(For the use only of Registered Medical Practitioner or Hospital or Laboratory)

THE MADRAS CLINICAL JOURNAL

JOURNAL OF THE MADRAS STATE BRANCH INDIAN MEDICAL ASSOCIATION
(With which is incorporated the "Miscellany")

Vol. ~~XXII~~ I. MAY 1956 No. ~~115~~

CONTENTS


ORAL TREATMENT OF
AMOEBIASIS

talking of Panaceas

We do not claim that
TETRACYCLINE DUMEX
is the panacea for all ills, but

We do claim that

TETRACYCLINE *Fortified (Dumex)* is an ideal combination of Tetracycline with vitamins. During infection, vitamin deficiency may occur adversely affecting antibody formation, body resistance and tissue repairs. Fortifying oral Tetracycline therapy with vitamins increases resistance to infections, aids antibody formation, helps tissue repair, prevents complications and helps convalescence.

We do claim that

TETRACYCLINE *Intramuscular (Dumex)* obtains effective therapeutic blood levels when oral therapy is not practicable.

We do claim that

TETRACYCLINE *Ointments (Dumex)*, Ophthalmic and skin are best suited for local treatment of superficial infections in wounds, abrasions and for prophylaxis in post-operative surgery.

"*If ye suffer paynes of ye stummick then to banishe same have someonne to jump upon ye afflickted portinne of thine anatomie when ye paynes shall verilly disappearre...*"

Composition & Packings:

Each capsule of TETRACYCLINE FORTIFIED *contains:*

Tetracycline HCL cryst. 250 mg.; Vitamin C 80 mg.; Vitamin K 0.55 mg.; Vitamin B_1 10 mg.; Vitamin B_2 5 mg.; Vitamin B_6 1 mg.; Vitamin B_{12} 1 mcg.; Niacinamide 50 mg.; Cal. Pantothenate 6 mg., Folic Acid 0.4 mg.

Bottles of 4, 8 and 100 capsules

Each vial of TETRACYCLINE INTRA-MUSCULAR contains:

Tetracycline HCL cryst. 100 mg.; Procaine HCL 40 mg.

Single dose vials

Each gm. of TETRACYCLINE OINTMENT contains:

Ophthalmic—Tetracycline HCL cryst. 5 mg. —3 gm. Collapsible tubes.

Skin—Tetracycline HCL cryst. 30 mg. —15 gm. Collapsible tubes.

DUMEX PRIVATE LIMITED, WAVELL HOUSE, BALLARD ESTATE, BOMBAY-1

(FOR CIRCULATION AMONGST MEMBERS ONLY)

THE MADRAS CLINICAL JOURNAL

JOURNAL OF THE MADRAS STATE BRANCH OF THE INDIAN MEDICAL ASSOCIATION

(With which is incorporated the "Miscellany")

VOL. XXII] MAY 1956 [No. 11

THE ENLARGED PROSTATE.

By

Dr. P. VADAMALAYAN, M.B.B.S., Madurai.

I have a record of 47 cases operated. The lowest age of the patient operated was 50 years and the maximum age 80 years. There was no mortality among the patients operated in the clinic. Two cases among those operated in the hospital died roughly just over 4 per cent mortality. All these cases were operated by the Freyer's Method, two by the one-stage method, and the rest by the two-stage method. There were 3 caseas mong these in which the enlargement was due to carcinoma of the prostate and so only suprapubic cystotomy was done followed by oestrogen therapy. Quite a few of the prostates ennucleated and sent for biopsy turned out to be carcinomatous.

Enlargement of the prostate may be benign or malignant. Benign enlargement of the prostate occurs in men over 50 years of age; most of them between 60 and 70. In rare cases, it may occur under the age of 50. These facts refer to White races in whom the condition is very common. In Indians, prostatic enlargement is less frequent and said to occur in younger age groups - in my series, the age groups applicable to the White race applies to Indians also. In Negroes, prostatic enlargement is said to be rare while in Mongolians it is exceptional.

The cause of the prostatic enlargement is disputed. Histologically, the condition closely resembles an adenoma in appearance and the term adenomatous 'enlargement' is frequently applied to it. Hyperplasia is undoubtedly present in the gland tissue, as a rule and 'prostatic hypertrophy' is another favoured term. The prostatic change has been ascribed, like chronic mastitis in the female, to senile involution, and this seems to be the likeliest explanation of the adenomatous and hyperplastic appearance in the gland. Normally, the preponderant testicular hormone is androgen, but a small quantity of oestrogen (female) hormone is excreted as well. In cases of enlargement of the prostate, the output of oestrogen hormone exceeds that of the androgen (male) hormone. The disease has been ascribed to this hormonal imbalance.

PATHOLOGY

Senile enlargement of the prostate may involve the lateral lobes of the gland or the middle lobe. The anterior lobe is rarely affected and the posterior lobe never. The lateral lobes may enlarge as well as the middle lobe usually; but occasionally one of the lateral lobes may enlarge more than the other or only the middle lobe may enlarge without appreciacle hypertrophy of the lateral lobes. The enlargement occurs mainly in that portion of the prostate situated above the level of the Verumontanum and common ejaculatory ducts, the remainder of the gland becoming compressed so as to form a false capsule from within which the pathological portion can be ennucleated.

SECONDARY EFFECTS OF THE PROSTATIC ENLARGEMENT ON THE URETHRA.

The portion of the urethra lying above the Verumontanum becomes elongated, sometimes to as much as twice its normal length. The canal is compressed laterally, so that it tends to become an antero-posterior slit. The normal posterior curve becomes so exaggerated that it requires Cokde 'or Bicoude' catheter to negotiate it. When once lateral lobe becomes enlarged predominently, lateral distortion of the prostatic urethra occurs.

On the bladder :— The musculature of the bladder hypertrophies to overcome the obstructions. Then we get the trabeculation which one is accustomed to feel and see in the inside of the bladder. Sacculation may occur giving rise to diverticulum of bladder.

When the middle lobe projects upwards into the bladder it acts as a dam to the last ounce or so of urine which remains in what is termed the 'post-prostatic pouch'. Stones are prone to form in this stagnant pool of residual urine. Quite a large number of cases operated by me had calculi - in a few cases multiple.

The enlarged prostate may compress the prostatic venous plexus and this may cause haematuria.

Unless the obstruction is relieved, a time comes when the muscular tone diminishes; muscular hypertrophy dwindles, and eventually gives place to atony, the tired muscle making no attempt to overcome the obstruction. Thus we get the enormously distended bladder.

On the ureters and kidneys: Increasing intravesical pressure or perhaps in some cases direct pressure of the intravesical portion of the prostate on the ureteric orifices causes gradual dilatation of ureters resulting in hydro-ureters, followed by bilateral hydronephrosis. The sphincter mechanism around the ureteric orifices ceases to function, permitiing reflux of urine from the bladder into the dilated ureters. Chronic interstitial nephritis with increasing damage to the renal parenchyma is a frequent accompaniment of the back-pressure effects of prostatic obstruction. As a result of ascending infection from the bladder, or more rarely the blood stream, acute or chronic pyelonephritis supervenes.

On the sexual organs : in the early stages of prostatic enlargements, there is increased libido. Later, impotence is the rule.

CLINICAL FEATURES OF ENLARGED PROSTATE

Frequency of meric turition is the earliest symptom of an enlarged prostate. At first it isnocturnal, the patient being obligedto get up to micturate twice or more often during the night, usually in the early hours of the morning. The frequency at this stage is probably due to eversion of the sensitive prostatic mucous membrane into the bladder by the intravesical enlargement of the prostate. The frequency becomes progressive and is then present both by night and by day. When the vesical sphincter becomes stretched, a little urine escapes into the normally empty prostatic urethra, causing an intense reflex desire to void and urgency is added to the frequency. Later, as residual urine increases, frequency becomes more and more in evidence and there is terminal dribbling.

Dysuria: The patient finds it useless to strain-in contrast to strictures where straining only brings on micturition. Rather, he must first wait patiently, with a relaxed abdomen for the stream to start. When it does start, the stream instead of being projected, tends to fall vertically.

Pain: is absent, unless cystitis or acute retention of urine supervenes. Pain may be due to a stone. When hydronephrosis commences, there may be a dull pain in the loin. A feeling of weight in the perineum or a fulness in the rectum are occasional complaints.

Haematuria: The first symptom may be an alarming haematuria due to rupture of a varicose vein at the base of the bladder or from an erosion in the enlarged prostate. More often, the haematuria may be only a drop of blood at the beginning or end of micturition. It is a fortunate symptom for, while it rarely produces severe exsanguination, it acts as a danger signal to the patient and makes him seek advice. Haematuria is more common in benign enlargement than in malignant.

Priapism: In some cases the pelvic congestion produces frequent erections with an increase in sexual desire which may have embarassing consequences.

Acute retention of urine: May be the first symptom which drives a patient to seek medical advice because of the intense pain it produces. It comes on often after indulgence in alcohol especially on a cold night.

Retention with Overflow: The patient comes complaining of dribbling of urine, usually unaware of a distended bladder.

Symptoms of renal failure: Headache, thirst, anorexia, nausea-vomiting, diarrhoea, neuritis, fibrositis, eye strain.

Prostatic dyspepsia is a definite clinical entity.

INVESTIGATIONS.

1. **Study the general condition:** Dry tongue, dry skin, eyes, colour, blood pressure for signs of incipient uraemia.

2. **Abdominal examination:** Bladder dulness, renal tenderness or enlargement are sometimes detected.

3. **Rectal examination:** Knee - elbow and bimanual examinations-a simple prostate is smooth, uniform, firm or elastic, moveable and well defined. No enlargement is palpable if the urinary symptoms are due to micdle lobe enlargemet alone, median bar or small fibrous prostate. Distention of the retroprostatic pouch may be felt as a fluctuant swelling and, if micturition has been performed before the examination, the amount of residual urine may then be roughly guessed. The rectal wall can be made to move over the prostate. A malignant prostate can be diagnosed by an experienced finger by its hardness, fixity and irregularity.

4. **Excretory pyelography:** This afiords a great deal of information without resorting to instruments; it may not be advisable when there are signs of renal failure. It is an excellent test of renal function. It will exclude or confirm the presence of hydroureter and hydronephrosis. Vesical diverticulum. if present, may be shown. If a film is taken after micturition, residual urine will be revealed. Sometimes, an intravesical enlargement of the prostate is outlined by the medium. A preliminary radiograph may show a renal calculus or a stone in the bladder, or in a diverticulum there of.

5. **Examination of blood:** A blood urea estimation is essential. Some surgeons recommend the urea concentration test. Specific

gravity of urine is a rough and ready test where these bio-chemcial examinations are not available.

6. **Cystoscopy:** This may not be necessary when the diagnosis of prostatic enlargement is certain by other methods-may be avoided if the bladder is distended.

7. **Examination of Nervous system;** To exclude tabes and disseminated sclerosis.

8. **Cardiovascular system:** Blood pressure may be noted. It is likely that old people with enlarged prostate are the subjects of old coronary thrombosis.

TREATMENT OF ENLARGED PROSTATE

With the advent of antibiotics, improved methods of anaesthesia, blood transfusion, which is more widely practised, and the facilities for rapid preoperative investigations as blood urea, X-Ray examination, the operation of prcstatectomy may be performed with more and more confidence.

Before proceeding, I want to impress on you that not all cases of enlarged prostate require operative treatment. As the patients get more and more enlightened, may I say prostate conscious, one gets quite a number of men over the age of 50 developing trivial symptoms of occasionalattacks of difficulty in starting micturition and nocturnal frequency and a rectal examination reveals an enlarged prostate. Intravenous Pyelogram is normal and shows no residuum after micturition, Cystoscopy shows no trabeculation, middle lobe enlargement or bladder neck contracture and the urine is uninfected. In these cases, with no odstructive symptoms the symptoms do subside. In other cases, there is a mild obstructive element, perhaps aggravated by infection. Cure of the urinary infection with some mild urinary antiseptic as Urolucosil will relieve the symptoms and render further treatment unnecessary. I remember one of my private cases who had mild symptoms and got on well for over 15 years and later came with acute retention as a result of an enlarged prostate as big as a closed fist and underwent a successful prostatectomy three years ago and is going about normally. In this case, the enlarged prostate showed malignant changes and he was put on Stilboestrol and is being followed up periodically.

It is said that in advanced countries where there is the fear of enlarged prostate, every patient must 'earn' his operation, either on account of a suspicion of malignancy, because his symptoms make his life a misery or because signs of back pressure are present such as a large residuum, a chronically distended bladder, bilateral hydronephrosis and a raised blood urea. I had only two patients who came without acute retention in whom I had to operate because of a high blood urea large intravesical prostate—which could barely be felt per rectum in one and in another without any of the recognised indications as high blood urea, no residual urine, there was only the frequency and dysuria—producing prolapsing piles. This was the oldest man of the series—80 years — in whom I did a one stage prostatectomy as he was well evaluated as regards operative risk.

You will admit that most of the cases of enlarged prostate seeking our advice come with acute retention of urine. Some of these cases have been repeatedly catheterised before first seen by the operating surgeon especially in outlying country districts. Though the elective treatment in most centers is one stage prostatectomy with, if necessary, preliminary non operative decompression of bladder, I would advise the two stage operation of Freyer to most general surgeons and this is what I am practising as a safe and satisfactory procedure and so will describe it in some detail. Before doing so, I shall only mention the various operative procedure adopted in many urological clinics.

These are:

1. Harris operation where the prostatic bed is retrigonised with the boomerang needle and the bladder is closed with an indwelling catheter which is left for about a week. I have seen this operation done by Mr. Galbraith surgeon of the Western Infirmary, Glasgow-in his well planned Urology Clinic.

2. Wilson Hey's Operation transvesical prostatectomy where part of the Trigone and interureteric bar are excised along with the seminal vesicles. Here also the bladder is closed after providing an indwelling catheter.—Wilson Hey of the Manchester Royal Infirmary. This operation is done where malignancy is suspected.

In both the above methods, primary closure of bladder is advocated and I could very well understand the principle of primary closure of the bladder so as to prevent wetting with urine-which is so troublesome in cold countries. I had the experience of these old patients complaining of the dressing though it be only for a week.

3. Retropubic Prostatectomy as practised by Millin, Surgeon, All Saints Hospital, London. I have seen this operation done by some of my colleagues as well as Professor Dix of the London Hospital Urology Clinic and Mr. H. A. Hunt, surgeon of the St. Bart's Hospital. Special instruments like illuminated retractors etc., are required. The only advantage may be the indwelling catheter can be discarded soon.

4. Transurethral resection of the prostate by the Thompson Punch or the Mc Carthy's resectoscope which are still being extensively practised in some Urology Clinics of America. These are indicated particularly in obstruction due to an enlarged middle lobe, a fibrous prostate or a median bar. Transurethral resection is better suited to frail patients.

5. Perineal prostatectomy of Young only requires to be mentioned as it is not widely practised.

Two stage prostatectomy: is the safest procedure for the general surgeon and it is this method which I usually adopt.

As soon as a patient with acute retention of urine is brought to me, a rectal examination is made to incriminate the enlarged prostate as the cause of retention and operation is advised. The blood urea is estimated. The blood pressure is noted. After carefully preparing the skin, the first stage suprapubic cystotomy is done under half per cent. local Novocaine anaesthesia. If the blood pressure is not high, a few drops of adrenaline in the Novocaine helps to keep the field of operation comparatively avascular. First the Vas are tied on both sides removing about an inch of it under local anaesthesia, provided the patient's condition is satisfactory as evidenced by a moist tongue. Through a 2 to 3 inch suprapubic incision, the pyramidalis and recti muscles are separated—the bladder is reached; peritoneum pushed up high by gauze dissection. After applying two catgut sutures (0·0 plain) for traction of the bladder wall, the bladder is incised fairly high above the Pubes, the right side index finger is inserted into the bladder to explore the inside of bladder. This gives a vivid picture of the state of affairs; trabeculation will mean a long-standing obstruction; calculi may be removed; intravesical enlargement and the size of the prostate are also clear. Half an inch or three-fourths inch diameter rubber tube with a hole near its end is placed inside the bladder, not to impinge on the floor of bladder; the stay stiches are tied over the drainage tube and another purse string O.O. plain catgut suture is taken round the tube invaginating the bladder wall. The rectus sheath is closed by a few interrupted No. 1 Chromic catgut sutures after providing a small drainage tube with a hole on a rubber dam in the cave of Retzius. This tube helps the wall not becoming adherent to the pubic bone Skin stiches with Nyllon or silk with the one near the drainage tube encircling the tube tightly so as to prevent its slipping, completes the operation. A continuous suction is applied to the suprapubic drainage tube and the bladder is kept drained completely all the time. The tube in the cave of Retzius is removed on the third day. Bladder wash is given daily with 1 in 5000 acriflavine solution; twice a day if the bladder is very septic. Penicillin and Streptomycin injections are given twice a day. Patient is encouraged to take plenty of fluids and a fluid intake chart kept to see that the patient takes at least 80 ounces daily. Whenever I get a case, I like this suprapubic cystotomy with a large drainage tube in preference to the small indwelling suprapubic catheter or indwelling urethral catheter. Exploration of the bladder at the time of operation is a definite advantage to assess the true state of affairs. I have not lost one patient with this procedure in whatever state I got him. Only in two cases I did not proceed to the second stage as the post operative period was tumultuous with hiccough, and breathlessness in a patient who had cardiac asthma with hypertension.

Second stage prostatectomy: This is undertaken ten days to 14 days. after the first stage and in some cases where the blood urea is still higher than 50 mgs. per cent. three and even four weeks later. I use heavy percaine 1. 5 c. c. spinal anaesthesia in almost all cases except in one where the blood pressure was very high-200 and 140. General inhalation anaesthesia with muscle relaxants may be ideal when trained anaesthetists are available.

After anaesthetising the patient, he is rolled to one side and an injection of 20 c. c. of Coagulin-Ciba is given into one buttock. The suprapubic tube is removed by a sharp tug and any blood or urine which has emerged from the wound is mopped dry with sterile gauze. The abdomen is painted with 3 per cent. picric acid in spirit and towels are arranged and clipped into position. If Vasectomy has not been done during the first stage because of the condition of the patient, this is done now.

Long gauze swabs are inserted into the bladder through the suprapubic track and its cavity is gently mopped dry. Two incisions are made, each beginning about one inch above the suprapubic opening, passing down to the outside of the suprapubic wound, converging below this to within one-fourth inch of each other and running vertically downwards on either side of the healed suprapubic scar and meeting at its lower entremity. The scar and as much as possible of the suprapubic scar are excised and the skin edges undercut for about one inch on either side.

An incision is next made which begins at the lower margin of the cystotomy opening and runs vertically downwards to the lower end of the skin wound. The knife divides accurately in the middle line all the tissues which consist mainly of the granulation tissue uniting the anterior rectus sheath, the two recti muscles and anterior bladder wall. Any bleeding points are picked up and ligatured and the bladder again mopped dry with gauze swabs. The towels covering the patient's left leg are turned back. The index finger of the Surgeon's left hand, previously lubricated with vaseline, is inserted into the rectum and the prostate pushed up into the bladder as far as possible.

The internal meatus is sought for and the right fore-finger inserted into it, and the mucous memberane of the antero-inferior margin of one or other of the lateral lobe broken through, just external to the Verumontanum. The inferior and superior borders of the lateral lobes are followed round to the middle line, first on one side than on the other, the finger slipping into the line of cleavage between the adenomatous portion and false capsule of the prostate. By this method, the prostate is quickly removed with gentleness and ease and with the *minimum* of bruising and disturbance of the surrounding tissues.

All parts of the prostatic capsule are palpated bimanually and any small adenomata or tags are removed. Unless Harris's technique is employed, the next step in the operation and one which is of utmost importance is preventing subsequent contraction of the communication between the bladder and the prostatic cavity, consists in splitting the posterior commissure in the middle line until the finger can be passed from one cavity to the other without any intervening elevation. As a rule, the greater the intravesical projection of the prostate, the larger is this vesico-prostatic opening and the less is the risk of subsequent stenosis.

There is free bleeding from the prostatic bed after removal of the adenoma. This is controlled by plugging the cavity with hot gauze strips and keeping the pressure over the gauze packs with the index fingers of both hands for atleast five minutes.

The prostatic bed is plugged with long ribbon gauze soaked in Flavine. If there is free bleeding gel-foam is put in before packing the cavity. The end of the gauze pack is brought out of the suprapubic wound. Some use a Foley's No. 18 catheter with 15 to 30 c.c. bag for plugging the cavity. This is certainly a better procedure but the Foley's Catheter is not freely available in our country.

The wound in the bladder and rectus sheath is closed over a half inch rubber tube and the rectus sheath by a few No. 1 Chromic catgut sutures. Skin is closed and continuous suction applied. Ribbon gauze is removed on the 3rd day and 4th day and the suprapubic tube on the 6th day. Daily bladder wash with warm Flavine solution is given. If there is oozing of blood on the first and second day, Silver Nitrate. 1 in 10,000 will be helpful when instilled into the bladder through the suprapubic tube two or three ounces at a time.

If there is much fall in blood pressure, 500 c.c. of blood is given by slow drip and later one or two bottles of saline. It is very important that a close watch is kept on the blood pressure and any fall is combated by proper blood transfusion. It is good to see that the patient never gets into shock. Omnopon or Morphia is givengr. $\frac{1}{6}$ as soon as the patient complains of pain and repeated once again on the first day.

CARCINOMA OF THE PROSTATE.

I had three cas es of carcinoma of the prostate-in one the first case in hospital who came with acute retention and where a suprapubic cystotomy was done to relieve it and a biopsy of a small bit of tumour growth showed malignancy. This patient lived for nearly five years after diagnosis and was seen after three years with bone secondaries - which also responded with Stilboestrol.

Carcinoma of the prostate is not always easy to recognize. In some instances it is discovered only after operation or histological examination of an apparently simple specimen. At the other end of the scale it may be quite obvious on rectal examinatton and typical secondary deposits may be present in the bone when first seen. In prostatic carcinoma rectal examination will reveal a stony hard gland, wholly or in part, with loss of mobility, loss of definition of the central sulcus, and a merging of the lateral edges into the periprostatic tissues. It is occasionally difficult to distinguish chronic inflammatory or calculous disease, but in the main it is .usually found that carcinoma is more often present than not when suspicion of it is aroused on rectal examination. Biopsy may confirm the diagnosis. Fragments for examination obtained with the resectoscope will show a carcinoma which impinges on the bladder neck or urethra. Samples from the periphery of the gland may be taken by open perineal operation, or, less certainly by needle puncture through the ischio-rectal fossa guided to the suspicious area by a finger in. the rectum. Early diagnosis is important. Clinically obvious carcinoma is unlikely to be suitable for radical extirpation, but the converse is also true.

Estimation of the serum acid sodium phosphatase may occasionally be of help in the diagnosis. Normally it is 2 to 3. 5 units. A rise confirms the presence of prostatic cancer especially with secondary spread. A normal finding, however, does not contradict the diagnosis. It is perhaps most useful as a guide to the progress of the disease.

TREATMENT.

Apart from the relief of retention there are two main methods-hormonal and operative. The former is applicable to those patients, the vast majority, in whom the growth is already too extensive for radical extirpation. Large doses of oestrogen are given daily and their action is sometimes supplemented by castraction. This is most conveniently achieved by "evisceration" of the soft testicuar tissue from within the tunica albuginea, which is then sutured to prevent bleeding. The daily dosage of oestrogen varies from 3 to 100 mg. The larger doses are used to control the disease in the early stages and improvement may be expected in a few weeks. They may be reduced but a maintenance does must be given for the rest of the patient's life. Should the toxic effects of stilboestral - chiefly nausea and vomiting-be troublesome, the more concentrate ethinyl oestradiol (O. 5 to 2 mg.) may be better tolerated. In most cases the prognosis is good even when metastasis is present, but at the price of feminism of varying degree, and impotence. This may be of little consequence in the old, but when the disease is discovered in middle-aged patients it can be a serious disadvantrge.

Radical operation is the removal of the whole gland with its capsule and usually of the seminal vesicles. It has been done by various approaches - transvesical, retropubic and perineal. None is easy.

The treatment of retention is the same whether due to carcinoma or adenoma. Suprapubic cystotomy should, however, be avoided and the early resection of obstructing tissue is indicated especially when radical operation is not possible. This, combined with indwelling catherization will usually tide the patient over the period needed for hormones to take effect.

° Lecture delivered at the Tiruchy Branch of I. M. A. on 25—2—56.

SHOCK IN OBSTETRICS

By

Dr. Mrs. ANNA VAREED, F.R.C.S. (Edin.) M.B.B.S., L.M., (Rot.)
D.R.C.O.G. (Lond.) F.R.F.P.S. (Glas.) COIMBATORE.

Shock in obstetrics is not a new condition nor a new discovery - the clinical picture and treatment of shock in obstetrics do not in any way differ from those of shock else-where in medical practice-Every doctor who takes up labour cases should have everything in readiness to treat shock if and when it develops; but prevention being better than cure, he or she should spare no effort in preventing its onset.

Obstetric shock must be regarded as the end result of one or more complications of pregnancy and labour. The life of the woman will depend upon the shock being effectively dealt with before any attempt is made to deal with the condition that brought on the shock-nor should an attempt be made to determine its nature, before dealing with the shocked condition of the woman, once there is established shock present. In the parturient, shock is most commonly associated with excessive blood loss. Sometimes it is difficult to decide to what extent the circulatory collapse is due to the shock per se and to what extent it is due to the blood loss, and in some cases the bleeding is entirely of the concealed type, as in rupture uterus or in concealed type of Antepartum haemorrhage. The effect of blood loss on any patient is not dependent merely on the quantity lost The fatigue and exhaustion of prolonged labour, the presence of pre-existing anaemia, the enduring of prolonged pain, suffering and anxiety, the infliction of trauma by operation or manipulation, the inadequacy or overdose or faults in the administration of anaesthesia, all these factors influence blood loss and many of these factors may be present together. On rare occasions a woman in labour or who has just given birth is struck by severe or even fatal shock due to some condition unrelated to her pregnancy, such as coronary occlusion, mesenteric thrombosis or pulmonary embolism.

CAUSES OF OBSTETRIC SHOCK.

1. **Haemorrhage.** This, the commonest single cause of shock in obstetric practice, may be antepartum or postpartum - Even in these cases which have lost blood, the shock may be due to the blood loss alone or it may also be due to or precipitated by the treatment employed for the original complication-Prevention of haemorrhage by meticulous care in all the three stages of labour is very important. Prevent Postpartum haemorrhage by prompt and efficient management of the third stage of labour. Prophylactic use of Oxytocics is coming into vogue nowadays. If uterus is firm and small, and bleeding still continues, have a look at the cervix and if lacerated, suture it at onec - Keep suitable blood in readiness to replace what is lost.

2. **Prolonged labour.** This is another cause of obstetric shock - and this can be eliminated by a high standard of antenatal and intrapartum care. Prolongation of labour is three times more common in primi than in multiparae and the syndrome of Grantley-Dick-Reed-known as "Fear-

pain, tension" syndrome is often a common cause of delay in labour. Nervousness, inefficient uterine action large baby with mal-rotation or insufficient rotation of the head, are often the causes of prolongation. Adequate sedation, encouragement and relaxation, maintenance of sufficient nutrition and fluid balance, if required even by intravenous infusion, sufficient sleep, empty bladder and rectum - above all, mental tranquillity-must be enforced throughout all the time. The old maxim "never let the sun set twice on a woman in labour" has much to commend it, though we cannot set anytime limit to the duration of labour, especially the first stage.

3. **Rupture of uterus** of course produces severe shock. When a previous caesarean scar or a myomectamy scar gives way we have what we call a spontaneous, silent rupture. So called traumatic rupture, is always associated with neglected, obstructed cases or with assisted delivery conducted with insufficient care and skill or done under wrong conditions. This is preventable and fortunately on the decline - Internal version is the common cause - It should never be attempted unless the uterine musculature relaxes sufficiently in between pains and sufficient liquor is present to allow easy movement of the foetus inside the uterus.

Oxytocics used carelessly are very dangerous and are responsible for many uterine ruptures, besides causing foetal death from anoxia and intra cranial injuries. It should never be given in the presence of disproportion or any cause of obstructed labour or if the head is not well engaged and the dose should not exceed 1 unit at half hourly intervals. That is why pitocin is now being given in an I.V. drip in higher dilutions—10 units in 1500 c.c. of glucose 5% in saline 30-32 drops flowing per minute.

4. **Retained placenta.** Even without haemorrhage, if the placenta remains too long inside the uterus, it does cause shock—apart from the manual removal—A trickle of blood over a long period drains the patient much more than a brisk spurt of blood of short duration—According to most authorities one hour is the time limit now allowed for placenta to seperate by itself In some cases shock may be precipitated by the trauma of unsuccessful brutal attempts at forcible expression of the placenta (Credes method repeatedly attempted) or of manual removal under inadequate anaesthesia, especially in a woman whose general condition is rather poor and who is already exhausted from prolonged and aided delivery,

5. **Inversion of uterus.** This condition can occur either spontaneously or it can result from mismanagement of the third stage of labour. Here the shock is out of proportion to the accompanying haemorrhae and is said to due to the pull on the peritoneum and ovaries and the stretching of the nerves in the broad ligament. The uterus is not felt in the supra pubic region and it may be present, inverted at the vulva, and so a vaginal examination is indicated under anaesthesia. Replacement must be conducted carefully and methodically-and the shock and the condition of inversion should both be tackled at the same time.

6. **Toxaemia, Hypertension, Anaemia or and Heart Disease.** Here the woman is more vulnerable to shock associated with childbirth. Prenatal supervision is all important and expert medical advice should be sought in such cases, and delivery aided by prophylactic forceps application, under suitable anaesthesia.

7. Pulmonary Embolism of amniotic fluid. Though a rare condition is indeed a very dangerous condition. There is a period of preliminary chill, soon followed by shock, dyspnoea and cyanosis and instantneous death. The shock is regarded as anaphylactoid in nature—This condition is confirmed by autopsy findings of desquamated epithelial cells, mucus and lanugo hair with many leucocytes in and around the embolus.

8. Operations in Obstetrics. After manipulations or/and operations to assist delivery, very many women go into shock. May be due to inadequate preparation of the patient or poor operative technique or haemorrhage or faults in the choice and adminstration of anaesthesia, especially if patient is anaemic, dehydrated and infected exhausted.

9. Drugs and anaesthesia. Shock may be due to too deep a plane of anaesthesia or to too light a plane of anaesthesia with intra uterine manipulations—Spinal anaesthesia produces sudden drop of blood pressure in hypo-tensive and anaemic patients.

Pituitary extract, if repeated especially, can cause shock and for this reason, many obstetricians prefer the use of pitocin Oxytocic without pressor effect.

CLINICAL FEATURES

The clinical picture is the same as that of shock elsewhere, is essentially and a picture of circulatory collapse. The first sign is pallor of the circum-oral type, to begin with, later spreading quickly over the face and down the entire body. The skin feels cold and damp and the patient may complain of a chill. The pupils dilate and the expression becomes anxious. Though the patient may complain of feeling cold and faint, the consciousness is retained until late. The sensitivity to pain may be diminished slightly. The breathing becomes rapid and shallow and in profound shock becomes even irregular.

The pulse rate increases even upto 150 per minute or it may not even be counted due to very low volume and tension. The blood pressure drops down with reduction in the pulse pressure and later the systolic and diastolic pressure readings may not be recordable—The vision may be dimmed and if the condition is not improved immediately by Oxygen administration, the loss of sight may be permanent.

Treatment: Falls under three headings:—

1. The prevention of shock, of foremost importance,
2. The treatment of shock itself
3. The treatment of the underlying condition that produced the shock.

It needs precise judgment to decide whether the shock itself or the condition that caused the shock should have priority in treatment, for the life of the woman will depend upon the correct decision and prompt measures taken. In hospital practice with many skilled hands always at hand, both may be dealt with at the same time and do give good results.

1. Prevention. This involves the entire gamut of good obstetrics. That means a very high standard of obstetric work but also adequate antenatal care and supervision, and prompt and efficient measures to meet the seperate demands in obstetric practice—All doctors engaged in obstetric practice should keep a constant awareness of the causes of shock and try and prevent them. Prolonged labour with its accompanying evils like dehydration, sepsis, sleeplessness, anxiety and dread, and the lack of tone in the uterine musculature, are particularly to be forewarned about—solutions for intravenous infusion and the intravenous transfusion set, should be in readiness—compatible blood may be kept ready in case needed.

2. **The treatment of the underlying cause.** If the shock is mild, and if the adequate treatment required for the condition can be carried out effectively and without increasing the shock, one may go ahead and deal with it. But when first seen if the patient is already in a condition of profound shock, whatever the cause, the shock has to be dealt with first, and when patient improves, the underlying cause can be dealt with.

3. **Treatment of established shock.** Morphia Gr. 1/4– intramuscularly as peripheral circulation is at a low ebb. Subcutaneous absorption may not be present. Foot of the bed is raised and warmth given by blankets and hot water bottles (caution must be exercised in using hot water bottles, because of the danger of causing scalds).

Oxygen inhalation may be started. (N.B.) Stimulants like Coramine, strychnine or adrenalin are better avoided at this moment.

Systolic and diastolic blood pressures are recorded every 15 minutes– so also the pulse rate. The armband of the sphygmomanometer is left attached to the upper arm—It will facilitate the giving of I.V. infusion also—when the fluid has started to run steadily the armband may be transferred to the other arm, and Blood pressure recordings taken without disturbing the patient further. As the majority of cases of shock in obstetrics are due to blood loss, the replacement of blood is of prime importance—If no suitable blood is obtainable, no time should be lost in starting an intravenous infusion. The choice of fluid lies between saline, glucose in saline, gum saline, plasma or plasmosan.

N.B. Whatever fluid that is transfused do not overload the circulation and produce right sided engorgement and pulmonary oedema—It is very dangerous to push in fluids without caution and let the woman drown in her own lung fluids.

As the veins are collapsed, be prepared to do vensection and put in a cannula—A shocked patient should not be submitted to a long journey by ambulance—It is better to treat for the shock at home and then when she has improved, she may be transferred to the hospital—or the necessary treatment undertaken there itself by getting one or two more collegues, to help.

When the systolic blood pressure has risen to 100 with an associated fall in the pulse rate to say about 100 per minute the patient may be considered fit for active treatment of the condition that brought on the shock. With the infusion running and with the assistance of one or more collegues - one giving anaesthesia, the treatment that is required may be carried out effectively and without causing further shock.

There are two delayed complications of shock. Anuria and post partum necrosis of anterior pituitary gland. Anuria is now treated by intragastric drip of 1000 c. c. of fluid daily made up of 500 gm. of glucose, 100 gm. of peanut oil, mucilage Q. S. to make up a homogeneous mixture. the total volume being only 100 c. c. daily - Prompt treatment of shock prevents anuria and the pitutary necrosis nothing can be done for the pituitary necrosis once it has occured.

Reference. British Obstetric Practice by Sir Eardley Holland and Aleck Bourne—1955.

INFORMATION OBTAINED BY INSPECTION OF THE NAILS

By

Dr. T. V. VENKATESAN, M.B.B.S. F.C.C.P., F.D.S. (Lond.)
Physician and Skin Specialist, Madurai.

The nails apparently yield an easy field of investigation. Much can be learnt by the peculiar anomolies. Normal or abnormal shapes of the nails originate from the matri and persist where the nail is attached at its bed.

1. **Nail en raquette** :—This is a dystrophy of the nail usually of the thumb. It appears wider than normal, the transverse curvature is diminished so that the nail seems flat. The effect is to produce a miniature tennis racket. The condition is exteremely rare. Syphilis is blamed as a probable etiological factor. The racket thumb may be unilateral or bilateral. The anomoly is a conscipicuous one so that the young girls hide the thumb in shame.

The affected thumb is short and wide. (Fig. 1)

2. Longindiual single nail groove or dystrophia medianna candifarmis of Heller. (Fig. 2)

3. **Longitidinal furrows**:— These may be slightly raised continuous interrupted straight or parallel line. (Fig. 3)

These longitidinal lines of furrows are called Onychrrhexis.

4. **Transverse Furrows**: These are called Beav's furrows. Various causes have been attributed to produce transverse bands. They are (1 Tuberculosis (2) Trauma produced by manicuring.

5. **Transverse white bands** : M e e ' s lines:—These are white lines which are found in chronic arsenic poisoning. A case of Leuconychia transversalis straiata has been described. The other causes that have been

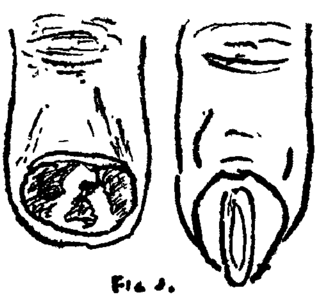


Fig. 1.

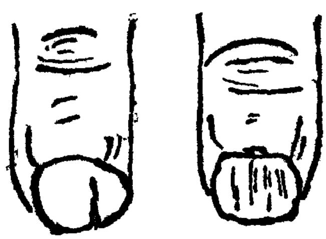
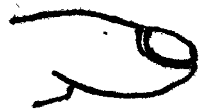


Fig. 2 & 3

IV

V



VI.

reported are (1) Cardiac infarction (2) Psoriasis (3) Hodgkin's disease.

6. **The clubbing of the nails** of fingers indicate disorders of the respiratory or circulatory system. (Fig. 4, 5 & 6)

Clubbing of the fingers and toes may occur as drumstick nails in cases of heart diseases and the parrot's beak in cases of suppurative diseases of the lungs. It is due to exaggeration of the vascular supply of the fiinger tips.

7. **Spoon shaped nails** or Koilonychia is a feature of anaemia and is said to be due to a disturbance of the nutrition of the nail.

Summary of the nail abnormalities.—

1. Short wide thumb :— Cause unknown.

2. Longitidutional groove:— cause unknown.

3. Longitidinal furrows:— which may be raised, continuous interrupted, straight or parellel lines. They are probably a manifestation of senility.

4. Beau's furrows :—Two groups of cases have been noted: 1. Tuberculosis (2) Trauma :— Has been found in cases of manicuring.

5. Mee's lines :— They have been noted :—in cases of (1 Cardiac infarction., (2) Chronic arsenical poisoning, (3) Psoriasis, (4) Hodgkin's disease.

6. Lunules and striae have been noted in the nails due to emetine toxicity.

7. Clubbing of the fingers and toes:

(1) Drumstick appearance in cases of congenital heart disease.

(2) Parrot's beak appearance in cases of suppurative condition of the lungs. The condition is said to be due to exaggeration of vascular supply.

8. Koilonychia in cases of anaemia.

ELECTION TO THE INDIAN MEDICAL COUNCIL.

I am standing for election to the membership of the Medical Council of India in the coming election from the Registered Medical Graduates of Madras, Andhra and Travancore and Cochin States. Requesting the support of every member of the profession.

K. C. Nambiar,
F. R. C. S. (E&ED.) Madras.

CEREBRAL PALSY

By :

Sr. S. PERSSON, R. N., Nursing Superintendent

and

Dr. H. L. WALLDEN, M.D.,

Surgeon, Swedish Mission Hospital, Tirupputtur, Ramnad Dt.

Some time ago there was a story in one of the condensed books printed by Readers Digest about an American girl Karen who was suffering from Cerebral Palsy. The lovely and inspiring story is written by her mother and shows what can be achieved in these cases by patience and tenacity.

Karen was a premature baby weighing under 2 Ibs. at birth and measuring only 9 inches from top to toe. The struggle for her life started at the very moment of her birth and she was kept in a hospital for 8 months. Then the parents got her home. She gained in weight nicely. She was a sweet and happy child but soon the parents noticed that she was not like other children. They never saw any progress in her movements. She did not at any time change her position or kick off her blankets. This worried them and one day they took the child back to the hospital. The doctor said that he had suspected for some time that Kaen had Cerebral Palsy. This technical term did not mean anything to the parents but the doctor explained to them that the belief was that children with Cerebral Palsy had no mentality. This opinion of a doctor was a terrible shock to the parents but they were determined to do whatever possible for their child. And so they started and endless travelling all over the United States consulting doctors and visiting various clinics. Everything seemed to be in vain until one day they met a doctor with a more positive view on the situation. He examined Karen and found her mentally very alert and her intelligence quotient above normal. He said that Karen could learn to talk, dress herself, eat and even walk, but it meant constant tuition and help. The story continued telling about every day struggle and every day progress. It was hard work and the immediate result was very poor. But as months went, something was achieved ; the first movements towards crawling, raising up and walking by help of bars, crutches and braces, the first trial of buttoning and dressing herself and, lastly, the difficult task of writing.

During the last year we have even in our place come across some children with Cerebral Palsy who, for some reason or other, have been admitted into the hospital. The first question is now; having no paediatrician connected with our staff what can we do for these patients under the conditions at hand? Are we prepared to take upon us the tedious work for the education and training of these handicapped little friends? We don't think we are as yet. But it is time to begin our orientation in the field. Our interest is that of an amateur but we hope that by experience and training we shall be able to attend more efficiently to these patients in the future. They belong in one way to the orthopaedic sphere which is already part of our responsibility.

DEFINITION AND CLASSIFICATION

The term Cerebral Palsy represents a group of brain lesions which have certain features in common. They are non-progressive and appear already at birth or in early life. They manifest themselves with disturbances of volontary movements and are often associated with mental and psychological handicaps.

Cerebral Palsy is not a rare condition. In England about one in every thousand children of school age suffers from some form of Cerebral Palsy. There are three common types one in which spasticity is the dominating feature, a second in which athetoid movements are prominent and a third characterized by ataxy.

1. The spacticity group shows damage to cortical and pyramidal areas. According to the distribution of the clinical findings there are three main forms:—

Spastic Tetraplegia with all four limbs involved

Spastic Paraplegia with the legs involved only

Spastic Hemiplegia with arm and leg of one side involved

2. The children with athetoid movements have damage to the basal ganglia of the brain and the extrapyramidal system. These children generally show involotary movements.

3. The ataxy group has its main damage to the cerebellum. Mixed forms are also common.

AETIOLOGY

The majority of the cases are congenital and determined either before or at birth. Very little is known about the changes taking place in the maternal organism and concomitantly in the foetus resulting in Cerebral Palsy. A few relevant findings have been made within the experimental pathology. We know from Duraswami's studies on chicken embryos that identical malformations are obtained if the embryos are exposed to experimental injury at the same period of life. X-ray exposures of pregnant rats give malformations of the central nervous system similar to those found in human pathology, and many cases of X-ray treatment of pregnant women are reported that have afterwards been delivered of microcephalic or microophtalmic childern. Foetal anoxia can also produce damage to the brain. This has been found to be the cause in various defects of placenta, e. g. partial separation of placenta, but also in toxaemia, pneumonia and heart failure of the mother. In some of these cases ophtalmoscopy of the newborn has revealed bleedings in the fundus of the eye and similar changes are most probably present even in the brain proper.

Anoxia and trauma are often prominent during lobour. Under certain circumstances these factors may be responsible for damage to the brain tissue resulting in Cerebral Palsy. The prolonged anoxia produced during obsteric anaesthesia with nitrous oxide has lately been included among these deleterious factors.

In the immediate neonatal period anoxia and jaundice are the main aetiological factor. Some cases of athetoid Cerebral Palsy are determined through severe jaundice of the newborn due to Rh-group incompatibility with special affimity of the pigment to the basal ganglia.

Prematurity is in itself a common determining factor.

DIAGNOSIS

It is always difficult to detect signs of abnormal cerebral function in infants because of the rather low development of the nervous tissue at this age. The most prominent signs of delayed developmen appear a little later as failure in control of head position, hand and eye coordination, trunk control as in sitting, trunk-limb coordination as walking and, finally, vocal coordination.

To list all the symptoms and signs characteristic of the different types of Cerebral Palsy is of minor importance in this connection. They all follow the classical neurological pattern and are well known from the text books. Of great importance from practical point of view, however, is the question of handicap in the child with Cerebral Palsy.

HANDICAPS

The mental handicap. It is of course extremely difficult to estimate the intelligence of children with Cerebral Palsy. Many of them have wrongly been considered idiots. However, modern intelligence testing has shown that about one half of the children with Cerebral Palsy have an intelligence quotient within the normal range. In general, athetoids and paraplegics are more intelligent than other types. But the mere fact that these children sometimes for months and years lie flat on their backs without being able to see and manipulate things around them, results in a considerable slowing of their intellect.

The sensory handicap. There is also a loss of sensations in many cases of Cerebral Palsy, particularly of stereognosis, two-point discrimination and position sense, sometimes combined with hemianopia. These children may show reading disability. The athetoid ones are often deaf, especially those determined by severe jaundice in newborn.

The psychological handicap. There is a certain correlation between type of Cerebral Palsy and psychological appearance. The spastic child is suspicious, introverted and fearful whereas the athetoid is more active, sensitive and responsive. Important in this connection is also the reaction of the parents on the patient's illness. Feelings of guilt are very common creating a certain attitude towards the child and towards each other. Over-protection on one side and rejection on the other are mechanisms at work in some instances. Anxiety, frustrated expectations with excessive demands on the child are other reactions set up by the impact on the parents of the tragic condition of their child. These attitudes may in intelligent children cause rebellion and frustration or over-dependence with desperate clinging to an infantile behaviour which they know will evoke still more protection.

TREATMENT

The early recognition of these cases is of utmost importance for a successful treatment. The general practitioner, the family doctor, therefor, is responsible for the detection of the children with Cerebral Palsy. A detailed diagnosis of the defects may in some cases require the help of a peadiatrician or a neurologist but the majority will never attract such a specialized attention.

The damaged brain cells can never be replaced. But those which are left can be trained and the muscles and sensory organs under their direction can be developed up to and even above normal capacity. This treatment is usually planned along two lines: the educational and the orthopaedic-surgical lines.

The educational treatment includes (1) Training of coordination, i. e. volontary directions of movements, (2) Exercises of equilibrium, i. e. utilizatin of movements in upright position, (3) Counteraction of contractions. In all these activities the cooperation of the parents is of great importance and their interest in the educational task should be stimulated as early as possible.

As emotional factors may affect the musclespasm and the incordination it is very essential that these children feel happy and at ease. The best place for the educational treatment is a good home. But it may be necessary to have long talks with the parents and other family members about the working programme, cooperation needed and the goal. One can very seldom expect complete cure but the maximum result within reach should always be the aim. If these facts are known from the beginning there will be less disappointment in the future.

The child should learn to control the muscles by will power, so that the movement come in right order. To teach the child to move the head in various directions and to perform regular respiration exercises is of great importance. The latter can be done by blowing out a feather. The back muscles can be strengthened by putting the child in prone position on a pillow and showing a toy in fornt of him thereby forcing him to raise his head. Crawling movements in the air is also a good training for the trunk muscles. The leg muscles are trained first by passive movements follwed by active movements in water and, finally, by active movements with or without help. In case of excessive muscle tonus the active movements have to be omitted for some time. Slow and sure progress is much better than a quick treatment with disappoinment.

All the exercises should have the character of game and joy. Changes are of importance. The games should be within reach and ability. Simple toys are preferable as are articles and games which stimulate the child's thoughts and imagination. One should follow the child and give assistance when necessary but not in such a way that the child becomes dependent. Daily life should be carried out as normally as possible. A good thing is it if the children with Cerebral Palsy can play together with other children so that they can learn from them. It is very little stimulating for them to be isolated or alone with the parents.

To assist in the different educational undertakings the whole armoury of orthopaedic bandages can be used. Night splints for the limbs, jackets for the trunk and head control are a few examples of these bandages apllied for temporary or permanent fixations of joints or support of muscle actions in order to make the patient concentrate on one or a few elementary functions at a time. The prevention of the 'floppiness' of the head and the 'scissoring' of the thighs are two important scopes for this supporting bandaging.

The main field for surgery is prevention and correction of contractions. The well known routine operations on muscles, tendons and peripheral nerves are used in order to establish balanced action of antagonistic muscles. It should be borne in mind, however, that the operation must never be an isolated procedure but always part of a scheme where the education and occupational therapy are the main points.

The very pronounced deformity in paraplegics is the adducted hips also called scissoring. A simple myotomy of the adductor muscles may suffice in less pronounced cases. But in severe contraction a resection of the obturatory nerve is the only effecient procedure. The resection should be done outside the pelvis since an intrapelvic division of the nerve sometimes gives complete paralysis of the adductor muscles with extreme abduction and rotation externally of the thigh.

Contraction of the knee joint is best corrected by resection of the motor nerves to the muscles and myotomy in the popliteal fossa.

The most pronounced deformity of the arm is the contraction of the flexor and pronator muscles of the forearm. The standard treatment is nerve resection in the elbow bend and excision of the whole of the pronator teres muscle.

In very obstinate cases of hemiplegia with uncontrollable fits and behavious disorders the neurosurgeons have in the last few years claimed good results in partial resection of the cortical hemispheres. In some resistant cases of athetose certain intracerebral tracts have been cut in order to exclude unchecked impulses but the results are so far rather poor.

Again the s u r g i c a l procequres represent only a part and a very small part of a team work which has to be carried out with tenacity and patience by the people concerned, and the educational scope which is the principal part of the work has as its object to convert into fanatic believers in the adopted treatment not only the patient but the patient's parents and the whole family and sometimes also the sceptical doctor.

READERS ATTENTION, PLEASE!

The Madras Clinical Journal, Journal of the Madras State Branch of I.M.A. is being published once a month and is despatched regularly from the office so as to reach the hands of all readers throughout Madras State by the last week of every month. Readers who do not get their Journals within 7 days of these scheduled dates should first of all enquire at their local post offices then should, **Without any further delay**, write to the undersigned direct intimating the local post offices.

Readers who happen to move out from their old addresses to new addresses should promptly inform this Office as also to their local branch office of the I.M.A. about the changes of address intimating both the new and old addresses. Failing these, intimations reaching this Office much later, it may not be possible to supply such readers with the missing copies of the Journals in their respective files.

Readers are all requested to please check up the typing of the names and addresses in the wrappers of their own copy of Journals. Any discrepency in the spelling or insufficiency about the postal address should be promptly intimated to the M. E. of the Journal of the MADRAS CLINICAL JOURNAL.

Managing Editor.

ANNOUNCEMENT.

An extract from the letter (Endt. R. No. 37959-G/56 dated 2—4—1956) of the Director of Medical Services, Madras, is published in the appendix to this announcement for the benefit and information of all registered medical practitioners in the State. The Honorary Secretaries of the various constituent branches of the Indian Medical Association under the jurisdiction of the Madras State Branch are particularly requested to impress the importance of the principle mentioned in the appendix on all the medical practitioners in their respective areas in the interests of the general public.

Appendix.

"(Copy of letter from the port Heath Officer. No 12/56. Cir. dated 22—3—1956 to all Shipping Companies and Operating Air Lines).

Extract from page 95 of the Monthly Bulletin of the Ministry of Health and the Public Health Laboratory Service directed by the Medical Research Council, London, for the month of June, 1955, Vol. 14.)

This is to inform you that when infants under the age of 9 months are to be vaccinated against both yellow fever and small pox there should be an interval of 21 days between the two vaccinations, no mater which is performed first. The above may be brought to the notice of your Medical Officers."

R. Sankaran, L. M. P.

Hony. Secretary, Madras State Branch,

Indian Medical Association.

ABSTRACTS

Lente Insulins.

Edga a. Haunz M.D. Journal of American Medical Association, Vol. 159 No. 17. Page 1611-1618.

Evidence has been presented to indicate, that with a few exceptions, lente insulins can be substituted for isophane insulin on a unit for unit basis; however a slightly lower dose of insulin lente is suggested at the outset, since many patients exhibit better diabetic control on therapy with slightly less lente than isophane insulin. With some exceptions diabetic control smoother and insulin reactions fewer and milder and stable in diabetic patients when lente is substituted for the previously used insulin. In cases of more severe and unstable diabetics, it is subject to the same decided limitations as its predecessors. Its selection in such cases is distinctly an individual problem and not a substitute for sound clinical judgment. It is axiomatic that in practice the clinician should fit the insulin to the patient and not the patient to the insulin. Hypoglycemic reactions can be just as severe and cumulative from use of lente insulin as reactions encountered with ample warning or may occur suddenly without warning. In patients with milder and more stable diabetes, however, the over-all incidence of reactions from use of lente insulins was decidedly lower. Until further investigation is forthcoming in the problem of mixtures of the two insulins, it is suggested that no mixture should contain more unmodified insulin than lente insulin, to avoid disrupting the buffer mechanism that preserves the independant time action potential of lente insulin. Insulin made from the zinc-insulin crystals constitute the preferred unmodified insulin of choice for admixture at the present time.

Anaphylactic shock after Penicillin injections; Three fatal cases. A. H. Handerson Copenhagon Denmark.

The third of three cases in which the penecillin preparation is believed to have caused fatal anaphylactic shock in an asthma patient illustrates the danger of injecting penecillin when the patient has previously shown intolerance to the substance. The cases all support the assumption that compound penecillin preparations are more toxic than benzyl penecillin. The danger that penecillin injection may cause death is slight, but the possibility of anaphylactic shock must be included in one's considerations. Penecillin should be given only when clearly indicated. Before injection the patient must be asked whether penecillin has been previously given and, if so, whether it was tolerated without side effects. If there were earlier symptoms of allergy, the drug should not be given.

(Abstracted from J. A. M. A. Dec. 24, 1955.)

* * *

Hysteria and Hysterical

Dr. Ida Macalpine and Sir James Paterson Ross. Lancet Jan 14. 1956 Pages 78 and 79.

This term has impeded the understanding of mental disorders from the earliest times. It was once used synonysmously with insanity in general, and for "fits" of every kind; and latteraly it has been used for somatinc symptoms of psychological origin.

"The name Hysteria should be abolished. For it is absurdly derived and used as a term of reproach, it is worse than absurd... hysterical is taken by many poeple... that she is silly shaming, or could get well if she pleased... call them anything ...but hysterical. (Paget 1873)

Reynolds (1872) pointed out that "Hysterical" meant widely different things to different people:

"Nervous temperament... a mood or disposition of disordered function which cannot conveniently be placed elsewhere .. simply conveys a doubt as to what is the matter... a prevailing conviction that it is nothing serious".

Allbutt (1869) was "quite sure that by the word "Hysteria" the medical not only injured the patient, but damaged his own power to cure."

* * *

Management Of Nephrotic State

It is a syndrome of proteinurea low serum albumen, high blood lipids and variable oedema. The course is one of chronic fluctuating oedema and about 40% die of uraemai and intercurrent infections.

Corticotropine and cortisone treatment.

To be used for 2 weeks. Daily dose of 40 mgs. of corticotropine or 200 mgs. of cortisone even in children. Don't use more. Hydro cartoneacetate is also effective orally.

Side effects of cortisone treatment.

(a) In cases where there is oedema and effusin this may bring out further fluid retention. So do a paracentesis and then give cortisone a diet of 3 gms. of sodium is to be advocated, and sodium must not be restricted to prevent a fall in serum sodium. (b) small increases in Blood Pressure is the rule withold harmone if there is a sharp rise.

* * *

Quinacrine For Tenia Saginata

J. A. M. A. Sept. 18, 1954 p. p. 272—Failures in the treatment of Tenia Saginata infections were treatad with Quinacrine at the Boda Hospital in Norway, and the reaction was satisfactory. The slight transitory yellow colour of skin and sclera was harmless and the tape worms discharged in response to Atabrine was in long unbroken yellow chains. In 2 cases the dose of 0.8 gms. proved in sufficient since the head was not evacuated and relapse occurred. Dr. Meyer suggests that when as much as 2 gms. of Quinacrine are given in the course of 2 days, it may be possible to dispense with the older ritual of tape worm treatment with special diet, castor oil, enemas etc.

* * *

Cortisone and aspirin in Early Rheumatoid arthritis

B.M.J., 29 May, 1954—61 patients were divided into 2 batches and were given Cortisone and Aspirin and were observed for one year. The two batches closely ran a parallel course in nearly all characteristics—joint pains range of movement. The haemoglobin level and E.S.R. were more favourable in the Cortisone group. For practical purposes therefore, there appears to be surprisingly little difference between the two drugs in the management of early Rheumatoid arthritis. But a more prolonged study is necessary to evaluate the Rheumatoid process itself under prolonged therapy.

* * *

Potassium In Congestive Heart Failure

Lancet. June 12, 1954 Three patients with congestive heart failure resistant to mercurical diuretics and hyponatraemia were studied which showed a large deficit of potassium and over hydration in the cells. The sodium in cells was also probably increased. Two patients died suddenly after muscle biopsy for the above study and institution of Potassium therapy. The third was continued with Potassium Therapy. In this case the electolyte and water content in the muscle was completely corrected oedema decreased, cyanosis disappeared and there was considerable clinical improvement. Hyponatraemia was corrected, sodium began to be excreted in urine. Hyponatraemia seemed to be an end stage of a prolonged loss of Potassium, due to administration of inercurias. Hypokalemia plays a definite part in the picture of congestive heart failure.

* * *

Clinical applications of Renal Function Tests

W. Goldering J.A.M.A. Dec. 5, 1953 p.p. 1245—(1 Inulin is excreted by Gloweruli and is not reabsorbed in the inlules. The rate gomerular filtration is measured by the amount excreted per minute divided by plasma concentration. The mean normal rate is 130 cc per minute. The quantitative measurements of renal functions are

(*a* Rate of glomerular filtration
(*b* Renal blood flow
c) Maximal tubular excretory activity
(*d*) Maximal tubular absorptive capacity.

(2) Renal blood flow measured by pamino hippen rate. This compound is completely removed from renal arterial blood during one circulation. The mean normal value is 1200 cc. per minute. (3) Maximal tubular excretory capacity represents the actual functioning capacity of the tubules. If the critical blood level of Didestrate or Pamino hippurate is raised the tubules excrete it at a maximal rate of 80 mgs. per minute (4) above a critical point Glucose is absorbed at a maximum capacity. If the concentration goes up further it is filtered out in excess or this maximal absorption and passes out in the urine. The maximal reabsorptive capacity is 400 mgs. per minute. These methods are too complicated for clinical use. Those commonly used are ureaclearance. Blood urea concentrating capacity of urine, dye excretion and pylography.

Urea clearance test. The value of urea clearance is about 70 cc. per 1.73 sq. meters. This should be made when urine flow is falling or stead at a rate between 1.5 cc to 12 cc per minute. During Diuresis a high urea clearance is obtained. Specimens must be collected by catheterisation. Collect 2 thirtes minute specimens with a single blood sample at the mid point.

Blood urea. If nitrogen and water balance are constant urea concentration varies inversely as urea clearance. It is difficult to place a prognastic significance on blood urea level. Maximal concentrating capacity is measured by urine Sp. gravity measurements when concentrating power is lost urine spr. gravity is fixed at 1010 normal kidney can elaborate a sp. gravity of 1024. The kidney can form dilute urine at 1.001 to 1.004 but the diluting power of the kidney which depends on the rate of water excretion is of little value in evaluating kidney function. No single test is adequate for complete evaluation of kidney disease. Ref. See Pfizer's Spectrum.

* * *

ASSOCIATION NEWS

COIMBATORE BRANCH

The Thirtyfirst Annual General Body Meeting of the Coimbatore District Medical Association was held in the Association premises on Sunday the 11th March 1956. The President Major R. S. Rao LRCP., MRCS., presided.

Dr. R. S. Rao, introduced the speaker Dr. A. Venugopal, MS., FACS., Honorary Surgeon, General Hospital, Madras and requested him to talk on "Calculi in the Genito Urinary Tract."

The afternoon session started at 2-30 P.M. The Secretary Dr. C. Arumugam, MBBS., read the Annual Report and the Statement of accounts for the year 1955 which was unanimously approved by the General Body.

The following Office-Bearers were elected for the year 1956.

Dr. T. V. Sivanandam —*President*

Dr. D. Sundareswaran—*Vice-President*

Dr. S. G. Rajarathnam —*Secretary*

Dr. C. N. Santhanam —*Associate Secretary*

Dr. C. V. Ramaraj —*Treasurer*

1. Dr. S. N. Ganapathy
2. Dr. C. Arumugam
3. Dr. A. G. Leelakrishnan
4. Dr. P. K. Kalyanaraman
5. Dr. S. V. Subramaniam
6. Dr. G. T. Gopalakrishna Naidu
7. Dr. T. V. Sundareswaran
8. Dr. Miss. N. Meenambal
9. Dr. C. N. Rajagopalan
10. Dr. C. Ganapathy
11. Dr. M. P. Jesudasan
12. Dr. Miss G. Devavaram
13. Dr. C. R. Seshadri
14. Dr D. Anantharaman
15. Dr. R. G. Iyer.

—*Managing Committee Members.*

1. Dr. C. Arumugam
2. Dr. T. V. Sivanandam
3. Dr. C. V. Ramaraj.
4. Dr. A. G. Leelakrishnan
5. Dr. S. Ganapathy
6. Dr. C. N. Santhanam
7. Dr. S. G. Rajarathnam (ex-officio)

—*Provincial Council Members.*

1. Dr. N. K. Sampath
2. Dr. C. Arumugam
3. Dr. L. Munuswamy

—*Central Council.*

Dr. T. V. Sivanandam the re-elected President requested Dr. Jacob Chandy to deliver his talk on "Head Injuries". Dr. Chandy dealt at length the various aspects of head injuries and how to treat them.

The President, introduced Dr. C. Satyanarayana, M.B., M.S. DLO., FICS., FCCP., Professor of Otorlaryngology and Surgeon E. N. T. Department. Govt., Stanley Hospital, Madras, and requested him to deliver his lecture on 'Cancer of the larynx," The lecturer gave an interesting talk on the subject and exhibited a film show on "Laryngoctomy."

* *

A meeting of the Coimbatore District Medical Association was held at the Association premises at 6 p. m. on 21st April 1956. In the absence of the President, Dr. D. Sundareswaran, MBBS., L.O., Vice-President presided.

The following two condolence resolutions were passed unanimously all members standing and observing silence for 2 minutes.

Resolutions :-

1. "This meeting of the Coimbatore District Medical Association records its deep sense of sorrow at the sudden death of Dr. J. A. S. Masilamani, MD., Physician, Government General Hospital, Madras, and requests the Secretary to convey the same to the bereaved family."

2. This meeting of the Coimbatore Medical Association records its deep sense of sorrow at the sudden death of Dr. R. E. S. Muthiah, MS., Superintendent, Government Ophthalmic Hospital, Egmore, Madras and requests the Honorary Secretary to convey the same to the bereaved family."

Then Dr. D. Sundareswaran, MBBS., LO., was elected unanimously to the State Council.

Then the President introduced the lecturer Dr. R. Kalamegham, B. A., MBBS., Trichy. The lecturer then addressed his talk on "The Limping Child."

* * *

MADURAI BRANCH

The monthly meeting of the Madura Medical Association was held on 21st April 1956 in the Association Building under the Presidentship of Dr. (Maj) G. A. Naidu, M.B.B S., F.D.S.,

Condolence Resolutions on the demise of Drs. J. A. S. Masilamany, Muthiah, and Gopalaswami were passed.

Dr. C. S. Sadasivam spoke on some common surgical peadiatric problems.

Messrs South Indian Manufacturing Co., Ltd., entertained the Members at a Dinner party, followed by Film Shows on "Varidase" "Polystan", "Insulin", "Injections of hand".

* * *

RAMNAD BRANCH

The monthly meeting of the Ramnad District branch of Indian Medical Association was held on 6th May 1956 at the Municipal Council Hall Virudhunagar at 6 p.m. Dr. R. Venkatachari presided.

Dr. V. Srinivasan, M.B. B.S., M.R.C.P., D.T.M & H., spoke on "Therapy in Cardiac Failure". With a vote of thanks by Dr. S. Radha Krishnan, the secretary, the meeting was over.

* * *

TIRUCHY BRANCH

A meeting of the association was held on Saturday the 21st April 1956 in the premises of the Medical Association Buildings, Salai Road, Woraiyur, Tiruchy. Dr. V. Enok, MBBS., LM., DGO., ZGO., presided.

Dr. M. V. CHARI, MBBS., MRCP., D.T.M. &H. Professor of Medicine, Kasthurba Medical College, Mangalore, addressed the members on "Recent Advances in paediatrics"

OBITUARY.

The Profession in the State has been subjected to two irreparable losses in the deaths of Dr. Masilamani and Dr. Muthayya.

Dr. Masi as he was known popularly to his friends and patients had an uninterrupted Honorary service in the General Hospital Madras for over 30 years. A Doctor popular with the patients and the students, did his honest best, and kept up high ethical standards in the profession. We offer our heart-felt condolences to his widow and four sons and to the vast army of his patients and friends.

Dr. Muthayya, Superintendant of the Elliot School of Ophthalmology was snatched away from us at an early age of 53. While the Elliot School was famous in the East, Dr. Muthayya elevated the reputation of the school to a higher pedastal by improving the School and the teaching and the standards of work done, sheerly by his untiring endeavours and his supreme capacity. By his death, Ophthalmology in the State has become poorer. May his wife and son be given strength to bear up with the loss by Almighty.

Circular No. 13 dated 26—4—1956

Sub: Quacks styling themselves as doctors and practising medicine-Opinion of the State Council regarding restriction or prevention.

When the above subject came up for consideration before the meeting of the State Council held at Palayamkottai on 19-2-1956, the Hony-Secretary informed the House that when he interviewed the Minister for Public Health, Govt. of Madras, he wanted the help of the Association to find out ways and means to prevent unqualified persons styling as Doctors and practising medicine. It was decided at the meeting of the State Council that the members of the Association should seriously think over the matter and put forth concrete proposals so that a final decision may be made at the next meeting of the State Council. The Honorary Secretaries of all the constituent branches of I. M. A., under the jurisdiction of the Madras State Branch are therefore requested to bestow their earnest thought over the problem and forward their views as to how best to prevent this menace. As the next meeting of the State Council is likely to be held during the 3rd week of May, 1956 all the Hony. Secretaries are requested to urgently consider the matter and forward their views so as to reach the undersigned on or before 15—5—1956 without fail.

R. Sankaran, L. M. P.
Hony. Secretary, Madras State Branch,
Indian Medical Association.

Edited and Published by Dr. R. Kalamegham B. A., M. B. B. S., Cantonment, Tiruchirapalli and Printed by: M. S. Rajarathinam Pillai at The Shivaji Printing Works, 3, Chinnakadai St. Teppakulam P. O., Tiruchirapalli-2.