further for 9 days ; after this olive oil or mineral oil used for the daily bath.

Our best results have been obtained by the sixth method. The skin of the infant, if left alone, and not injured by rubbing with an antiseptic, or irritated by washings, tends to clear itself and seems to develop some immunity to infection. From a physical standpoint the skins of these newborns are much more pink and healthy appearing than are those washed with oil or water. Pustules have been practically eliminated by this method combined with the new nursing technique as outlined.

About 10 per cent. of the babies will show irritations of some sort irrespective of the type of treatment, although with commercial baby oil both the irritations and the pustules were more numerous. The only thing we found in its favour was its pleasant odour.

There has been little difficulty with intertrigo. Buttocks reddened from loose stools healed promptly when exposed to air and the heat from an ordinary incandescent bulb at a distance of 20 inches. Irritations caused by rubbing the face with the hands responded quickly after encasing the baby hands in silk mittens.

The change in nursing technique alone reduced skin irritations by one third and pustules by over half. Larger nursery quarters were used, allowing one nursery for normal infants, a second for those with minor skin irritations, and a third for isolation of infants with more severe lesions. If an irritation was found, the baby was removed from the first to the second nursery, where he was kept until the skin was clear. If a pustule was found, the infant was isolated in the third nursery, on a different floor, and the mother was removed from the maternity floor. The nursery for normal infants was closed, and all newborn babies were admitted to the second nursery. When all babies in the first nursery were discharged it was washed and cleaned before reopening.

The graduate nurse in charge was the only nurse who touched the babies when they were naked. All nurses were masked and gowned. No person touched an infant until his hands were washed in soap, water, and alcohol. All nursery linen and clothes were washed in neutral solutions before sterilizing.

RABIES.

C. F. Schlotthauer, V. M. D., Division of Experimental Surgery : Rabies is a highly fatal encephalitis or encephalomyelitis caused by a specific infectious organism. It is primarily a disease of canines, especially dogs, but it may affect man and all warm blooded animals. Man may be infected secondarily through the bite of a rabid dog, but rabies can be transmitted by contamination of a wound with infected saliva or tissue. Recently also evidence has been found that the infective agent can pass through unbroken mucosa.

The morphologic character of the specific etiologic agent of rabies is not known. It has some of the characteristics of a virus, but at present the belief is growing that it is a protozoan organism and that the cell inclusion bodies, described by Negri in 1903, are one form of this organism. For convenience I shall refer to the infectious organism as a virus.

The virus of rabies is present in the saliva of infected animals. In the dog, the saliva is considered to be most infectious immediately after symptoms appear, but it has been observed to be infectious as early as eight days prior to the appearance of symptoms. Fluid saliva may remain infectious for twenty-four hours or longer whereas dried saliva usually becomes non-infective after fourteen hours.

The incubation period of rabies varies. It is determined by numerous factors such as the site of infection, the resistance of the animal and the virulence of the virus. Usually it is from sixteen to forty days, but cases have been reported as early as fourteen days after infection. The maximal incubation period has not been established definitely. Many investigators have expressed the opinion that the development of rabies many months or even years after exposure is the result of a more recent unobserved infection.

Since rabies is primarily a disease of the central nervous system, the symptoms manifested are those of severe, rapidly progressive encephalitis or encephalomyelitis. The virus of rabies travels to the spinal cord and brain by way of the peripheral nerves. Therefore, if infection enters through one of the extremities, symptoms of peripheral neuritis and myelitis may be noted several hours before encephalitis, whereas if the infection gains entrance through wounds on the head and neck, symptoms of encephalitis precede those of myelitis. It commonly is thought that rabid dogs become furious or vicious and that they foam at the mouth. Fortunately this is not a frequent or common manifestation of rabies. The period of cerebral irritation usually is very short and unnoticed, but it may persist for three or four days and is then followed by progressive mental depression. Generally, the latter symptom only is noted and the animal is said to have the dumb form of rabies.

Rabies is always severe, rapidly progressive and fatal. It has not been proved experimentally that any of the lower animals except fowl ever recover from an attack of rabies. Reports of cases in which recovery occurs among lower animals probably are the result of an error in diagnosis. The symptoms of encephalitis from any cause are similar; they differ in magnitude only, and therefore it would be difficult indeed, positively to diagnose rabies from the symptoms alone.

Since the virus of rabies travels to the central nervous system through the peripheral nerves, weakness or paralysis of the extremities may be an early symptom when the virus has gained entrance through the spinal nerves. Changes in behavior and mentality are frequently early symptoms. Vicious dogs may become more friendly and quite frequently dogs may become irritable and hard to manage, but the reverse may also occur. Not infrequently affected dogs whine or bark as if they were being annoyed or worried. They may seek seclusion in some dark corner as if they were trying to hide from the thing that is tormenting them. Rabid animals commonly eat foreign materials such as sticks and stones or their bedding. This symptom, however, is also noted in puppies and in dogs which have mental disease due to other causes. Paralysis of the muscles of mastication and deglutition undoubtedly is the most constant symptom noted in animals affected with rabies. This is due to the anatomy and physiology of the nervous system, the route of entry of the virus and its tendency to incite severe destructive lesions in nervous tissue. The nuclei of origin of all of the cranial nerves having a motor function are situated in the medulla and brain stem. Therefore, the virus in its migration to the brain through the spinal cord or through the cranial nerves would produce lesions in the medulla and brain stem before affecting the cortex.

Paralysis of the muscles of mastication and deglutition in animals causes the lower jaw to hang so that the mouth remains partially open and the tongue may protrude. The eyes have a peculiar stare and the voice is changed. At first the paralysis is not complete and the animal can close the mouth or bite, but later this is impossible. The animal then is unable to swallow food or water and the saliva tends to drool from the mouth. The drooling of saliva, however, is not constant for I have observed cases in which the mouth was dry. As the disease progresses into the brain, mentality is impaired and affected dogs may become stuporous or dumb or they may move about and if not confined or restrained have been known to travel for many miles. Dogs thus affected not infrequently unconsciously bite anything that crosses their path including man, animals, sticks, or stones. If they are confined in a cage, they not infrequently bite at the cage bars, food pans or at anything that is thrust into the cage. They may snap at imaginary objects and this is commonly termed

"fly catching." Rabid dogs, however, will rarely or probably never willfully go out of their way to bite. If they are not entirely unconscious of their actions, they appear frightened and scared of man and other animals. However, this is not true of all animals. Horses and cattle commonly charge at anything that moves, and occasionally they will even charge stationary objects. Since animals affected with rabies early lose their ability to swallow food or water, they rapidly become dehydrated and emaciated. Paralysis and convulsions generally are terminal symptoms. Death usually ensues within three to seven days after the appearance of the first symptoms. Since the course is rapidly fatal and Negri bodies are demonstrated more easily if the disease is advanced, an animal that is suspected of having rabies should not be killed until death is eminent.

Unfortunately the previously mentioned symptoms may be manifested by encephalitis or myelitis due to causes other than the specific organism of rabies. Therefore a definite diagnosis of rabies cannot be made from the symptoms alone. Undoubtedly the presence of typical Negri bodies in the nerve cells of the brain or spinal cord is a most significant or conclusive finding. These are found in greatest abundance in the large nerve cells of the hippocampus or Ammon's horn, cerebellum, brain stem and medulla. Negri bodies are frequently observed outside the cell body in smears or touch preparations, but extracellular Negri bodies are infrequent in properly fixed tissues. These bodies tend to retain their normal shape and structure regardless of their situation. In the absence of demonstrable typical Negri bodies one should resort to inoculation of animals. For this, rabbits, guinea-pigs and white mice are the most satisfactory. The suspected material must be injected subdurally or intracerebrally. Rabbits commonly manifest symptoms and die in fourteen to twenty days. Guinea pigs and mice have a shorter period of incubation and usually manifest symptoms in eight to fourteen days. However, the mere death of an experimentally inoculated animal within the specified time is not in itself diagnostic of rabies. Negri bodies must be demonstrated in the nerve cells of the experimentally infected animals in order to make the diagnosis of rabies. It must be remembered that the encephalitis present may be due to an etiologic agent other than that of rabies and that experimentally infected animals can die of encephalitis from any cause.

Diffuse encephalitis with marked perivascular lymphocytic infiltration is a common lesion of the brain of animals affected with advanced rabies. However, this reaction is not specific for rabies alone. I have observed similar reactions in the brains of many dogs affected with encephalitis that were not due to rabies.

The seriousness of rabies cannot be visualized from a comparison of statistics dealing with mortality alone. It would be difficult, indeed, to evaluate the suffering from fear and anxiety, the expense

and the inconvenience attributable to the presence of rabies in a community. Denson, McAlpine and Gil reported that in Alabama alone a positive diagnosis of rabies was made in 9,282 lower animals from January, 1922, to August, 1936. During this same fourteen-year period, 34,864 persons received antirabic vaccine and forty-two persons died of rabies, twenty-one of whom had received antirabic vaccine. Unfortunately similar conditions exist in other states. Rabies can be controlled if the public opinion forces its control. It does not exist in Canada nor in Great Britain. That it is not controlled or eradicated in the United States is uncomplimentary. Graham and Dunlap stated, "the key to the control and prevention of rabies in human beings and in animals is the suppression of the disease in dogs." They suggested "compulsory licensing and vaccination, the impounding and destruction of all stray dogs, the quarantine of all dogs during the presence of the disease in a community and of all dogs brought into the region at any time." No one of these measures alone will prevent outbreaks of the disease.

CODLIVER OIL IN THE TREATMENT OF GASTRIC DISEASES.

W. Thiele (Med. Klinik, No. 28, 1937) says that, in the past few years, codliver oil has gained ever increasing importance as a curative factor. Its regenerative influence on the epithelium leads to its being used on wounds and peripheral diseases of mucous membranes (vagina, rectum, etc.). For the last 1½ years the writer has prescribed codliver oil to patients suffering from gastritis or gastric or duodenal ulcer, naturally in addition to the other therapy required.

Firstly, the invigorating effect of codliver oil should be fully appreciated. Lohr recommended codliver oil for debilitated sufferers from gastric disease to make them able to stand operation. With his patients suffering from gastric diseases the writer achieved increases of weight of between 5 and 9 kilos in the course of four weeks in spite of the strictest dietetic regime. Secondly, the local effect of codliver oil on the gastric mucous membrane comes into consideration. Lohr demonstrated that codliver oil taken orally adheres to the gastric wall for hours and for an especially long time to ulcerative points, and that the secretion was reduced or entirely checked during that time. Furthermore, codliver oil is rich in vitamins A and D. Vitamin A seems to be a kind of protective vitamin for the epithelium; with A-deficiency erosions and ulcers develop in the stomach. In view of the fact that the restriction of

diet necessitated by diseases of the stomach leads to great poverty of vitamins in the food, a supply of codliver oil rich in vitamins may be extremely beneficial. Apart from this, vitamin D produces a rise of the serum calcium level which is very desirable. Finally, codliver oil has also a laxative effect so that laxatives, which are otherwise so often required in sufferers from gastric disease but are not always well tolerated, can be dispensed with. As a matter of fact, it has been demonstrated that codliver oil increases the acid values in the stomach but this has actually never caused discomfort, and we have to-day relinquished the standpoint that hyperacidity plays an important part in the etiology of gastric ulcer.

The writer prescribes a daily dose of 60-80 gm. codliver oil in addition to the dietetic treatment, and attaches special value to giving a dose at night in order that it may take effect throughout the night. A little lemon juice may be added to improve the taste. Treatment with codliver oil is chiefly indicated with every large callous ulcer and every chronic solitary ulcer of the stomach and duodenum; further, with ulcers situated so high up as to make operative treatment impossible, and with all the forms of chronic gastritis. This therapy is especially suitable for all patients suffering from gastric disease who lost much weight as a result of their illness, thus for after-treatment after operations on the stomach, and after operated or with inoperable cancer of the stomach.

Medical News and Notes.

CANCER HOSPITAL IN MADRAS.

OPENING OF NEW BUILDINGS.

Premier's Speech at Function.

The new buildings of the Madras Radiological Institute and Private Cancer Hospital in Poonamallee High Road, the foundation stone of which was laid last year, were declared open on 2nd Feb. 1939 by the Hon. Mr. C. Rajagopalachari, the Prime Minister.

The Institute and Cancer Hospital which is under the direction of Dr. P. Rama Rau, is housed in an extensive compound in Poonamallee High Road. The extensions and the original buildings provide accommodation on the ground floor for the X-Ray and electro-therapeutic equipment, administrative offices, wards and poor patients, nurse's quarters, dining rooms, kitchen and stores. On the first floor there is accommodation for eleven patients, a separate room for each, and there is also a Radium Theatre. The Resident

Medical Officer has his quarters on the second floor. In front of the building a bust in bronze of Prof. C. W. Roentgen, is installed on a pedestal, to symbolise the nature of work done in the place. The buildings and equipment have cost about Rs. 3 lakhs.

At the invitation of Dr. Rama Rau, a large gathering of medical men and prominent residents of Madras were present at the opening ceremony. Dr. Rama Rau received them, on arrival. Tea was served to the guests on the spacious grounds in front of the building.

DR. P. RAMA RAU'S SPEECH.

In requesting the Prime Minister to declare the hospital open, Dr. Rama Rau gave a brief account of the origin and growth of the institution. The foundation-stone of the Radiological Institute, he said, was laid exactly a year ago by the Hon. Dr. T. S. S. Rajan. The institute had its early beginnings a little over a decade ago when he (Dr. Rama Rau) installed a diagnostic X-Ray unit, in George Town. On the advice of friends, he specialised in Radiology, and it had been his endeavour since his return from Europe in 1932 to keep pace with the developments elsewhere. A deep X-Ray plant was then installed, as also other apparatus for radiation therapy. Towards the end of 1934, he considered the possibility of using radium and obtained a supply of the same. At the end of 1935, the "Chaoul" therapy outfit for the treatment of cancer of the mouth and skin was installed, after a study of the technique from Prof. Chaoul himself in Berlin. The premises of the clinic were shifted to the present grounds and accommodation made available for six patients.

He visualised for himself, Dr. Rama Rau continued, the possibilities of establishing a Radiological Institute which would ultimately become a national service institution. He visited Japan, America and Europe in 1937, and on his return, towards the end of that year, he attempted the consolidation of his ambition by putting up a place to house the patients and for keeping them under scientific observation. He had also installed further equipment including 400,000 volts X-Ray apparatus.

"A DEDICATION CEREMONY."

Proceeding, Dr. Rama Rau said :—

"The present function is not only an opening ceremony but also a dedication ceremony. It is the ceremony of dedication of this Institute to the service of suffering humanity particularly in South India. As it is customary with us that the ceremony should be performed by a purohit—learned and wise in the Vedas, the Upanishads and the Gita—it is of happy augury that the Hon. Mr. C. Rajagopalachariar, the Premier of our presidency, who is not only well versed in political lore but also and to a greater degree in the Vedas, should be so kindly be here to bless this Institution this evening.

"The Hon. Dr. Rajan, you all are aware, sacrificed a very lucrative medical practice and has devoted himself to the advancement and

improvement of medical and public health affairs, in this presidency. The Hon. Mr. Rajagopalachariar's is wholly a life of absolute sacrifice entirely at the service of the Motherland. An institution blessed by these two illustrious sons of India must progress from year to year, and be of help to suffering humanity, particularly those suffering from that much-dreaded disease, Cancer.

"This institution has been so designed as to have the necessary equipment to deal with any kind of medical—radiological work—diagnostic and therapeutic, and in particular to deal with cancer treatment in all its aspects. One hundred and ten millegammes of radium are available here for all forms of treatment, with the exception of the radium bomb, which is not within the means of a young private institution.

"The ideal of service which actuates this Institute is different—must be different—from what actuates a purely charitable institution. This is private as far as its financing is concerned; and in order that it might run, it should be self-supporting. But because the Institute has to levy fees from its clientele, it does not mean that it has lost its desire to be of the greatest possible service to suffering humanity. Provision is made for the free treatment of a limited number of poor patients in a ward named after my good uncle the Hon. Dr. U. Rama Rau to whom I owe many things in this life. It is, however, necessary to state that the actual cost of maintaining the institute in sufficient working order must be met by the paying clientele.

"The services offered are of as high a technical and professional standard as it is possible for me to command, the merits of which, of course, I can only leave the medical colleagues to judge from the results the Institute yields. It is my ambition, and I say it not in idle boast, to make it possible for every patient that finds his way into the Institute to get the best of radiological service even as compared with the foremost radiological institutes in the world. I may be permitted to say that the cost of the building and equipment has run to approximately three lakhs of rupees.

"I claim only a beginning for radiological service. The fulfilment of my ambition depends upon the co-operation of the medical profession in this land; and from my experience in the past of the support that was given by my colleagues which I most gratefully acknowledge, the future as I envisage it will fully be justified. The willingness to serve and the ability to serve are not the same. The ability to serve can come to the Institution only with the help of the medical profession and the public at large."

In conclusion, Dr. Rama Rau acknowledged the help rendered by Mr. L. M. Chitale, the architect, Mr. N. T. Patel Engineering Contractor, and Mr. H. P. Mukherjee, Engineer of the Victor X-Ray Corporation, who had been responsible for the installation of the

apparatus in the clinic. He then requested the Prime Minister to "declare this Institute open and bless him with success in the undertaking."

THE PRIME MINISTER

The Hon. Mr. C. Rajagopalachari, expressed his great pleasure in declaring the institute open. "It is not usually given to one", he said "to be able to declare open institutes of this solid scientific and useful kind. I know many are invited to lay foundation stones of this or that venture. It is easy to lay foundation-stones; but it is difficult to complete the structure and get it ready for use. Many foundation-stones in our country still remain as foundation-stones. It is, therefore, a great privilege when the man who was asked to lay the foundation-stone is sitting here, for me to have the easily and more satisfying privilege of declaring the Institute open, all within the space of twelve months. It proves the energy of the organiser."

Continuing, the Prime Minister said that even during the past few minutes, they had seen the humility and the energy of Dr. Rama Rau. "Dr. Rama Rau wants me to bless him. May the god bless him. That is all I say. Without the blessing of God no radium can work; without the blessing of God no therapy can cure; without the blessing of God no man can diagnose correctly whether with the X-Rays or with the fingers on the pulse. It is a great thing to see a young man who has the audacity to harness the forces of Radium and X-Ray for the benefit of sick people, who has gone round America and Japan and I do not know to what other places, and who still thinks there is God and that it is necessary to ask for a blessing from a man like me, whom he takes to be capable of procuring the blessings of the Divine Power. I am glad that he is of that curious type in modern days, because I know so far as I am concerned that the 400,000 volts come from that Power and not from the wires. When a young man begins an adventure with so much humility and faith, I have no doubt he will succeed."

"I am not fond of presiding at such functions", the Prime Minister continued. Many are the adventures in these days, both commercial and benevolent, and one does not know to what ultimate use these institutes will be put. But I have no doubt in my mind with regard to an institute of this kind. It is not merely an adventure in competition; it belongs to the class of new things. Our people cannot support as many hospitals as our sick population needs. Our people cannot start as many schools as our illiterate people require. Our people cannot pay for building, equipping and maintaining institutions of this kind. Modern civilisation is measured by the manner of roads you have the number of hospitals you have, the number of schools you maintain, the number of radiological institutes you have and so on. Our civilisation is very great. It has been

great for some thousands of years. But unfortunately our people, our tax-payers have not the money to-day to build and maintain these externals of civilisation in such forms as you would like them to be maintained. We therefore want the energy and the resources of individuals like Dr. Rama Rau to come to our assistance.

It is not like opening a new coffee hotel or a new cloth shop or a furniture depot. But it is one of those rare and good things which add to the benefit and welfare of our poor people, who cannot have it otherwise altogether."

The Government, the Premier continued, could not afford, the tax-payer could not afford to run radiological institutes like this in all places. The other day the Surgeon-General was telling him that a radiological section was an absolute necessity for a modern hospital. He (Premier) pleaded with him that forty-two years ago there were hospitals and men got ill and well again. There was nothing like radium or X-Ray therapy known then. He also told the Surgeon-General that then "marvellous cures had been accomplished and the world was getting on all right. So why should he insist on radiological sections for all hospitals?" The good Surgeon-General told him "that is all an old story. To-day you cannot have a hospital without a radiological section." He (premier) said, "You cannot expect people to pay for all these. I hope some private people will be able to build up such institutes, which we may utilise." This was the gist of his conversation with the Surgeon-General and here they had a young man, a self-made man, who had put into actual practice what he had seen and dreamt. Dr. Rama Rau was telling them that there were beds for the rich and the poor. Let the rich pay. While the rich man got cured himself, he also got a poor man cured along with him.

A NEW WEAPON

"I am very glad," the Premier proceeded, "to see such distinguished company here. I hope none of you will stand in need of assistance in such an Institute. But you can assist this institution by taking all the persons who suffer, to this place and paying for them if you can. The Premier advised people not to yield to quack treatment and experiments and then go to such institutes when they were far too ill for a cure. "When God has given us a new weapon," he said, "to find out what the matter is with you by direct ocular demonstration, it is impious not to make use of such assistance—as impious as for a doctor to shut his eyes because he can diagnose by feeling the pulse."

This Institute utilised the powers of radium and radio-therapy for the purpose of cure as well as used X-Rays for mere diagnosis. In careful hands these were very powerful and useful things. But let them not run away with the notion that because X-Ray photographs showed up the inside, they could say, "this is such and such

a thing." It was not so easy to read X-Ray photographs. A particular training, a particular genius and if he might say so, a particular intuition was necessary to read those pictures properly. "You may read it altogether wrongly as you can read a section of an Act wrongly and give a bad judgment or as you can read a passage from scripture wrongly and think you are pious while doing something bad. Therefore it is that it is necessary to appreciate the attainments, equipment, patience, humility, research and all else that has built this Institute; and I do hope this Institute will succeed in its endeavour to help the poor people in our province to get cured of diseases with which they are afflicted for no sins committed by themselves.

DUTY TO THE POOR

Proceeding, the Premier said that they might have seen rows of shops in temples and mosques. The mosques and temples got money out of those shops by way of rent. And the house of worship was hidden away beyond the lines of those shops. Modern taste was offended by that. Some might feel that it was not the right thing to do. Dr. Rajan was so angry with the state of things in Madura that he directed instructions to be issued by which many of the shop-keepers were ousted so that the temple might be the peaceful place it should be. He did not say that Dr. Rajan was wrong. He was only explaining how oldfashioned people arranged things so that the houses of worship might be maintained with the income derived from the shops without any interruption. Even if the piety of the local population went down and the temple did not get proper income, the rents could maintain it. "In the same way, Dr. Rama Rau here wants people to pay for a few wards so that out of the money that he got, he may maintain the poor people's ward. It is not a bad arrangement. Do not therefore run away with the notion. 'Oh! people have to pay. Where is the charity in it?' Yes, those who can pay should pay so that those who cannot pay may get healed and not simply be left to die in their huts. If you do not want complete State management for everything in this world, if you do not want Moscow, Bolshevism or Socialism which you abhor, you must pay for what you get in such institutions, pay with pleasure, and when you are cured pay something more so that those poor people who cannot afford even to pay railway fare from their villages, could be brought by friends, be admitted, cured and sent back. May be that poor man deserves to be cured and to live, whereas it may be doubtful in our own case."

In conclusion the Prime Minister hoped that Dr. Rama Rau would, in course of time, increase the number of beds in the ward for the poor and said that he had great pleasure in extending to Dr. Rama Rau "all our best wishes that this Institute may grow and

be useful that people may be cured and that the good name of the institution may flourish."

The Prime Minister proceeded to the entrance and cut the tape tied across. The Prime Minister and other guests were then shown round the buildings

THE TINNEVELLY DISTRICT MEDICAL ASSOCIATION, PALAMCOTTAH.

(Tinnevelly Branch of the Indian Medical Association.)

The monthly meeting of the Tinnevelly District Medical Association was held at the Government Hospital, Nanguneri on Saturday the 28th of January 1939. Members numbering 20 were present at the meeting. After Tea and music by Mr. G.B. Ramakrishniah, the meeting began under the Presidentship of Lieut-Col., T. S. Shastri, I.M.S., at 5 P.M. The Secretary and Treasurer read out the minutes of the Annual Re-Union which was celebrated on the 3rd of December 1938, which were passed. It was decided to invite Madura, Ramnad and Travancore Medical Associations to hold a joint meeting with us at the next monthly meeting at Palamcottah. A resolution was unanimously passed congratulating the Honourable Dr. T. S. S. Rajan, Public Health Minister of the Government of Madras, on the unanimous passing of the Public Health Bill by the Madras Legislature.

Resolved that the Indian Medical Association should be officially recognised by the Government of Madras and that orders may be issued that the Association must be consulted on all important matters relating to Public Health and Medical profession as well.

Dr. M. Vaidyanathan, L.M.P., of Nanguneri showed a child of 3 years who is suffering from a very complicated state of congenital syphilis.

Dr. T. K. Nilakanta Iyer, L.M.P., read out the following cases, which were successfully treated at the Government Headquarters Hospital, Palamcottah :—

1. A case of Acute Abdomen.
2. A case of Fracture of Pelvis.
3. A case of Myelitis.

The skiagrams relating to the above were demonstrated. Each case was fully discussed by the members.

Thereafter Lieut-Col., T. S. Shastri, I.M.S., summed up the salient and important features of all the cases and their differential diagnosis in detail. He offered his cordial thanks to Dr. M. Vaidyanathan, L.M.P., for the arrangements.

Thereafter an excellent Dinner brought the happy gathering to a close at 10 P.M.

HEALTH EXHIBITION.

Under the auspices of the Tinnevely District Medical Association in connection with the monthly meeting, a Health Exhibition was arranged at the Board High School, Nanguneri on the 28th of January 1939.

Lieut-Col., T. S. Shastry, I.M.S., welcomed the guests and declared the Exhibition open.

Sri G. B. Ramakrishna Iyer, Teacher, Board High School Nanguneri, reproduced in Tamil which Colonel Shastry spoke, viz., Sanitation, Small-pox, Cleanliness, Nutritious food etc., for the benefit of about 200 boys and girls.

The Exhibition was kept open till 1 P.M. The Exhibits consisted of Posters on Tuberculosis, Small-pox, Fly Danger, Cholera etc. The Exhibits of the School were also exhibited.

Review.

Dispensary Label Book: Printed at the Merchants Press, 85, Nainiappa Naick St., P. T., Madras. Price: Rs. 1.

In this, the medicines are arranged in alphabetical order and their doses given. These comprise 113 pages. Then a few blank sheets are left and after that, 'Poison' labels and other 'direction' labels are printed in Red Ink. This Label Book will be found very useful for Dispensaries and will greatly facilitate their work in labelling their medicine bottles.

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