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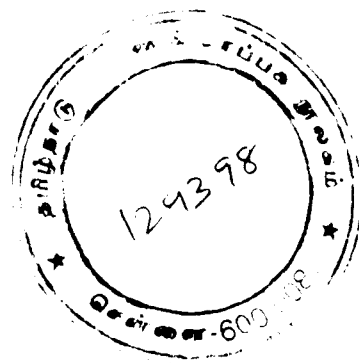
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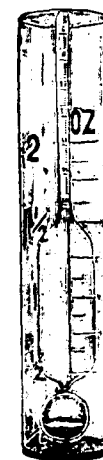
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The Madras Medical College Magazine

GENERAL EDITOR

Dr. T. Bhaskara Menon, M.D., M.R.C.P.



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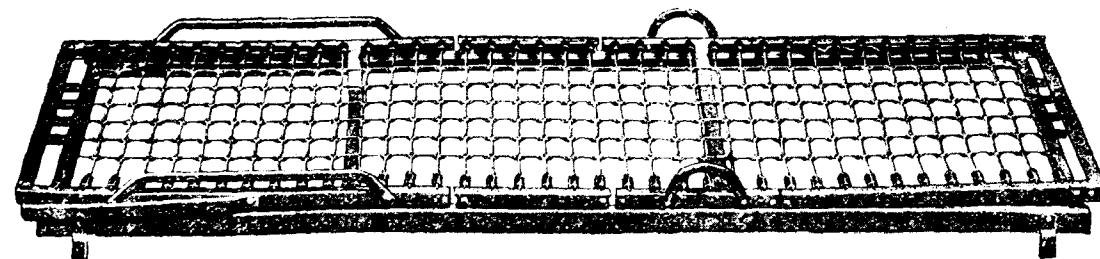
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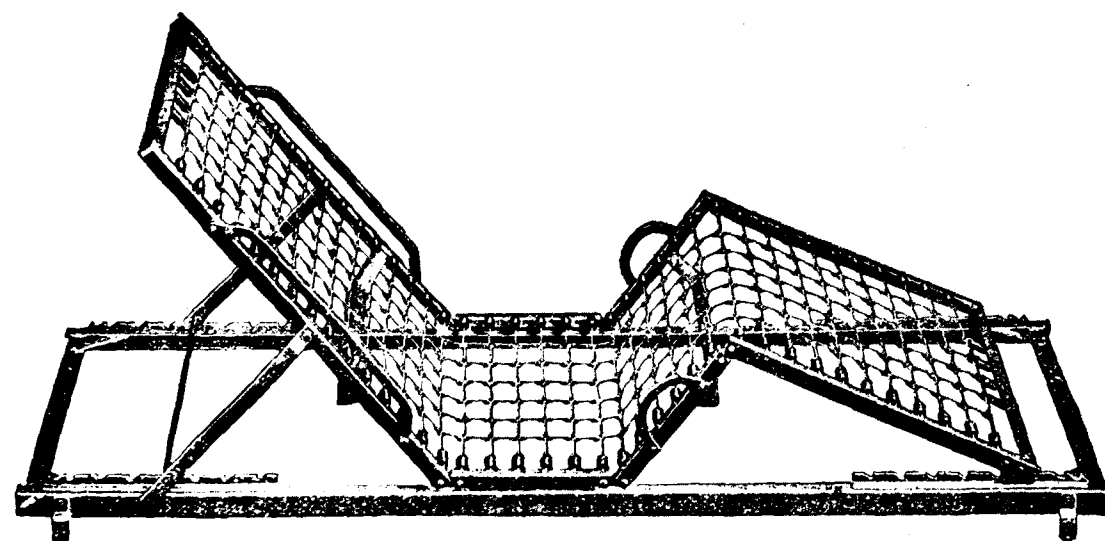
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I SWEAR by Appolo the Physician, by Asklepios, by his daughters Hygeia and Panacea and by all the gods and goddesses, that to the best of my ability and judgment I will faithfully keep this oath and obligation.

The master that has instructed me I will esteem as my parents, and shall supply to him, as occasion may require, the comforts and necessities of life. His children I will regard as my own brothers, and if they desire to learn I will instruct them in the same art without any reward. My patients shall be treated by me to the best of my power and judgment in the best manner, without injury or violence.

Neither will I be prevailed upon by anyone to administer noxious medicines, nor will I be the author of such advice myself. I shall never recommend means to procure abortion, but will live and practice chastely and religiously. I will not meddle with lithotomy, leaving that to operators of that art. Whatever house I am called upon to attend, I will aim at making the patient's good my chief aim, avoiding all injury, corruption and unchastity; and whatever I hear in the course of my practice relating to the affairs of life of my patients that ought to remain secret, nobody shall ever know of me.

May I be prosperous, honoured and esteemed by all men as I observe this solemn oath, and may the reverse be my lot if I violate it and forswear myself.



RAO SAHIB T. SUNDARA REDDY, F.R.C.S.,
Professor of Anatomy, Madras Medical College,
(1923-1931)

THE MADRAS Medical College Magazine

VOL. XI

JULY 1931

No. 1

Arthritis Deformans

By DR. N. MANGESH RAO, M.B.C.M., F.R.C.S.

This is a chronic form of joint disease characterised by a gradual destruction of articular cartilage of the joint surface and a simultaneous proliferation of certain elements in the joint.

The condition is separable into two main types.—(1) Osteo-arthritis, (2) Rheumatoid arthritis. In both destructive and proliferative changes take place side by side. The distinction between them is largely clinical and also on the presence of bony proliferation in osteo-arthritis as compared with predominance of periarticular fibrosis in rheumatoid arthritis. Atrophic changes are common to both forms.

Osteo-arthritis

It is mainly characterised by erosion of articular cartilage at first and later of bone, of the working surface of a joint. This is combined with proliferation at the margins of the articular cartilages resulting in the characteristic "candle-gutterings," and proliferation on the surface of the synovial membrane. The capsule is not affected to any great extent.

Etiology.—It affects the joints of elderly people of both sexes, being a disease of aging joints and is often regarded as a senile degenerative change in articular tissues.

Trauma.—Repeated slight trauma is an important cause and is the chief one when the disease starts in the earlier part of life. Osteo-arthritis is therefore very liable to occur in repeated internal derangement of joints as the knee, in faulty alignment of articular surfaces after fracture into a joint, from knock-knee, flat feet, etc., and is liable to increasing frequency as age advances.

Focal sepsis.—Plays an important part in the progress of the disease. It is chiefly the toxins that assist trauma in the onset and progress of the

disease. Oral sepsis, chronic sinusitis, chronic prostatic and bladder infections, alimentary toxæmia, etc., are examples of this.

Climate.—Cold and damp increase the symptoms of an established disease. The disease is more often seen in colder and damp countries owing to the longevity of people and the climate.

Osteo-arthritis affects chiefly the larger joints, often only one and seldom many. When it takes the poly-articular type, it usually commences in the hands and feet and is then often characterised by out-growths near the articular ends of phalanges known as Heberden's Nodes.

Pathology.—The first changes are atrophic, affecting the articular cartilage at points of greatest stress, *i.e.*, mostly the central region of the joint. It becomes thin, soft and loses its lustre, the matrix becomes fibrillated along parallel lines running slightly obliquely to the bone surface. The cartilage cells multiply and become arranged in parallel rows. The margins of the articular cartilage become vascularised and later proliferation takes place here. As the cartilage atrophies at the centre, *i.e.*, the weight bearing surface, hypertrophic changes occur in parts that are less exposed to friction. The margins of the articular cartilage become thickened (lipping) and palpable. An irregular proliferation of bone cells also occurs at the margin under the cartilage and later gives rise to osteophytes.

Synovial membrane.—The synovial membrane becomes hyperæmic, soft and secretes a slight excess of synovial fluid. The synovial fringes and villi also hypertrophy and project into the cavity of the joint like miniature strands of pink sea-weed. The fatty areolar tissue of the membrane is increased by deposition of fat, sometimes in such quantity as to be called Lipoma Arborescence. Sometimes nodules of fibro-cartilage may appear at the junction of synovial membrane and articular cartilage, and may give rise to loose bodies. Intra-articular cartilages, such as semilunar cartilages, may at first develop synovial fringes but later get gradually destroyed and the underlying bone surfaces are exposed and grate on movement. In the late stages the synovial membrane may show atrophy owing to arterio-sclerotic changes in its smaller arteries.

Bone.—The bony surface exposed by destruction of articular cartilage becomes worn away into grooves where it is in contact with its fellow, and its surface becomes dense, polished and white—a process known as eburnation. These areas of grooves and ridges are best seen in hinge-joints. In ball and socket joints, the globular head becomes gradually absorbed at the highest part becoming flattened and the

osteophytic out-growths at the edge of the articular surface make the head appear mushroomed. Around the edges of the bearing surface a ring of osteophytes form from proliferation of bone cells, which can easily be palpated, and give rise to restricted movement or locking of joint, apart from loss of function from pain. Immobility of a joint in osteo-arthritis is due to deformation of the articular ends and never to bony ankylosis.

In the case of hip joint, erosion of cartilage and lipping is succeeded by wearing away of the upper weight bearing surface of the head with formation of osteophytes in the direction of the neck. This results in mushrooming of the head. When the head has been destroyed, the upper surface of the neck which now has to bear weight, undergoes atrophy and osteophytic outgrowths form on its under surface. Thus an apparent coxa-vara condition develops. This type is common in old people and usually follows on injury to the joint. It is called Morbus Coxæ Senilis. Eventually the whole of head and neck may be absorbed, enlargement of the acetabular cavity also occurs for the same reason by absorption and formation of osteophytic growths. Movement though restricted is still kept in the joint. In other cases limitation of movement in the joint from locking due to osteophytes may check such extensive absorption of head and neck.

X-ray appearances.—Hypertrophic changes are the first to become visible in the bony lipping of the articular edges from proliferation. Diminution or disappearance of the normal clear area of a joint indicates atrophy or destruction of articular cartilages. Later deformity of the articular ends of bones and osteophytic outgrowths are seen. Irregular areas of rarefaction of cancellous tissue in the articular ends, small periosteal outgrowths as on the phalanges (Heberdon's Nodes) may also be seen less frequently.

Spondylitis Deformans.—Osteo-arthritic changes occur in the spine as in other joints. Osteophytic growths form resulting in painful movements of spine or may produce compression of nerves and neuralgias. In another type ossification of ligaments occurs but no osteophytes form. This ossification may start in the cervical and upper dorsal region, known as von Bechterew type. Or it may start in the lumbar region and then extend to the hips and shoulders, known as Strumpel-Marie type. Both may extend to the whole spine in course of time.

Diagnosis.—It is more common in old people of labouring class, a trade arthritis due to repeated slight trauma. It is more com-

mon in men than women and usually mono articular, hip joint being most commonly affected. In younger people it may follow on trauma of articular surfaces as by intra-articular fractures, loose bodies, loose or torn cartilages or other internal derangements of joints. This type is more common in the knee. Ankylosis never occurs but locking of joint may occur due to osteophytic outgrowths. Periarticular fibrosis is not found but only osteophytic growth. Intra-articular cartilages and ligaments disappear from absorption. Deformity of the bony articular ends is often seen.

Rheumatoid Arthritis

This is a progressive disease characterised by atrophy of articular cartilages, proliferative growth of synovial membrane and peri-articular fibrosis. It is poly-articular involving more than one joint and often symmetrical. It often begins in the smaller joints of the hands—the proximal inter-phalangeal and metacarpo-phalangeal joints. Later it may involve the shoulder, knee, wrist and other joints. Hip joint usually escapes this type. The onset is insidious and progress is slow, but sometimes subacute exacerbations may occur. Swelling of joints occurs from effusion, proliferation of synovial fringes, deposit of fat and peri-articular fibrosis.

Etiology.—It is more common in women than in men (3:1) and appears at an earlier age period, 20—40. The disease is more common in damp and cold countries. Infection plays a very important part in its production and progress. Organisms cannot be usually isolated from these joints. It is the result of the action of toxins absorbed from foci of chronic infection as the alimentary canal, genito-urinary canal, mouth, nasal sinuses, etc. It is often accompanied by a low type of fever, anæmia and a round-celled infiltration of articular structures indicative of infective origin of the disease.

Pathology.—The synovial membrane and capsule become swollen and infiltrated with round cells. The surface of synovial membrane is red, its villi and fringes are converted into pulpy masses by proliferation and there may be a slight amount of effusion. The granulation tissue from the synovial membrane at the edge of the articular cartilage grows over it like a pannus. Similar granulations form from the cancellous tissues under the cartilage due to action of toxins. The cartilage gets softened, eroded, and destroyed ultimately. The cartilage gets fibrocartilage, etc., are also destroyed. Intra-articular structures as fat laden fringes of synovial membrane. The joint cavity is filled with

increased by deposit of fat. Fibro-cartilagenous nodules may be found in the fringes but no osteophytic outgrowths occur. During subacute attacks of inflammation in the joints muscular spasm produces fixation of joints and brings the joint surfaces together. If the joint is maintained long enough in this position, granulation tissue grows across the joint cavity and fibrous (usual) adhesions and ankylosis, or sometimes bony ankylosis, may occur. The cancellous tissue of the bony ends shows rarefaction and atrophy partly from disuse and partly from action of toxins. A certain amount of deformity is produced by muscular spasm, but it is chiefly due to contraction of the capsule. In the early stages there is round celled infiltration of the peri-articular tissues including the capsule. This gives rise to the fusiform swellings of the joints specially noticeable in the finger joints. Subsequently contraction of these structures chiefly contributes to the deformity in addition to muscle spasm. The overlying skin may become smooth and shiny due to atrophy.

X-ray appearances.—The destruction of articular cartilages is shown by the disappearance of the normal gap between the joint surfaces. There is also an alteration in the outline of the articular surfaces and diminished density of the cancellous tissue.

Still's disease.—occurs in children and is characterized by fusiform swelling of many joints, fever, muscular atrophy, enlargement of lymphatic glands and often the spleen also. The swelling of joints is due to peri-articular thickening. Bones do not atrophy and articular cartilages are but slightly eroded. The enlarged lymph-glands are firm, painless and discrete as there is no periadenitis.

Diagnosis.—The condition affects more than one joint with a preference for the smaller joints. It may also involve larger joints as the knee, ankle, shoulder, wrist, etc., but avoids the hip joint which is the favourite site for osteo-arthritis. It occurs at an earlier age period and is more common in women in contrast to osteo-arthritis. Ankylosis usually fibrous sometimes bony is the final stage. In osteo-arthritis ankylosis is rare but locking due to osteophytes occurs.

Both types are accompanied by pain worse in the morning or after long rest and improves after using the joint. Damp and cold increase the pain. Rheumatoid-arthritis cases improve markedly after removal of focal sepsis especially in the earlier stages.

Neuropathic Arthritis (Charcot's Joint)

This is a painless disorganization of joints, commonly associated with tabes or syringomyelia, though sometimes it may be seen in cases of cerebral or peripheral nerve lesions. The incidence is greater in syringomyelia than in tabes. But as the latter is a more common disease tabetic joint affections are more commonly seen. In tabes the joints of lower limbs are commonly involved and in syringomyelia those of the upper limb.

Both varieties present the same pathological changes. Usually there is found a combination of hypertrophic and atrophic changes. Atrophic ones predominate in the shoulder and hip and hypertrophic ones in the knee and other joints.

Hypertrophic type.—In this irregular masses of bone form at the margins of the bony ends accompanied by atrophy at the centre. Parts of the capsule and synovial membrane may show calcification. Hypertrophy of synovial fringes and formation of fibro-cartilagenous nodules also occurs. The joints become distended with effusion. Intra-articular structures such as cartilages, tendons and ligaments disappear. Pain is absent. The capsule is stretched by effusion and as the bone ends atrophy, this allows unnatural movements in the joint.

Atrophic type.—All intra-articular structures disappear, the capsule becomes thinned out by large quantity of effusion. It becomes adherent to the surrounding structures. Intra-articular bone ends atrophy to a greater extent than in the hypertrophic type. The synovial membrane shows hypertrophic changes such as synovial fringes and fibro-cartilagenous bodies projecting into the joint. Unnatural movement in the joint are more marked. The effusion is chiefly serous and clear but may occasionally be blood stained. Suppuration may occur from a perforating ulcer or through the blood-stream.

Diagnosis.—Painlessness, unnatural mobility are the chief characteristics. Destruction and effusion into the joint is more marked than in other types of arthritis deformans. In addition the cases will show other signs indicative of tabes or syringomyelia.

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Medical Indications for the Induction of "Abortion" and "Premature Labour"

By DR. K. P. G. MENON, M.R.C.P. (EDIN)

In considering the above subject, we have to define the meaning of the terms "Abortion" and "Premature Labour." According to one school of writers, "Abortion" means the interruption of pregnancy during the first six months of conception, *i.e.*, before the child has attained viability; while another school is of opinion that the term "Abortion" should be applied only to a termination of pregnancy in the first three months, *i.e.*, before the placenta is fully formed, and the term "Miscarriage" should be applied to any interruption of pregnancy in the second three months, *i.e.*, when the placenta is formed, but the child is not viable. In discussing the indications for the interruption of pregnancy, we can safely follow the first school of writers, as the indications for a termination of pregnancy during the first three months and the second three months will be found more or less the same. Fortunately, all are agreed as to the meaning of the term "Premature Labour". By this is meant the interruption of pregnancy after the child has attained viability but has not reached its full term. Thus we have to consider the indications under two headings:—

- (1) For inducing "Abortion"—during the first six months.
- (2) For inducing "Premature Labour"—during the last three months.

Having defined the terms "Abortion" and "Premature Labour," let us now proceed to define what we mean by "Medical Indications." A word about the medico-legal aspect of the question of abortion will not be out of place here. According to Moral and Statute law, it is unlawful to procure or attempt to procure abortion a crime as serious as infanticide except with the object of saving the mother's life or of avoiding serious injury to her health. The responsibility of the Medical profession is great in deciding whether a particular case requires interference or not and it will be always safer for a doctor to decide on induction only in consultation with a colleague of the profession. According to Hardley Holland, there are certain positive indications for the interruption of pregnancy. There are also cases which require inter-

ference depending not on one indication alone, but on a conglomeration of circumstances. Each case has to be judged on its own merits. Induction of abortion may be justified if, according to Williams, it is done in cases falling under any of the following groups:—

- (1) Cases where the mother's life is in danger and where immediate induction might save it as in hyperemesis.
- (2) Cases in which the mother's life will be in danger if pregnancy is allowed to go on as in pre-eclamptic toxæmia.
- (3) Cases where the mother's life will be in danger if pregnancy goes to full term as in phthisis.

The more common indications may be considered under two headings:—1. General. 2. Local.

General:—

- i. Hyperemesis Gravidarum.
- ii. Acute and Chronic Nephritis.
- iii. B. Coli infection of the urinary tract esp. those intractable cases of Pyelitis.
- iv. Cardiac lesions.
- v. Pulmonary Tuberculosis.
- vi. Insanity.
- vii. Chorea.
- viii. Grave's disease.
- ix. Diabetes.
- x. Patients with a single kidney.

Local:—

- i. Threatened Abortion with severe hæmorrhage which does not respond to treatment
- ii. Hydatidiform Mole.
- iii. Retention of the dead ovum. $\left\{ \begin{array}{l} \text{Missed abortion.} \\ \text{Cervical abortion.} \end{array} \right.$
- iv. Septic infection of the uterine contents frequently as a result of attempts at criminal abortion.
- v. Acute Hydramnios.
- vi. Irreducible prolapse.—Here, pregnancy is of rare occurrence.
- vii. Pelvic contractions.
- viii. Atresia of the genital tract.
- ix. Certain tumours of genital tract.
- x. Certain tumours of the rectum. $\left\{ \begin{array}{l} \text{Where Caesarian section} \\ \text{is refused or cannot be} \\ \text{performed at term.} \end{array} \right.$

Incarceration of the retroflexed gravid uterus was formerly taken as one of the indications for induction. At present, in non-infected cases, laparotomy with replacement of the uterus after freeing the adhesions is the treatment for such a condition.

Taking the indications one by one, we have:—

Hyperemesis Gravidarum.—The toxic variety which does not yield to treatment, requires interference at an early stage. The following conditions should be considered as positive indications for intervention:—

1. Persistent vomiting and resulting emaciation despite medical treatment.
2. Persistent rapid pulse of 100 or above, per minute.
3. Persistent temperature of 100 or above.
4. Presence of marked toxic changes in the urine, such as albumin, bile, etc.
5. Presence of jaundice.

In this connection, Rank and Lyle are of opinion that no case of hyperemesis should require induction if properly treated. How far we can subscribe to this opinion is something which requires further investigation.

Acute and Chronic Nephritis.—Most of the obstetricians are agreed that there is no necessity for interference in every case of nephritis unless the patient's condition calls for it. In cases where the following conditions are present, pregnancy should be terminated early:—

1. A previous history of uræmia.
2. A large quantity of albumin in urine. Bethel Solomons says that if in spite of starvation treatment, albumin in the urine persists, the quantity of albumin is 4 or 5 grammes per litre, the amount of urine secreted is scanty, the B. P. is above 200 m.m. and if optic neuritis is present, induction is imperative.

B. Coli infection of the urinary tract.—Excepting certain intractable cases of pyelitis, there is no necessity for induction in these cases. Most of the cases are amenable to medical treatment. The following routine treatment for pyelitis in pregnancy has been advocated by the Edinburgh School of obstetricians before induction is thought of:—

1. Rest in bed with abundant bland fluid diet.
2. Bowels kept well open by alkaline purgatives.

3. Foot of the bed raised to take away the weight of the uterus from the ureters. It has been suggested that one of the contributory factors in the causation of pyelitis is the pressure of the uterus on the ureter at the brim of the pelvic bone. According to *Middleton*, this is not the only factor to be considered. Pyelograms prepared by him show a hypertrophy of the ureter where it is crossed by the uterine artery. Following on this observation, other workers on the subject have shown that there is a subsequent stricture produced at the site of the hypertrophy. It is suggested that the stricture thus formed may also be a contributory factor in the causation of pyelitis by obstructing the free flow of urine from the kidney to the bladder.
4. Alkalies by mouth for the first week or ten days during the acute stage. These should be given in sufficiently large quantities to keep the urine alkaline. The following mixture has been recommended :—

Pot. Citras	}	aa gr. 40 by mouth 4th hourly.
Pot. Bicarb		
5. Hexamine gr. 7 with Acid Sod. Phosph. gr. 10-20 by mouth t.d.s. given after the first week of alkaline treatment when the acute stage has passed. Hexamine may also be given by the intravenous route as an alternative method. 5 c.c. of a 40% solution may be given intravenously once daily for 5 or 6 days which is followed by the oral administration of the drug if it is found necessary to continue the treatment.
6. Catheterisation of the ureters with lavage of the renal pelvis if necessary.
7. Nephrotomy with drainage will be found necessary in those cases where pyelo-nephritis supervenes.
8. Vaccines are of use in chronic cases.

Ordinarily, improvement is rapid by the above treatment; but if the condition of the patient becomes alarming in spite of this, induction should be done without hesitation. The emptying of the uterus is, as a rule, followed by complete recovery as the obstruction of the ureters is relieved and free drainage of the kidney is established.

Pyelitis usually makes its appearance only in the second half of pregnancy; and so, it should be considered as an indication for inducing premature labour as well, if the term of pregnancy is over six months.

Cardiac Lesions.—Medical opinion is more or less unanimous in upholding the view that when a woman with a well-compensated heart-lesion gets pregnant, she may be allowed to go to full term with the usual precautions of abundant rest, heart tonics and avoidance of exertion during the period of pregnancy and at the time of labour to make her as comfortable as possible by giving her "Twilight Sleep" and to make the second stage of labour as short as possible by terminating it by forceps as soon as the conditions for the operation are fulfilled. *Parsons-Smith* is of opinion that the majority of heart patients would develop some degree of failure during pregnancy, but that proper antenatal care would in most cases enable adequate compensation to be maintained. These cases generally go to full term and seldom require intervention. According to him, however, one is justified in inducing abortion in those cases where there is compensation at the time of observation, but, there is a history of decompensation in previous pregnancies. In these cases, he says, decompensation may be regarded as inevitable, and as such, may be considered as a positive indication for the interruption of pregnancy.

Cases where compensation has already failed may be divided into two classes; viz. (1) Those seen in early pregnancy, i.e., during the first three months. (2) Those seen late in pregnancy. In the former class of patients the consensus of opinion is that abortion should be induced as soon as the general condition of the patient allows of this operation after rest and intensive Digitalis treatment. In the second class of patients, induction has no place in the treatment. The best form of treatment suggested is, to tide over the patient's condition by continued rest and Digitalis treatment as suggested by *Eggleston* or his followers to allow the pregnancy to go on as long as possible and to do a Caesarian section under Spinal anaesthesia when the child is viable and has a fair chance of living. The results of leaving it to spontaneous delivery are wrought with danger especially the end of the second stage and the third stage of labour. P.P.H. should be guarded against although, a certain amount of blood-loss may be beneficial in cases with great venous engorgement.

Pulmonary Tuberculosis.—It is difficult to say in a given case of phthisis whether induction will do good or not. These cases cannot be

grouped according to the extent of the lesion in the lung. Patients with pulmonary tuberculosis may improve a little in their general health and outward appearance during pregnancy, but they go rapidly downhill after confinement unless looked after with the greatest care. A phthisical woman more often than not carries to full term without any trouble. If she is seen after the first three months she should be treated on ordinary lines for phthisis and the strength maintained in every way till she falls into labour spontaneously. Labour should be made as easy and short as possible by giving "Twilight Sleep" and forceps delivery as soon the conditions for the operation are fulfilled. Induction of labour in the later months of pregnancy is not of any use in this disease. Induction of abortion plays a part in phthisis in those patients who are seen in the first three months of pregnancy. In these cases, according to Solomons, if the disease seems to be advancing or if acute tuberculosis is present, induction may be done. Geoffrey Marshall suggests that cases with only a short history of tuberculosis should be picked out and abortion induced in such. Williams is of opinion that induction is not only justified but is almost imperative in those cases where the first pregnancy occurs after the onset of the disease, or whenever its existence is discovered during the early months of a pregnancy.

Insanity.—Proper nursing, rest, sleep, moderate exercise, and proper nourishment will generally be sufficient to relieve the condition in most cases. Sometimes recovery is delayed till after the birth of the child. In a few instances, however, the patient does not get well even after delivery and she becomes a chronic demented lunatic for the rest of her life. In view of the fact that recovery is seen in many cases when the child is born, induction is indicated in a few cases where medical treatment has failed. Bernard Hart is of opinion that in cases of "Recurrent Psychoses" where several attacks have occurred, clearly indicated and is justifiable. In such pregnancies induction is opinion as regards the class of patients where a psychosis has developed after the occurrence of pregnancy. Some say that abortion is indicated in cases where the symptoms do not subside after continued medical and institutional treatment. As opposed to this view, the other school is of opinion that psychosis developing during pregnancy and puerperium are not definite entities constituting special forms of mental disorder as was formerly held; that pregnancy is only a circumstance

of minor importance in such cases, and its termination is not likely to affect the course of the disorder materially. So, they hold that abortion is not indicated in such cases. There is another group of psychosis associated with pregnancy where pregnancy occurred in the course of pre-existing psychosis. In this class of cases the toxic factors and the emotional strain of pregnancy may be causal factors in deciding an attack of an "Exhaustion Psychosis." In these cases, induction, although theoretically, it might do good, does not practically affect the course of the mental disorder in any great degree. Cases of psychoneurosis have to be considered separately, each case on its own merit.

Chorea.—There are two types of cases where this disease is associated with pregnancy:—One in which pregnancy occurs in a choreic patient, and the other in which chorea appears only after pregnancy has occurred. The latter is held by some, to be of toxaemic origin and is classed under the toxaemias of pregnancy. This type is the 'true Chorea Gravidarum' where induction may be considered under certain circumstances. Most cases of chorea are controlled by sedative and eliminative treatment. According to Williams, some get well by the injection of the serum of a normal pregnant woman of about the same term of pregnancy as suggested by Albrecht. Some cases, however, resist all forms of medical treatment and get well only after induction. Some end in spontaneous abortion due to the excessive movements of the body associated with the disease.

Grave's Disease.—This cannot be considered as an absolute indication for induction as most of the cases tide over pregnancy by the usual medical treatment without giving any great trouble. Absolute rest, both mental and physical, and Iodine therapy properly instituted, play the most important part in its treatment. Surgical interference may be undertaken with the usual precautions in the selection of anaesthetics and in the preparation of the patient. As goitre is a complication of pregnancy in certain cases due to the undue activity of endocrine system, operative interference should be considered only when it is absolutely necessary. The condition may pass off after the pregnancy is passed through. According to Fehling, patients with Grave's disease seldom become pregnant. If they become pregnant they have a good chance of going through pregnancy quite well. All are not agreed on this point. Some are of opinion that there is an increased risk of abortion in such patients due to the increased excitability of the vasomotor system and the instability of the nervous system usually associated with this disease.

Diabetes.—Presence of sugar in the urine of a pregnant woman as shown by the Fehling's test does not warrant a diagnosis of true diabetes in her. Pregnant women in their later months usually excrete lactose in their urine and this reduces Fehling's solution. So, the sugar passed in urine has to be differentiated by the fermentation test or the glucosazone test. If the sugar is proved to be glucose then the blood sugar test may also be done to gauge the severity of the disease. Williams says that in several of his diabetic patients, the glycosuria disappeared during the latter half of pregnancy to appear again a few days after delivery. This he thinks, is due to the activity of the foetal pancreas compensating for the deficiency of the maternal organ. Diabetes was formerly held as an absolute indication for induction, but since the advent of Insulin into the medical world, diabetic women can pass through pregnancy and labour with little or no risk. In a few cases, as noted by Williams, slight glycosuria persists, notwithstanding the most rigorous anti-diabetic regime. These cases, according to him require careful observation and the pregnancy should be terminated upon the first appearance of any untoward symptoms. Cases with acetone in quantity and with severe acidosis may be considered, according to Solomons, as one of the indications for induction, but, full doses of insulin with a proper diabetic diet should be given a trial first and will usually suffice to avert a calamitous issue till labour ensues spontaneously. During puerperium, however, the prognosis is grave even with full doses of Insulin and proper dieting, owing to the rapid changes in the metabolism at this period.

Patients with a single Kidney.—These cases should not be allowed to get pregnant; if pregnant, abortion should be induced at the earliest possible opportunity. They are, according to Holland, cases with positive indications for induction, as, irreparable damage may result from the extra strain placed on this kidney.

Having considered the more important general indications for the induction of abortion, let us now proceed to think of some of the general indications which, according to Holland, are but debatable points and are not accepted by all as positive indications:—(1) Albuminuria or Eclampsia in previous pregnancies (2) Hyperthyroidism (3) Hypothyroidism (4) Multiple Arthritis Deformans. Taking one by one:—

(i) *Albuminuria or Eclampsia in previous pregnancies.* This is a question which requires a little more consideration than the mere mentioning of it. Recently, much literature has come out on the subject

of "Toxaemias of pregnancy," and has given room for much discussion among the leading obstetricians of the day. It has been proved by many workers on the toxæmias of pregnancy that albuminuria may recur in succeeding pregnancies in about half the number of cases, contrary to the time-honoured belief. It has also been shown that a good many of the patients do recover completely after the first attack without any recurrence of symptoms in the following pregnancies. Statistics gathered by Gibberd at the Guy's Hospital, London, and by Young at the Simpson Memorial Hospital, Edinburgh, show that about 40 per cent of cases recover completely after one attack, that about 50 per cent show recurrent symptoms during succeeding pregnancies with no appreciable damage during the interval, and that about 10 per cent show permanent renal damage after one attack. The "Recurrent Toxaemia" of which Prof. Young of Edinburgh is the exponent, may manifest itself in the form of abortion, accidental haemorrhage, premature labour, still birth, eclampsia, etc. in succeeding pregnancies. The "Low Reserve Kidney" of Stander which is characterised by a moderate albuminuria with a temporary rise of blood pressure without any change in the blood chemistry, has also a marked tendency to recurrence. But it must be said that not all cases of toxæmia recur in succeeding pregnancies. As said before, about 40 per cent of cases have been shown to be free from any recurrence after the first attack. So, we are not in any way justified in saying that albuminuria or eclampsia in previous pregnancies is an indication for induction. We should not, at the same time, ignore the fact that more than half the number of cases show some evidence of kidney damage showing itself either permanently or during succeeding pregnancies. Proper antenatal care and prophylaxis will usually suffice to enable the pregnancy to go to full term without any serious consequences. In considering the prophylactic treatment of cases with albuminuria in previous pregnancies, Rivett says that it is all-important that all such patients should report to the doctor as soon as the menstrual period is missed. Prophylaxis, according to him, depends on proper dieting and on the maintenance of the alkalinity of the urine by giving large doses of alkalis by mouth. Diet should be carefully prescribed, the protein part of it being cut to the minimum. Rest, fresh air and avoidance of strenuous exertion are adjuvants to the prophylactic treatment of albuminuria. Bowels are to be kept well open. "Focal sepsis", according to James Young, plays an important part in the production of placental disease which is invariably present in all "Recurrent

Toxaemias". He suggests that it is in the excretion of the catabolic products of the damaged placenta that the kidney excretes albumin. So, we cannot ignore the importance of eradicating all possible "focal sepsis" in the prophylactic treatment of albuminuria.

(ii) *Hyperthyroidism*.—This shows that not all of the signs of Grave's disease in a mild degree. What has been said of the latter disease holds good in this also.

(iii) *Hypothyroidism*.—Here pregnancy is of rare occurrence. True myxoedema cases, according to Fehling, do not become pregnant.

(iv) *Multiple Arthritis Deformans*.—This is a rare condition and may in severe cases require induction.

Now, some of the indications which Holland terms as "Eugenic" may also be considered here from the social and economic stand-points. These are:—

(i) *Refractory Syphilis in the mother*.—This condition should no longer fall under the indications for induction, in view of the recent and elaborate methods of diagnosis and treatment of the disease both in the expectant mother and in the child.

(ii) *Idiopathic Epilepsy*.—It has been said that only about 5 per cent of epileptic persons had an epileptic heredity. Also, it is said that not all epileptic mothers give birth to epileptic children. So, how far epilepsy could be considered as an indication for induction is a debatable question.

Coming now to the "Local" indications for induction, there is nothing much to dilate on them. Each condition will speak for itself.

Next, the indications for induction of "Premature Labour" may be considered. As has been said earlier, "Premature Labour" is the termination of pregnancy during the last three months. Here also, we can consider them under two headings:—'General' and 'Local.'

General.—Most of the general indications mentioned under abortion may be applied to "Premature Labour" as well. Two are conditions, general indications. 1. *Albuminuria*, and 2. *Pre-eclampsia*, have to be added to the list of independent of true nephritis, the treatment is more or less the same as in the latter condition with pregnancy. So, most of what has been said of nephritis holds good in albuminuria and pre-eclampsia. It is noteworthy however, how most of these toxæmic pregnancies respond to

antenatal treatment with amazing rapidity. Herein lie some of the greatest triumphs of the modern antenatal care. Essen-Møller, the great Swedish obstetrician, has remarked recently in one of his lectures that prophylactic treatment was well-nigh unheard of in old midwifery practice. The difference in the past and modern methods of antenatal investigations and treatment is striking. By physiological research one tries to investigate the biology of pregnancy in these days. The various anomalies are detected in time by the employment of X-rays, pelvic measurements, examination of urine, etc., so that proper antenatal treatment can be instituted in time to lessen the risk to the lives of the mother and the child. In a few cases, however, any amount of care would not do any good. These cases should not be treated long on expectant lines. According to Young, no toxic patient should be kept under treatment for more than two weeks unless, she shows sufficient progress to warrant a continuance of the treatment on the same lines. He is of opinion that if symptoms do not abate under proper antenatal care and hygiene with special reference to diet, bowels, and rest, the case should be considered as one which requires immediate intervention. Recent researches by Harding and Wyck of Toronto University on the diet of pre-eclampsics have shown that restriction of protein is not absolutely necessary in the treatment of pre-eclampsia, contrary to the former belief. They say that diets high in protein or fat are quiet innocuous to pre-eclampsics. With ordinary mixed diets, according to them, the patients show marked clinical improvement and protein does not play a part in the production of eclampsia. They suggest that a salt-free diet or rather a salt-poor diet plays the most important part in the treatment of pre-eclampsia. They have shown by experiments that it is the Sodium ion that should be restricted to prevent an attack of eclampsia. According to Rountree, changes in the water balance of the body gives rise to convulsions. So, a retention of salt may precipitate an attack of eclampsia by producing a water intoxication. Thus, a salt-poor diet may help in reducing the water intoxication. The following conditions, according to Young, may be considered as the indications for active interference.

1. Marked oedema of the lips and face.
2. Blood pressure raised 30 or 40 mm. or more, than the normal.
3. A heavy deposit of albumin in urine.
4. A marked drop in the urinary secretion.
5. When headache and visual symptoms are present.

It should be always kept in mind that an expectant line of treatment in toxæmias is adopted to ensure the viability of the child. Statistics gathered both by Holland and Young independently in this connection go to show that about 28 to 30 per cent of the children are born dead, and a good many of those born alive survive only a short time. Toxæmias of pregnancy are more lethal to the child than any other maternal disease. The disease which so heavily prejudices the life and health of the mother is even more unkind to the foetus. So, in treating a case of toxæmia on purely expectant lines alone, we are 'gambling with the life or health of the mother in the interests of a child whose survival is problematical. Here, one might recall the delightful picture drawn by Punch, the keen critic of the frailties of the day, where the doctor assures the prospective and overwrought father that in all his midwifery practice he has not yet lost a father. Therefore, the greatest caution and judgment are required in deciding whether the pregnancy should continue or not in cases of 'albuminuria' and pre-eclampsia.' The indication for active treatment detailed above should always be borne in mind.

In view of the fact that patients with 'pernicious anaemia' and 'leukaemia,' according to Grafe and Winter, get worse when they get pregnant, induction may be thought of in cases where they are rapidly downhill even under the modern method of treatment by Liver or Hog's stomach diets or by their extracts.

The "Local Indications" may next be considered which call for interference during last three months of pregnancy they are:—

- | | |
|---|---------------------------------------|
| (i) Ante Partum Haemorrhage | } Those due to the Mother (Passives). |
| (ii) Hydramnios | |
| (iii) Moderate Pelvic Contractions. | |
| (iv) A large child— | } Those due to the child (Presents). |
| v. Habitual death of the child during the later weeks of pregnancy. | |
| vi. Increasing size of the child with successive pregnancies. | |
| vii. Post-maturity of the child | |
| | |

Each of the above indications may now be taken separately.

1. *Ante Partum Haemorrhage*.—(Accidental Haemorrhage and Placenta Praevia). It is not all cases of ante-partum haemorrhage that require active treatment. Most of the obstetricians must have had cases at one time or other coming under their care with a history of slight

haemorrhage during the last months of pregnancy which passes off with rest without recurring itself, allowing the mother to carry her pregnancy to full term and with no untoward results either to the mother or to the child. These are but mild cases and palliative measures could be employed only in such cases and that too only if the patient is in a hospital or under the immediate care of a doctor who can keep a constant watch over the patient. Expectant line of treatment in placenta praevia is adopted only when the baby is not viable and when the patient could be constantly watched. According to Williams, however, the termination of pregnancy is urgently indicated in cases of placenta praevia, as soon as the condition is positively diagnosed. He is against employing palliative measures of treatment, as he contends that it is impossible to predict when the condition may give rise to so alarmingly profuse a haemorrhage as to cause the death of the mother. Williams' view should undoubtedly be taken in cases where the patient cannot afford constant and adequate medical help.

ii. *Hydramnios*.—Expectant line of treatment may be followed in cases of hydramnios, unless the patient's condition calls for interference. In acute hydramnios, or in chronic cases where the patient is in distress due to the overdistention of the uterus, labour should be induced by rupturing the membranes as high up as possible and by allowing the liquor amnii to drain away slowly. If labour does not ensue within 24 hrs. of the rupture of membranes, it should be helped by bringing down a foot if the breech is presenting or by bringing down the foot after doing version if the head is presenting. Premature labour is sometimes a natural outcome of most cases of hydramnios, due to the overstretching of the uterus. Malpresentations, uterine inertia, and P.P.H. are very common in hydramnios and should be guarded against. Shock by the sudden rupture of membranes could be avoided by the high rupturing of the membranes and by allowing the liquor to drain away slowly.

- | | |
|---------------------------------|---|
| iii. Moderate Pelvic Conditions | } |
| iv. A Large Child | |

These two conditions may be considered together as, it will be seen, that induction in these cases, is done for a 'misfit' of the child's head in the mother's pelvis if the pregnancy is allowed to go to term. By proper antenatal attention the 'misfit' could be avoided if induction is done at a time when there is the least tendency of overlapping of the head at the brain, as shown by the examination of patient by the Munro-Kerr

method. It is said that the child's head is the best pelvimeter, and it is only by finding out the disproportion between the head and the pelvis, that treatment could be decided upon. Whether it is a large head and a normal pelvis, or a normal head and a small pelvis, induction of premature labour is a form of treatment provided the disproportion is not great and is done at the proper time. The prospects of getting a live child even with the greatest care in its rearing up, is rather remote if induction is done before the thirty-fourth week of pregnancy. By careful examination of the patient every week by the Munro-Kerr method, the exact date for induction is found out when the head is just trying to overlap the pelvic brim. If the patient is examined before the thirty-fourth week and if even on the first examination there is slight overlapping of the head, then induction cannot be considered as a form of treatment in this case to get a live child. Caesarian section at term will be the proper line of treatment in such cases. Induction of labour is best done between the 34th and 38th week in the interests of the child, the prospects of getting a live child being greater, the later the term of pregnancy is after the 34th week. No induction need be done after the 38th week, as spontaneous delivery at full term is possible in such cases if they are left alone.

Now, coming to the next condition, 'Habitual death of the child during the later weeks of pregnancy', induction is justified and should be done if there is positive evidence that the child is alive in the 36th week or later. If the mother is positive that the movements of the child cease after the 36th week in all her previous pregnancies, then the possibility of getting a live child should be considered if induction is done at the 36th week.

The next two conditions are:—'Increasing size of the child with successive pregnancies' and 'Post maturity of the child'. These are also conditions in which induction may be considered for the 'misfit' of the child's head in the pelvis as done in conditions iii and iv.

Apart from the indications detailed above, there may be other conditions which may require induction depending on circumstances best judged by the medical attendant alone, who is on the case. Great caution and accurate judgment are required by the doctor in deciding whether a particular case requires intervention or not, and as said before, it is always better to share the responsibility with another member of the profession where there is the least ray of doubt arising. It should always be borne in mind, that unlike the physician or the surgeon, the obstetrician

is dealing with two lives at the same time, the life of the mother and that of the child, thus making it all the more desirable for two heads working together in cases of doubt, to achieve the desired result.

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Spinal Analgesia.
A NEW METHOD AND A NEW DRUG—"PERCAINE"

BY CAPT. M. R. W. HART, M.B.E., L.M.D., M.R.C.S. (LOND.),
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Nizam's Osmania Medical College and Hospital, Hyderabad (Deccan).

Having read a report on the above subject by W. Howard Jones,
M.B.B.S. (LOND.), Surgeon Anaesthetist to Charing Cross Hospital,
I decided to give the drug a fair trial.

Percaine belongs to a group of chemical combinations which up to
recently were unknown to possess analgesic properties. It does not
belong to the same family as Cocaine or Novocaine but is a derivative
of Quinoline and therefore related to Quinine.

The solutions recommended are:—

- (1) For nerve block 1 in 1000 or 1 in 500.
- (2) Large infiltration 1 in 2000.

Maximum amount of these solution to be injected as follows:—

400 CC	...	...	1 in 2000.
150 CC	...	...	1 in 1000.
50 CC	...	...	1 in 500.

For Spinal injections the following solutions are recommended:—
1 in 1000, 1 in 1500, 1 in 2000.

The Sp. Gr. of C. S. fluid according to Starling is 1.005. This
may vary from 1.001 to 1.010; whereas, Sp. Gr. of Percaine in solu-
tions is as follows:—

	1 in 1000.	1 in 1500.	1 in 2000.
In water	...	1.0001	1.00005
„ 0.5 % NaCl.	...	1.0035	1.00345
„ 0.9 %	...	1.0062	1.0061

From this table it will be seen that only the most delicate methods
are capable of detecting any rise in Sp. Gr. due to percaine dissolved
in water in these high dilutions. The terms Hyper,—Iso,—Hypo-baric
are used to describe solutions which have sp. gra. greater than, equal to,
or less than that of C.S.F.

Comparison of Percaine solutions with C.S. Fluid.—Bearing in
mind the very important variation in the Sp. Gr. of C.S. fluid and com-
paring P. Sols. with it, it is evident that the normal saline solutions in
all high dilutions may prove to be hyper—iso—hypo-baric.

The 0.5 per cent Saline Solution having a sp. gr. of 1.003 will
almost certainly be hypo-baric and is also—tonic and will not have a
difference comparable to that of the old Novocaine and Stovaine
Solutions.

In Hyper-baric.—There is always a danger of a spread by gravity
in the high Trendelenburg.

Iso-baric.—Will, of course, stay in the region into which it is put
until absorption takes place.

Hypo-baric.—Being lighter than C.S.F. will of course be the safest
to use, particularly in the Trendelenburg position.

Administration.

A 20 CC Record Syringe, some fine rustless needles a fraction over
1 mm. in diameter, with the point ground down to a short bevel and a
barrel length of 9 c.m.

A 2 CC Record Syringe for administration of Ephedrine Gr. 1,
which is given in every case and, to blow out a needle if one should
become blocked.

The distal $\frac{3}{4}$ of the needle should not be touched with the fingers.

If the point is sharp, puncture of the skin is not difficult and, is
effected by a sudden stab, hardly noticed by the patient.

At the Osmania, we use the lumbar puncture needle to tap the sub
arachnoid space, on withdrawing the stillete, the C. S. fluid escapes and,
as soon as this happens, the nozzle of the Record Syringe containing
the Percaine solution is fitted on and, the injection slowly given if there
is a sense of resistance. Pause a little to allow the fluid time to push
upwards and, then proceed with a pause between each 2 CC; after
injecting the whole of the fluid, the needle is not withdrawn at once but,
after a pause of $\frac{1}{2}$ minute—during the whole process only about 1 CC of
C.S.F. escapes. The wound is then sealed with collodion or Tr.
Benzoin. In this method an equivalent amount of C.S.F. as that of the
Percaine solution injected is not withdrawn.

The patient is now placed in the ventral decubitus for 7 to 10
minutes, in order to soak the posterior "Sensory" roots and develop
analgesia, and finally put in the dorsal decubitus—by the time the

abdomen is painted over and, the towels placed in position, paralysis to the Anterior (Motor) roots follow.

The Position.—The position of the patient at the time of injection is the "right lateral", the spine is flexed as much as possible. The injection is given in any of the interspaces between the 1st and the 5th Lumbar.

Testing the Results.—Inability to raise the legs proves that the lumbar plexus is blocked. If the abdominal muscles are paralysed, coughing is difficult and ineffectual, and the patient is unable to raise her thorax. A skin clip is now applied gently but with progressive firmness, unseen by the patient in skin area D4 and the face watched for any record of this test. If this is satisfactory, splanchnic block may be assumed.

General Management.—Plug ears with cotton wool, watch patient's colour, appearance and pulse. The B.P. is scarcely affected and there is no need for a sphygmomanometer. There is no vomiting either during or after the operation. Do not crowd round the patient's head, let her have plenty of fresh air, avoid loud discussions about any pathological abnormality. Put up a screen in front of the patient's face. Sips of cold water from time to time, a teaspoonful of brandy diluted with two of water every $\frac{1}{4}$ hour, and occasional sponging of the face with cold water is refreshing. An hypodermic injection of Adrenalin (1 in 1000) $\frac{1}{2}$ CC helps to keep up the blood pressure.

The following cases have been operated on under Percaine at the Osmania.

1. Total Hysterectomies with tying of both Int. Iliac Arteries	...	Two.
2. Sub Total Hysterectomies	...	Two.
3. Ovariectomies	...	Two.
4. Amputation of Cervix Uteri	...	Two.
5. Obstructed Labour	...	Two.
6. Huge Incarcerated Scrotal Hernia	...	One.
	...	One.

One woman aged 65.—Ascites and acute abdomen, stoppage of bowels, huge mass blocking pelvis, pulse scarcely perceptible, 10 CC of the solution was injected. 10 minutes later abdomen opened, 8 pints of blood stained ascitic fluid given exit to, Omentum red and oedematous, firmly adherent to growth and pressing on pelvic colon. A large portion removed between ligatures, the growth, a malign. Cyst. of the ovary was partially removed, wick drain inserted, abdomen closed with

through and through stitches. The pulse improved during operation. She is now comfortable, as well as can be expected three weeks after the operation.

A Young Primipara.—Difficult labour, R. O. P. head fixed at brim, will go through with good pains and delivery can be effected with a strong pull. Cx 4/5 dil, membranes entire. As the case was handled out side, Caesarian section was not decided on. At 9 a.m. 10 CC of Percaine solution injected, patient suspended in ventral decubitus for 10 minutes and, then placed on her back; for the first half hour uterus was absolutely relaxed, the head disengaging and floating above brim; Foetal parts very distinctly palpable as if only a layer of thin "soft silk" intervened between the foetus and the palpating hands. After this pause of $\frac{1}{2}$ hour, uterus began to act again and in an hour from the time of injection, uterus was acting strongly. In the meantime during period of relaxation with some manipulation, the head was made to engage in R.O.A. position, 15 minutes after, the Bi Parietal of the foetal skull had passed the pelvic brim, membranes were then artificially ruptured, ex being completely dil, 15 minutes later i.e., $1\frac{1}{2}$ hours after injection only slight progress was made in spite of good uterine action. Head now in mid cavity Pituitrin $\frac{1}{2}$ CC was given, this had the effect of almost immediately increasing the pains. Little or no progress in 3 minutes and, Axis traction forceps were applied and delivery effected with difficulty after several strong pulls. Cord tightly round neck, could neither be drawn over head nor pushed back over the shoulders, and, was therefore divided between clip forceps. A female child delivered in a state of white Asphyxia, resuscitated with difficulty but died a few hours after. Child weighed 6 $\frac{1}{2}$ lbs. The placenta was ejected immediately after delivery of the child.

The points I wish to lay stress on are :—

1. With a little practice the Subarachnoid space can be tapped with ease.

2. An abdominal operation can be commenced 12 to 15 minutes after the injection.

3. The perfect relaxation of the abdominal muscles, obviating to a great extent the use of retractors.

4. The intestines recede automatically, affording a good view of the Pelvic Cavity, only a very moderate Trendelenburg, if at all, being necessary.

5. The pulse improves both during and after the operation. No post operative complications, e.g., vomiting, distension and pain have been noticed.

6. The action of Pituitrin is not interfered with. In the case of labour quoted above, Pituitrin would have expelled the child had it not been for the cord being relatively short and tight round the neck.

7. In cases where a Caesarian Section has been decided, on Percaine will prove useful provided the operation is begun after the temporary relaxation is over, the period of relaxation can be cut short by an injection of Pituitrin $\frac{1}{2}$ CC.

8. In the case of the huge incarcerated hernia, the relaxation of the abdominal musculature was very much in evidence, reduction of the mass was comparatively easy and manipulations consequently reduced to a minimum.

9. There is complete analgesia, relaxation for $1\frac{1}{2}$ hours.

10. Percaine is an ideal drug for producing spinal analgesia and should displace chloroform in all operations on the abdomen and lower extremities. For my part I shall in future use Percaine in all Gynaecological operations until something still better comes along.

The preparation used at the Osmania is the 0.5 per cent Saline Solution in 1 in 1500 Percaine, contained in 20 CC sterile ampoules. We have not found it necessary to use more than 15 CC. The Drug is purchased from the Clayton Aniline Company, Pharmaceutical Department, 40, Southwark Street, London, S.E. 1. Cost of each injection 10 annas. I am sure Percaine will prove an ideal drug for Nerve block, infiltration anaesthesia and for E. N. T. cases.

N.B.—The point to remember is that the 0.5 Saline Sol. 1 in 1500 is lighter than C. S. Fluid, so that, with the patient in the Rt. lateral position and the head lowered slightly there is no fear of the Solution travelling upwards into the upper cervical region.

A Few Hints in Practical Histology.

By DR. M. N. PAI, M.B., B.S.

Department of Pathology Medical College, Madras.

In the following notes I am mentioning some of the common errors committed by the student in examining morbid histology slides either in the practical classes or at the examinations. I must confess at the outset that most of these mistakes have been committed by everyone in the course of his student's career. It is therefore only as a part of my duty and not with a fault finding attitude that I am giving the following hints.

The first thing that a student does, on coming to the practical classroom and takes his seat, is to take out the microscope from the box. This should be done gently the microscope being lifted up as a body, from the *bottom* support and *not* held at the fine adjustment support. A failure to do this results in the fine adjustment getting out of order in a year or two, or earlier and a miserable legacy is left for the future generation of students who will be cursing the authorities for supplying such rotten microscopes. Each microscope costs over half as much as a motor cycle combination, and just as owner driven motor vehicles last twice as much as these driven by professionals, "a sense of responsibility" in the handling of the microscope prolongs its life.

The second point to be borne in mind is to see that the eye piece and objectives are clean. The student ought not to rely on the attendants in the laboratory. Some of them work hard no doubt; others work hardly. He should therefore satisfy himself about the cleanliness of the lenses and remove dirt or grease from the lens with either a bit of muslin, or (equally good) a clean kerchief. One can never imagine the amount of relief and comfort to the eye, whenever a slide is examined with a clean lens.

Thirdly, clean the slide that is provided. In dry and dusty weather, the slide has a deposit of dust on it and if it is examined under the microscope, numerous black particles may be noticed. A section of normal lung or congestion of the lung might be mistaken for a section of "Carbon pigment in the Lung". But if examined carefully, these

dust particles take a different focus from the section itself and so this error is inexcusable.

The fourth common error which is committed is placing the slide on the wrong side with the coverslip downwards, i.e., placing the slide topsy turvy. When this is done, it is impossible to focus the high power objective either 1/6 or oil immersion. I have heard very often a student saying "Kindly give me another microscope. This is out of order, I cannot focus the high power lens at all. In a minute the mistake has been set right and "the microscope has been repaired".

Fifthly, never be satisfied by looking only with low power. While it may be very easy to make a "lightning diagnosis" of a slide under the low power at a glance, it is really difficult to find out the nature of the section without using high power. A section of a malarial liver may look as a normal liver or a case of congestion of the liver (which may be co-existent) under low power. If the high power is used, the true state of affairs is revealed and Kupfer cells loaded with pigment are found in abundance. Moreover, the structural details of individual cells, nuclei, etc., cannot be seen under the low power.

Sixthly, never be satisfied with your diagnosis until and unless all parts of the field have been examined. A section of an early tuberculous lymph gland might be given in which only one or two giant cells are seen and only one minute area of caseation is seen at one corner. Though such "difficult" slides are not usually kept, it is better not to take any chances. When you are given perfect liberty to move the slide and handle it as you like, why not enjoy the privilege? I can very well recollect the mistake once committed by a student. A section of multilobular cirrhosis of the liver showing patches of fatty change was kept. The previous student had moved the slide about and "diagnosed" correctly and when the "five minutes bell" rang, left the slide (under high power) with a field showing an area of fairly advanced fatty change. The next student glanced at it, only under high power, smiled and without any hesitation, noted down "Advanced fatty degeneration of the liver," although under low power, the different bands of cellular fibrous tissue were prominent enough to strike one in the face. If the student had spent half a minute more and examined it under the low power, he would not have committed this mistake. The low power of the microscope is very often more important than the high power though both are necessary. Under the low power, the diagnosis of the organ and very often, the condition of the organ is

made; under the high power, the diagnosis is confirmed by noting finer details; and without the combination of these two, no report is complete.

Examination under the low power, is equally, if not more important than, examination under the high power, especially for finding out if a blood smear has been properly stained. When staining a smear for malarial parasites, it is always advisable, after the staining is complete, to see it under the low power or 1/6 th lens. An idea is obtained as to whether it has been properly stained. The Leishman stain might be very old and might have deteriorated and perhaps, only one blood smear was available. In such cases, if the smear has been faintly stained, it might be stained again for some more time. If cedar wood oil has been used, it has to be removed by Xylol and then it is impossible to stain the smear again. This shows the importance of examining the smear as a routine under low power or 1/6 th lens. A glance is usually enough and it takes practically no time. An idea of Leucocytosis or Leucopenia is also obtained.

Another important point to remember, when a slide is kept and you are not permitted to move it about or change the objective, is to note the number of the eye piece, whether 1/3 or 1/6 or oil immersion. Grave blunders have been committed owing to an omission of this procedure. A micro-filaria kept under low power has been identified as a spirillum. The student must have an idea of the size of the different organisms under low power, high power and oil immersion. If this particular student had remembered that it is impossible to see a spirillum with a 1/3 or 1/6 objective, the blunder would have been avoided.

Finally identify the slide according to your own best judgment and not according to what others tell you. The student must have a free and open mind and with this most errors are obviated. A proper use of the microscope is just as important to a student and a medical man as the time-honoured use of a stethoscope.

Bluffs in Medicine.

BY R. VISWANATHAN, B.A., M.D.

The habitual as well as the occasional film fans amongst us would not have lost the opportunity of seeing and hearing Maurice Chevalier in the "Big Pond," wherein that lovable laughing comical Frenchman in his inimitable way, makes a summary disposal of the outstanding characteristic of modern American life when he cries out at the top of his sopranic voice "I bluff, I bluff, I bluff". But it is not altogether fair to attribute this characteristic of bluffing exclusively to Uncle Sham, because however much the venerable but irreverent Uncle might deserve that appellation "Sham", other nations as well as individuals are not altogether bereft of their own modicum of Bluffs; only bluff gets translated into different forms and shapes in different ages and in different climes, not altogether unlike the Shakespearian "Bottom" even though there is no Quince to bestow his blessing. If, according to the highest conceptions of Eastern philosophy, the whole universe is a Maya, the unreal, a veritable bluff in our present parlance, we have every justification for asserting, without the least fear of contradiction, that Bluff holds its authoritative sway over every department of human life. Max Nordow was neither a fool nor a knave when he expressed his "trenchant views" on the "conventional lies of our civilization", and passionately exposed the bluffs that seem to exist even in the Sanctum Sanctorum of religion and matrimony. In fact, from the very basic foundations to its lofty pinnacles, modern social life, with all its rigid conventionalities, unbecoming decorums, unwholesome delicacies and reprehensible vanities, what with its good-mornings and good-evenings wished most often with the least intention of being good and wishing good perhaps sometimes nurturing in the mind the very opposite of what is expressed, is a bundle of blithering bluffs. There is, therefore, every justification for Master Bluff to exist in any one of its vicarious translations, also in the department of medicine to which we have the honour or the dishonour to belong, according as it is judgment by self or by the cantankerous public.

Introspection is an agonising enquiry according to Carlyle, but it will reveal a deplorable but inevitable state of affairs wherein bluff

exists in all its malignancy, and perpetrates with impunity the wildest excesses of fantastic oppression and cruelty and exhibits itself in all its flamboyant colours. In no other profession is bluff practised as a fine art, so much so that even the astute lawyer with all his pretensions to insight into the intricacies of the human mind, will fail deplorably in gauging the extent of its malignancy with any amount of accuracy. From the very beginning of his training to the time of his retirement from practice, perhaps even to his journey's end the medical man's life is a concatenation of bluffs.

Just as the melancholy Jacques with his habitual cynicism describes the life of man in seven stages, we may without putting it into water tight compartments, consider the life of he or she entering the portals of our profession, as a series of steps in the ladder of ambition "where the climber upward turns his face scorning the base degrees by which he did ascend." First of all there is the student who even for entering the gates of the institution wherein he is to be initiated into the mysteries of his bluffing profession, has to resort to bluffing the gate keeper who under ordinary circumstances will bluff the aspirant away with the specious excuse of 'no vacancy.' Once he has gained entrance into the college, he is safe for five years or perhaps more, depending on the individual capacity to bluff his or her way through. The bluffs of a student are too numerous to be enumerated; besides they are so well known to one and all of us; because if only we don't conveniently plead shortage of that commodity called memory, we are sure that recollections of our student life won't fail to bring qualms of our sleeping conscience, which in its activated moments may prick us with the bluffs we had recourse to in those happy-go-lucky days of collegiate life. The subjects one has to wade through in the medical college are so vast that unless the teachers are extra-ordinarily clever men with leechy brains, it is an extremely easy task for a student to bluff his way through, provided he has got the capacity, self-confidence, certain amount of unscrupulousness, and the boldness to bluff. Success is guaranteed to him if he sticks to his guns without allowing cowardly conscience to undermine his foundations and stand boldly as an "everfixed mark that looks on tempest and is never shaken." Some of our best men who are now occupying some of the enviable positions in our profession and who are commanding creditably lucrative practice, have been bluffers even in their student days. By that I don't mean to say they were not clever otherwise than in bluffing. It will be sheer

injustice on my part to categorise them as a bundle of bluffers since they were really clever in their collegiate career. But only Master Bluff acted as a catalytic agent to their cleverness which occasionally carried some of them even to Johnstonsian heights.

Leaving the college with the proud possession of a licence to cut and kill with callous indifference, with hopes that spring eternal, with a robust optimism which is only born of youthful inexperience, the young enthusiastic aspirant, enters life as a house man which is the second step in the ladder of his ambition. Having now mastered the art of bluffing to perfection, he finds a fertile field for practising the art amongst the constituents of the hospital wherein he is a potent but an irresponsible factor. When necessity arises he bluffs to the boys about his laboratory investigations, counts blood corpuscles with the rapidity of an electric totaliser, fudges the result of examination of human excrements with a brazen-facedness which might put even hardened habitual criminals to shame, fill both the pages of a case sheet with all the clinical and laboratory investigations, and not to speak of the historical narration of a case that he has not examined, perhaps not even seen, and with a dangerous carelessness born of blissful ignorance, certifies while lying in bed being too reluctant to shake off the embraces of the pillow, the death of a patient whom he does not know from aboriginal Adam. Countless are the ways in which the houseman bluffs. Not satisfied with bluffing in his professional capacity, he exhibits his proficiency in this fine art to his professional sisters, especially when labouring under the influence of the romantic moon, he parodies the sonnets of Keats and Shakespeare or adopts the passionate stanzas of Omar Kayam as particularly his own, and sometimes resorts to the Master Bluff of proclaiming his bachelorhood in spite of his being a condemned victim of matrimonial shackles. But these are only preliminaries to the bluffs of the confirmed physician whose advancement in his profession depends entirely on the degree of perfection of his knowledge of this exquisite art which finds expression in every particle of work he does. It is because the lay man out of his colossal ignorance of the inner workings of this organised trade union, as Shaw calls our fraternity, attributes super-human powers to the medical man, he has to bluff them partly with the idea of producing a mental satisfaction to the patient and mainly with the purpose of self-aggrandisement. The suffering son of sin will invariably be concerned with the prognostication of his illness, and the cornered physician cannot help bluffing to him about the prospect of a

bright future using the hackneyed expression "you will soon be alright." These bluffing words act like oil over troubled waters, a soothing balm to the suffering soul, magical in their action. In this at least bluff has a justification, making us believe in the eternal conceptions of the influence of mind over matter of the superiority of soul force over brute force. Can we really place our hands over our heart and conscientiously declare that we have cured any single ailment (except perhaps the fancied ones of a hysterical lady) by the potations and concoctions which we administer taking meticulous care about the exactness of the components even to the one hundredth of a grain or perhaps to the physically indivisible molecule? Assuredly not! And yet we administer them in all forms as pills, potions, elixirs, catchets, pulvinous atoms, inhalants, injections, unguentums, and what not, to the credulous public who reiterate their confidence in these wonderful physicians whom they worship as demigods, not suspecting in the least that patients get cured not by gulping in these potations with clock-like regularity but in spite of these inefficacious drugs. But the physician has no way of escape from bluffs since he has to play upon the patient's credulity, and has to go on prescribing all the drugs in the pharmacopœia British, American, and even the extra ones of Martindale, since the lay man has such implicit faith in his mixtures and injections that any conscientious objector, if he resorts to plain speaking and administering aquavitæ will run very serious risk of losing his lucrative practice. The Doctor who refuses to write lengthy prescriptions, who preaches against the efficacy of injections, who does not in season and out of season insist on dietetic restrictions, will certainly fall very low in the estimation of the ignorant public who refuse to be convinced that medicine is bluff from top to bottom. The lay man wants to be cajoled and bluffed and the medical man has to pamper to his tastes and thus ensure a purchase for his bluffing wares. He has to bluff about the present condition of the patient; he has to bluff about the prognostication of the disease so as to ensure the influence of the mind over the body; he has to bluff about the efficacy of his potions; he has to bluff about the magical influence and even the place of manufacture of his injections; he has to bluff about the costliness of the ingredients owing to the popular conception rather misconception that the potency of the drug is proportionate to its price; he has to bluff sometimes even in the diagnosis of diseases, since he may be so hard pressed for time, being compelled to see hundreds of patients in the short compass of an hour

that he can only use his pen for writing prescriptions one after another and cannot possibly use scientific methods of investigation for accurate diagnosis. But we can't blame him for this kind of work which may be construed by plodding science as slipshod. For after all he has to satisfy every member of the admiring crowd who has endowed him with super-human powers and has such supreme confidence in those autographed slips issued continuously and mechanically at the rate of one per minute, perhaps more. Besides it is not medicine but bluff that cures a patient, by producing in him the article of faith.

In fact the Doctor has to live in bluffs and by bluffs. He is to be sympathised rather than condemned. To society he is a necessary evil. His existence can neither be ignored nor washed out of existence as long as human nature continues to be what it is and as long as the credulous public in their blissful ignorance refuse to be shaken out of their supreme confidence in the artistic bluffs of the experienced physician.

I have bluffed about the bluffs in medicine and I have not cut the caps to any particular dimensions nor intended to fit the head of any particular personality but if the cap suits anyone I have absolutely no objection in his wearing it.

Editorial Notes.

The Medical College Association is deeply indebted to Lt. Col. K. G. Pandalai, for the valuable services he rendered to the association. Till lately he has been the Vice-President of the Association and during his term of office he has done a great deal in placing the finances of the association on a sound basis. His great interest in the many activities of the association is well known. The social functions of the College owe a great deal of their success to his genial personality and untiring efforts. We are sure he will continue to take a keen interest in our activities, and on our part we shall certainly look to him for help and advice in our difficulties.

We are also equally indebted to Dr. Mangesh Rao the retiring Editor to whose unstinted efforts on behalf of the association as well as the Magazine we owe what little we have done. The continued success of our College Magazine and its great popularity among the students is entirely due to his enthusiasm and perseverance.

We offer a hearty welcome to those of our professors who have come back to us after their sojourn in Europe. We congratulate Dr. J. C. David on his Ph. D., of the Edinburgh University and Dr. B. T. Krishnan on his M.Sc., of this University. We are very glad to welcome back Dr. Mannadi Nayar our Professor of Bio-Chemistry. We congratulate Dr. Basir on his Ph. D., of the London University and Drs. Kutumbiah, Viswanathan, Paul and Achar on their M. D., of this University.

To the Graduates of the year of this College, we convey most hearty good wishes and we hope that they will distinguish themselves in their profession and contribute to a real advance of the medical profession in India.

We are also glad to extend a hearty welcome to the "freshers" of the College. We invite their attention to the Pre-registration examination which is regarded as the

"pons asinorum" of the College and hope that they will get across and form more corporate and stable units of the College next year.

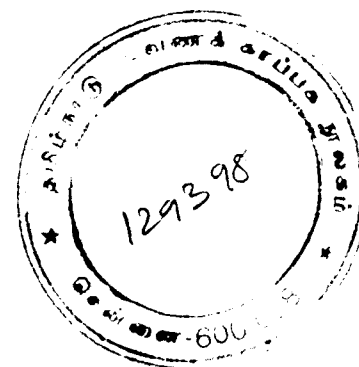
Among old boys of our College who have achieved distinction abroad are Drs. Govindan Nayar and Rajam who have taken the M.R.C.P., of Edinburgh in Venereology and Dr. B. M. Sundaravarathan who has passed the F.R.C.S. of England.

We are very glad to learn that Major A. M. V. Hesterlow is coming back to the College as our Professor of Hygiene. He will find here a hearty welcome from the staff as well as his students present and past.

Dr. T. Sundara Reddi, F.R.C.S.I., our distinguished Professor of Anatomy has retired after long years of service devoted to the teaching of Anatomy. His success as a teacher is so well known that many who went for Post Graduate studies in Europe spent many hours in the dissecting halls here. His lucid exposition and faultless technique were highly appreciated by all. We wish him many long years of useful life even after retirement.

His successor is Dr. Koshy, M.B., M.R.C.P.E., who has been for a long time Assistant Professor of Anatomy. We are sure Dr. Koshy will acquit himself creditably in his new office.

We have received a copy of the "Willingdon Medico", a magazine started by the "Lady Willingdon Medical School Old Students' association". It is very well got up and contains articles of both scientific and general interest. It reflects great credit in the organizers in that they should have taken the initiative in founding a women's medical Magazine for India. It is hoped that this will serve as a medium of self-expression not only for the old students, but for the present and future students of the medical school. We wish the magazine every success.



Case Reports.

AN EARLY CASE OF ANEURISM OF THE ARCH OF THE AORTA.

B. S. VISWANATHAN AND N. CHANDRASEKHARAN.

Patient, Mr. A., 45 years of age, Hindu, Police Head Constable, was admitted into the Sixth Physician's wards, for pain in the lumbar region, right side of the chest, and in the joints, of a month's duration.

History of present illness.—The patient has been having vague pains in the shoulder, elbow, and knee joints, and also in the lumbar region and right side of the chest for the last six months. For the past one month the patient was having more definite pains in the right side of the chest and lumbar region, and sometimes along the left arm. The patient consulted an ayurvedic physician who gave him some "oil," after which his pains grew worse.

History of Previous Illnesses.—The patient gives a definite history of having had sores on his penis and also of a white discharge from his urethra, some ten years ago.

Social status, etc.—The patient is married and is of temperate and regular habits.

Physical signs and condition on admission.—The patient is a well nourished and well-built individual of 45 years; not anæmic: teeth clean: no pyorrhoea alveolaris present: tongue clean and moist: veins of the legs, varicose.

Abdomen.—Flabby with plenty of subcutaneous fat: no rigidity or tenderness anywhere. Lower border of the liver not palpable, spleen not enlarged.

Circulatory system.—Apex beat neither visible nor palpable. A slight pulsation was felt in the second left interspace. A faint systolic thrill felt over the manubrium sterni and to the left of it with the patient sitting up; it is not definite with the patient recumbent. Dulness to percussion from half an inch to the right of the right margin of the sternum to one inch to the left of the left margin of the sternum in the second intercostal space.



X ray photograph showing dilation of the aorta and the arch of the aorta.

Heart boundaries are within normal limits.

Heart sounds are feebly heard. A systolic murmur is best heard in the third interspace about three quarters of an inch lateral to the left margin of the sternum; not conducted. Aortic second sound is accentuated. Pulse regular, 80 per minute; volume and tension good. Left radial pulse seems to be slightly weaker. Blood pressure right arm 120/80; left arm 110/72.

Respiratory system.—Well developed chest. Both sides are symmetrical; move equally with respiration. No impairment of resonance. Breath sounds are normal.

Nervous system.—Cranial nerves normal. Pupils unequal the left being dilated. No alteration in the reflexes. No sensory changes. Locomotor system normal.

Laboratory and other investigations.—Urine: Sp. Gr. 1020, acid. no sugar, albumin, acetone, or deposits.

Motion: no ova found.

Sputum: no tubercle bacilli found.

Blood film: nothing abnormal made out. Wassermann reaction strongly positive.

X-Ray: A dilation of the Aortic shadow upward and to both sides.

On reviewing the above findings, the possibilities suggested are Syphilitic Aortitis and Aneurism of the arch of the Aorta. But there was nothing in the symptomatology of the patient to suggest either possibility. The pain was of a very vague distribution.

The pain in Aneurism are of several kinds. (1) substernal, (2) cervico-occipital, radiating up the neck and occipital regions, (3) radiating down the left arm, sometimes down the right arm, (4) intercostal neuralgia, (5) dull boring pain of erosion of bones. In this connection the following lines from Allbutt and Killeston will be of interest. "It is a good practical rule, as laid down by Gairdner, that 'whenever a case of obstinate or frequently recurring pain, such as might, constructively, be due to pressure upon nerves or upon solid parts, and such as is not fairly in accordance with some disease known to exist in the organs of the thorax or abdomen, the suspicion, at least, of an aneurism ought in all cases to arise.'"

Case Reports

The second point of interest in this case is the absence of the more common pressure symptoms, namely cough, dyspnoea, tracheal tug, dysphagia, and hæmoptysis.

The presence of aneurismal dilatation of the aortic arch was first suspected on noting the anisocoria. Anisocoria occurs also in aortitis but is more marked when the aortitis goes on to aneurismal dilatation. The presence of the aneurism was suspected even before the X-ray photograph was taken on the clinical findings alone, and the X-ray justified the diagnosis. It was deemed that the case was not one of mere aortitis, for, the symptoms were more severe than what one gets in aortitis, and the physical signs were more definite, namely:

(1) A systolic thrill over the manubrium and to the left of it (2), dullness from half an inch to the right of the sternum to about an inch to the left of it, (3) the accentuated aortic second sound in the absence of a high blood pressure. (4) a positive Wassermann reaction "which is practically the concluding piece of evidence necessary to settle the diagnosis." (Blumer), (5) the difference in the blood pressure on both sides, (6) X-ray picture. The absence of the more common symptoms of the aneurism can be explained by the fact that the case is a very early one.

The question of prognosis is always a difficult one in cases of aneurism. But in this case one may be justified in giving a reasonably favourable prognosis because the case is a very early one and secondly, it is specific.

We have great pleasure in acknowledging our indebtedness to Dr. K. C. Paul, M.D., for permitting us to report this case; and also to Dr. Santhanakrishna Pillai of the X-ray Institute for the X-ray photograph.

FROM M-1 WARDS.

J. SELVAM, FINAL YEAR.

1. A CASE OF MENINGOCOCCAL MENINGITIS.

Patient Mr. N. Age 22 years. Hindu male. Occupation—electrician. Residence:—Chinthadripet. Admitted 29-6-31.

Complaint.—Fever, and pain in the neck and limbs.

Duration.—5 days.

Family History.—Nothing particular.

Previous History:—Patient gives no history of any severe fever or of any pain in the neck.

History of present illness:—10 days ago patient got fever which lasted one day. Two days later he took a purge and had about 15 motions. Still two days later he carried a heavy load on his shoulders. He has pain in the neck ever since. Next evening the fever started again and has not left him since. Appetite good. Bowels constipated. Patient is not able to sit with his legs crossed because of the pain in the limbs.

Physical signs on admission:—Ill-nourished man, aged 22 years. Not anaemic. Tongue coated and dirty. Teeth clean. Gums bleed easily. Patient is not able to bend his head nor is he able to turn it from side to side because of the pain.

Circulatory System:—Nil abnormal except for reduplication of second sound in the pulmonary area.

Respiratory System:—Nil abnormal.

Alimentary System:—Abdomen not distended. Spleen and liver not palpable. No tenderness or rigidity.

Nervous System:—Intelligence and memory good. Cranial nerves normal. Tendon jerks cannot be elicited. Abdominal reflexes present. Muscular power good. No wasting. Kernig's sign present. No sensory changes.

Investigations:—

29-6-31 Blood—No parasites, leucopaenia.
Motion—No ova.

Urine—Nil abnormal.

A lumbar puncture was done on 29-6-31. The cerebro-spinal fluid escaped under pressure.

Cerebro-spinal Fluid.

(Slightly turbid.
Centrifuged—Deposits contained:—
(1) No gram-negative cocci.
(2) No acid-fast bacilli.
(3) Polymorphonuclear cells ++ 334 cells per c. mm. All varieties of cells present.
(4) A few R. B. C's.
(5) Albumin 88.9 mgm%, Globulin 31.5 mgm%, Sugar 0.008 mgm%.

Case Reports

Culture of C. S. fluid.—Meningococci grown. Gold test—negative. A diagnosis of cerebro-spinal meningitis was made.

Treatment:—

Hexamine 10 grs. in 10 c.c. of water intravenously daily.
30 c.c. of anti-meningococcal serum intrathecally daily.

Progress:—

- 30-6-31. Patient complains of head-ache and pain in the back of the neck. He had intermittent fever, maximum being 104° F. Pulse occasionally irregular.
- 4-7-31. Head-ache and pain in the neck better. General condition improving. Temperature continues to be intermittent.
- 19-7-31. Complains of pain in the joints mostly in the knee, ankle, elbow and small joints of the hands. 10 grs. of soda salicylas was given intravenously.
- 26-7-31. No pain in the joints. Temp. normal. General condition very much improved.
- 26-7-31. Patient discharged cured.

Differential Diagnosis:—(1) From acute anterior poliomyelitis—differentiated by the absence of paralytic symptoms.

2. From other forms of meningitis—especially tubercular—Differentiated by the culture of C.S.F.

3. From other acute fevers like typhoid—Differentiated from Typhoid by (a) the distended abdomen of typhoid as contrasted with the retracted one in cerebro-spinal fever (b) widal reaction.

The following varieties of the disease have been described.

1. The acute type.
2. The fulminating type.
3. A mild variety.
4. Cervical opisthotonus-posterior basal meningitis of children.
5. Septicaemic type.

No case of meningo coccal meningitis has been seen in the General Hospital for the past five years.

2. A CASE OF SYDENHAM'S CHOREA (HEMI-CHOREA)

Patient.—Mariamuthu—aged 10. Hindu.—occupation student.

Complaint.—Involuntary and purposeless movements of right hand, fingers, leg and face.

Duration.—3 weeks.

Previous history.—No history of rheumatic fever.

History of present illness.—Had fever and pain in the neck for three days, 3 weeks ago. The fever and pain subsided. The involuntary and purposeless movements started then.

Physical signs on admission.—Patient is fairly well-nourished, teeth clean; tongue clean; but unable to keep the tongue steady when it is put out.

NERVOUS SYSTEM.—Intelligence and memory good. Cranial nerves normal.

Motor system.—Jerks diminished, muscular power weak, more marked on the right side.

Sensory system.—Normal. Patient making involuntary movements of face, right hand, and legs.

Circulatory system.—Heart sounds rapid; otherwise normal.

Respiratory system.—Nil abnormal.

Alimentary system.—Nil abnormal.

Investigations.—

Urine :—Nil abnormal.

Blood :—No parasite : Leucopenia.

Motions :—Round worm ova found

E. N. T :—Tonsils not enlarged.

Diagnosis.—Hemi-chorea.

Aetiology.—It is identical with that of rheumatic fever. Chorea is predisposed to by neuropathic diathesis. It is more common between the ages of 5 and 20 and rare before the age of 3. Girls are more often affected than boys and often the victims are of the poorer classes.

Pathology.—Lesions of chorea are identical with that of encephalitis. Pia-arachnoid, and basal nuclei of cerebrum, and cortex are affected,

especially the fibres running from the cerebellum, through the Red-nucleus and subthalamic regions to the cortex.

Symptoms.—1. Muscular weakness may be so severe that there is even muscular paralysis.

2. Ataxia : This is not a manifestation of the irregular movements.

3. Spontaneous involuntary movements so characteristic of the disease. These are irregular in point of place, nature and time. The upper limbs are more affected than any other part of the body. The head, trunk and lower limbs may be affected. Movements cease when the patient sleeps; and increase when under observation.

4. Mental Symptoms : Patient's mentality is altered. He loses capacity to learn anything, talk connectedly or even play.

The following varieties of chorea have been described :—

- (1) Generalised chorea.
- (2) Hemi-chorea.
- (3) Paralytic-chorea.
- (4) Hemiplegic chorea.
- (5) Chorea gravis.

Differential Diagnosis has to be made from Tics, Torticollis, Post hemiplegic and Post encephalitic Chorea, Myoclonus, and Athetosis.

Complications of chorea are (1) heart failure, (2) Exhaustion, (3) Dermatitis, (4) Myocarditis, (5) Pericarditis, (6) Eucephalitis.

Treatment.—1. Absolute rest, in a darkened and quiet room.

2. Atropine grs. 5 every four hours.

3. Symptomatic.

4. Arsenic :—Liq. Arsenicalis in 4 minim doses is sometimes given.

My thanks are due to Lieut. Col. G. E. Malcolmson, I.M.S., for kindly permitting me to report the above two cases from his wards.

Reflections of the Student Editor

Reflections of the Student Editor.

Ourselves.

Our journal has frequently been accused of being too serious and too scientific for a college magazine. Now that our juniors are also made compulsory subscribers, the accusation, is in my belief, only too just. It is always a matter of pride to have one or two original articles and interesting case reports, but these alone would not bring us all close together. If the defect is to be remedied, our students must themselves contribute freely. It is gratifying to find that our *Ladies* have already given the lead in this matter. We therefore hope that in the future numbers at least there will be evidence of keener interest and greater enthusiasm to the credit of our friends.

A boon.

Ever since 1926, the Madras University has undergone many changes in respect of medical studies. It has excelled even the Kaleidoscope in this respect. Some are benefited by the changes, but others suffer. Now it has assumed a somewhat lenient attitude towards our "non-registered" friends, who are hereafter, we hear, to have four chances before they are disqualified for registration. This decision, we hope, will not only produce a sigh of relief in those who were already in suspense, but also be a welcome announcement to encourage the future generations as well.

Retrenchment.

Retrenchment is in evidence everywhere, and particularly so in the medical department. We have already learned with disappointment that the idea of a long-cherished hostel for us which had almost taken shape, has again drifted to our dreams. As we are going to the press, we hear with alarm that retrenchment is not likely to spare even the house surgeon. Sometime back, of course, the house surgeons' cadre was purely honorary, but in the brighter days that followed, the present system was introduced. If we are to revert to the olden days, there is only one consolation and that is that there is no caste distinction as at the present day. Retrenchment is an ideal remedy for the present financial crisis, but it must be administered with caution and only where

there are strong indications in its favour. Surely, the young house surgeon, who has just entered upon his career, is not very much in need of it.

A Grievance.

It is another pitiful story. When the athletic fee was raised from four to five rupees, the optimistic among us, hoped that there would be improved facilities for our sportsmen. But the events that followed have taken a different turn altogether. The new pathology block, under construction, has encroached upon our tennis courts, and till now no provision has been made for fresh grounds. All of us rejoice at the idea of a new pathology block, but what about our sportsmen? The athletic fee is still five rupees, and in addition we had to sacrifice our tennis courts also!!

A Tragedy.

The results of the final M. B. B. S. Examination have come as a shock to all of us. We do not know what is really wrong, but everyone knows that something is wrong somewhere. Most of the planes crashed in the final year after a non-stop flight from the first year. Our condolences to all those who were hit by hard luck.

Athletics.

We are glad to hear that the medicoes will be represented at the Annamalai University sports this year also. We won the shield last year, and we have every reason to hope that it will be retained this year also. We wish them every success.

A Generous Offer.

Dr. J. C. David, M.B., PH.D., Professor of Pharmacology, offers a prize of either books or instruments to the value of Rs. 40, to the student of the Madras Medical College who stands highest in the diploma examination in German of the Madras University, to be held in July 1932. Past students of the college who graduated not earlier than April 1925, are also eligible for this prize.

We hope this will give an impetus to those who contemplate going abroad for prosecuting their further studies.

M. NARAYANA MENON,

Final Year.

A Moonlight Reverie.

MISS DWARAKA BAL, SECOND YEAR.

The moon was shining bright. Yearning to have some quiet time after the day's work, I stole out into the open air and sat on the grass. Nature in all its splendour seemed to be whispering the greatness of the Creator.

Sitting there, I could have a good view of the clear sky with the moon shining. In five minutes' time, I forgot where I was. I felt myself raised aloft on invisible wings into a higher sphere above all the petty vanities of the world below. It was Mercury, the messenger of Gods that was leading me. Within a short duration of this glorious feeling, Lo! I stood in front of the two Gods—Zeus and Apollo—the guide departed. What does this mean? The two Gods looked very stern. They beckoned me to a stool in front of them. I could scarcely believe my eyes. What could this be? I was trembling with fear. Then one of them said, Come on, don't feel so nervous. Good God! save me! Is this an oral exam.?—I thought—I looked about me for my hall-ticket, but could not find it. I was to have my exam. only the next day and I had not looked up certain things, and—here I am! What can I do now? Couldn't the roof come down on me and crush me to death! What am I to tell them? These thoughts were suddenly checked by one of them adjusting his voice and bursting out suddenly "How do you prepare the diethyl melonic ester?" Done for me! Yes, I could see my theory paper in their hands and they have seen that I have answered that particular question, wrong. But—surely, I could give them no better answer now! What is to be done—I must face it.

In another moment I found myself very briskly describing the ramus of the mandible—it has an angle, two processes and this and that. Suddenly I realised that I was not answering the question put to me, but something else—what confusion!

I could see them both exchanging smiles—all at my expense! I am doomed, I thought—one of them gave me a forced smile, was it ironical? Did it mean that I had no hopes? Would they not ask any more

questions? *Perhaps* I might answer them! But—no time was lost. They asked me for my number—I stammered. Click, went the bell and I was asked to go. Just then, I felt a gentle touch on my shoulder and heard a foot-step behind me. I turned round expecting to see the fleet-footed Mercury to lead me back—but—I opened my eyes and saw only my friend who had come to call me to go in. Thank Heavens! It was only a dream! I rubbed my eyes well, went into the room, and having looked into the hall-ticket, made sure that I was to have my oral examination in organic chemistry only the next day.

Dame Scharlieb Memorial Fund.

The Principal acknowledges with thanks the contribution received from the undermentioned gentlemen for the proposed Memorial to the late Dame Scharlieb:—

	Rs.	A.
Lieut.-Col. J. M. Skinner, I.M.S.	...	30 0
Dr. A. Lakshmanaswami Mudaliar	...	20 0
„ T. Bhaskara Menon	...	10 0
„ K. Vasudeva Rao	...	5 0
„ C. A. Venugopaul	...	5 0

(Sd.) C. A. F. HINGSTON, LIEUT.-COL., I.M.S.,

Principal.

Dr. T. SUNDARA REDDY, F.R.C.S.I.

AN APPRECIATION.

Rao Sahib Thirukama Sundara Reddy, F.R.C.S.I., by his retirement from service, severs a connection of 15 years with the Anatomy department of the Madras Medical College.

Born on the 17th of June 1874, he entered the Medical Service in 1899. Subsequent to his education in Europe and admission to the Fellowship of the Royal College of Surgeons, Ireland, he was appointed as Assistant Surgeon in 1908. His connection with the Madras Medical College began as early as 1916, when he was appointed assistant to the Professor of Anatomy. Serving successfully under Lt.-Col. A. Chalmers and Dr. G. Rama Rao, Dr. Reddy succeeded the latter as Professor of Anatomy in 1923. He continued to adorn that post till June 1931, having had his term of office extended by two years.

A strict disciplinarian, with the welfare of students always at heart, he was respected and feared by all his students. Whether in the lecture hall or dissection theatre, his commanding personality always instilled discipline and respect in every student. By his ceaseless efforts, he made the students realise that anatomy has to be studied in the dissection room rather than from books. By example and precept he taught his students the value of punctuality and neatness.

His untiring work for the cause of his students and for the advancement of the study of Anatomy is well known. It is mainly due to his personal effort that the Anatomy department came to occupy the present spacious, well ventilated and dignified part of the College buildings. Under his direction the Anatomy museum has become a pride of the Medical College.

I feel certain that the years that the students spent in the anatomy department under Dr. Reddy will be ever remembered as pleasant though strenuous, and that they will have for their 'guru' a warm corner in their hearts. Though I am sure he will be missed very much by the students, we shall console ourselves with the thought that he is free and energetic enough to turn his attention to other spheres of activities. May he be granted a long life to serve the motherland and the noble profession!

GEORGE FLETCHER (*Student Editor*).

The Madras Medical College Association.

OFFICE-BEARERS FOR 1931-32.

The Executive Committee.

President.—Lieut.-Col. C. A. F. Hingston, I.M.S.

Vice-Presidents.—Lieut.-Col. J. M. Skinner, I.M.S.

Dr. A. Lakshmanaswamy Mudaliar, B.A., M.D.

Secretary.—Mr. G. P. Rayen.

Asst. Secretary.—Mr. C. J. Siva Rao.

<i>Representatives</i> .—Final Year	... Mr. F. P. Mascarenhas.
Fourth Year	... Mr. P. T. Gopala Nair.
Third Year	... Mr. C. J. Siva Rao.
Second Year	... Mr. M. Munuswamy Chetty.
First Year	... Mr. M. Natarajan.
Pre-Registration	... Mr. K. G. Vasudevar.
B. S. Sc.	... Dr. T. M. A. Nather.
Lady Students	... Miss. M. Mammen.
Military Students	... Mr. G. F. Martinus.

The Magazine Committee.

President.—Dr. M. R. Guruswamy Mudaliar, B.A., M.D., C.M.

General Editor.—Dr. T. Bharkara Menon, M.D., M.R.C.P.

Associate Editor.—Dr. P. Kutumbiah, B.A., M.D., M.R.C.P.

Student Editors.—Mr. M. Narayana Menon.

Mr. George Fletcher.

Secretary and Publisher.—Mr. G. P. Rayen.

ASSOCIATION NOTES.

A very hearty welcome to the freshers of our College! We congratulate them on the keen interest and ardent enthusiasm they have already evinced for the activities of the association. We hope that this interest

will be more abiding and of a permanent nature, without fleeing away as the novelty of the surroundings becomes more impressed.

On the 17th July, a General Body Meeting was held in the library hall to elect the office-bearers for the year. We are sorry that Lieut.-Col. K. G. Pandalai, owing to pressure of work, could not find it convenient to accept office this year. This is really an irreparable loss to our association. He has been fostering the association from its very inception, and it is no exaggeration to say that the present status of our association is, mainly if not entirely, due to his ardent devotion, untiring zeal, and unceasing efforts. In Dr. Mangesh Rao's declining to accept office this year, the association has to lose the services of yet another enthusiastic and zealous member of the staff. We place on record our deep debt of gratitude to these two fathers of our association and we are sure that their most valuable experience will ever be at our disposal for our future guidance.

The election of an Assistant Secretary was keenly contested this year. A record number of 527 votes was polled on the 23rd July, and Mr. C. J. Siva Rao was duly declared elected with 211 votes to this credit.

RECEPTION TO THE NEW GRADUATES.

Owing to insufficient accommodation in the College, this outstanding activity of the association was conducted in the usual grand scale, at the Museum Theatre on the 7th August. Lt.-Col. Hingston presided and Dr. A. Lakshmanaswamy Mudaliar addressed the Graduates. During the period the speaker was on the platform, the audience, which was not too silent at other times, was kept spell-bound, and this fact alone is an eloquent tribute to the mellifluousness of the widely acknowledged orator of South India.

Some people, it is said, discover their latent capabilities by a chance opportunity that comes in their way. At least it proved only too true with some of the medicoes. Moliere's "Doctor Love" came as a disillusionment to some of our members, who had never even acted in their dreams. It provided them an opportunity of exhibiting their dormant histrionic talents. With only a surprisingly short time for rehearsals, the farce was staged with considerable success.

Every contributor to the programme of the evening richly deserves our sincere thanks. We take great pleasure in mentioning the name of Miss D. Shantasundari whose spontaneous and timely service was much appreciated. Our thanks are also due to Miss M. Mammen, the representative of the lady students, for her fervent enthusiasm and her earnest endeavours to make the function a success.

We are highly grateful to Col. Skinner and Col. Newcomb, for the trouble they took to give us all possible conveniences in the hall and on the stage. We take this opportunity of thanking the Madras Dramatic Society and their Secretary, Mr. Skipworth for so kindly sparing us the Theatre for the evening.

G. P. RAYEN,
Secretary.

OBITUARY.

As we go to press, to our profound sorrow, we hear of the sad and untimely demise of our late Patron, **Major-General F. H. G. HUTCHINSON**, C.I.E., K.H.S., I.M.S., former Surgeon-General with the Government of Madras. We offer our heartfelt condolences to the bereaved family.

"The College Association Day"

MISS M. MAMMEN, THIRD YEAR.

The students of the Medical College were *en fete* on Friday the 7th August, when under the auspices of the association they were At Home to the new graduates and the staff at the Museum Theatre.

At 4.45 p. m. tea and light refreshments were served in the beautiful lawn in front of the theatre. No evidence of the much talked of financial stringency was to be seen there, due in all probability to the active co-operation of the students of the College with their special donations for the occasion.

Tea over, the guests were slowly led to the seats reserved for them in the hall. Already, every coign of vantage, on a higher plane had been occupied by the students. After garlanding the President and the Speaker, the Secretary, Mr. Rayen, opened the proceedings with his welcome address, which was soon followed by the introductory speech from the chair. The President, Col. Hingston was welcomed to the platform with loud and vociferous cheers, and in his characteristically humorous way, he addressed the audience.

There was a loud and prolonged applause as Dr. Lakshmanaswamy Mudaliar stepped on the platform, to deliver his address to the graduates of the year. It was an address couched in the choicest expressions and delivered in a most interesting, and eloquent manner. Who would not envy his eloquence? He vividly described the reminiscences of his student life, the little but interesting anecdotes of his college career, impressing us thereby that they too were once like us—making fun of their hoary headed professors, mistaking the words "examples are" to an yet undiscovered drug "sambozoar" and so on. He remarked that Madras had given the lead in many important matters, for other provinces to emulate. It was Madras that first admitted a lady student into a medical college, the late Dame Mary Scharlieb, the Great Gynecologist. It is again Madras, in the whole British Empire, that has this year chosen a lady to address the Annual Convocation. Madras again can boast of some of the biggest hospitals in the world, etc. etc. He hoped that Madras would be proud of the young men of the present generation, some of whom, he was sure in a few years would shine as the World's brightest luminaries in the Medical Profession. He concluded his illuminating and interesting address by wishing the new graduates all success in their future.

Dr. Chintan Nambiar, the Johnstonian of the year replying on behalf of the Graduates, remarked that even the very few who had passed successfully through the narrow gates without being crushed by Charybdis and Scylla, wished that they were students once again. Was it not encouraging us to prolong our college career, as long as possible, when we heard him say that they found their purses empty, with no money orders waiting for them, when they were once out of College? Attributing the lamentable results of the year to the lack of proper coaching in practical work, he concluded by thanking the hosts of the day on behalf of the Graduates.

The variety entertainment was opened by Mr. Sastri's vocal music followed by Mr. Sudakar Rao's melodious strains on the flute. Mr. M. Santhosam's ? was something more than a mark of interrogation. His mimicry was so perfect as to make one believe that he really was a brahmin woman in his *Poorva Janma*. The "Doctor Love" was a capital success. The father was indeed an old father, inspite of his high spirits. One would have easily mistaken him for an old man in reality, had he not come back to the stage, as the General Secretary, with only a part of his beard off. The ladies, I should think were a real treat. As for the young lover, the wonderful doctor, no one could deny that he was a true disciple of Cupid. The four doctors, with their new discoveries amused the audience very much. But I hope they will not put to practise their new discoveries, and I wish them better luck, the next time they are called upon to see a patient. The entrance of the Negro on the stage was a pleasant surprise. An attempt to describe him is beyond the scope of my pen.

Thanks to Miss Santhasundari, who relieved the audience of the monotony of sex on the stage. Even the most boisterous of the howlers was quieted down by her sweet music. Mr. Sreenivasan as usual was much appreciated. It is saddening to think that this is his final year and that the College will no more have the pleasure of hearing him.

With the Secretary's vote of thanks and the singing of the national song the function came to a close at 8 p. m.

Our hearty congratulations to Col. Skinner, the Secretary, and others who were responsible for the success of the function.

Athletics.

It is indeed a great loss for us this year that our two veteran players Ghani and Saldanha, cannot represent our College in any of the various Intercollegiate activities. For five years, they have given their services unstintingly to the College and have brought her glory on many occasions. Our Alma mater will not easily forget the two names.

In spite of this serious handicap, we have very good teams in Hockey, Cricket and Football. Perhaps Hockey is our fore-thought the other two teams have their own supporters. The Intercollegiate matches have already begun, and so far the Medicoes have lost none. We are sure to persevere till the end and carry off all the possible cups and shields of the Intercollegiate Athletic Association.

We are competing for the Annamalai University Intercollegiate Sports this year also, in the first week of September. Needless to say that with our all India Champion D'Costa we will bring back the Chettinad Shield, we are taking with us.

P. Z. ABRAHAM,
Sports Secretary.

CRICKET.

The Cricket XI this year contains practically all last year's colours; but it is a matter for regret that all our players do not turn up for the Intercollegiate matches, and seldom are we able to field our full side.

Lack of bowlers is our chief complaint. Nevertheless, out of the two intercollegiate matches we have so far played, one has been won outright, the other drawn.

Team.—C. J. Perira (Captain), F. Martinus, E. Gonsalves, Dr. Bhandari, E. Denton, R. Garson, F. Periera, S. D'Costa, Chan Sahib, Thiruvengkatachari, W. Martinus, E. Wilkinson, and K. Hegde.

Result of Matches.—Vs. Presidency College, 145 for 5 wickets against 253 for 8. (Garson 38, Perira 28, Gonsalves 25, D'Costa 21 not out. Chan Sahib 2 for 13. Gonsalves 2 for 78.) Match Drawn.

Vs. Christians.—108 against 81. Match won.

C. J. PEREIRA,
Captain.

HOCKEY.

Our Hockey Team is still to the fore this year having won all the matches so far: our most notable victory being against Engineering College 6-0. We have also defeated Loyola College twice 1-0, Law College 4-0, Pachiappa's College 4-0. We had to replace Mr. Gonsalves and Mr. Ghani who are unable to play owing to pressure of work and our veteran and former captain Mr. Saldhana is unable to play having already played five years for the College. The new additions to the team are Messrs. Mc Namara, Cullen and Mc Innes who have proved themselves worthy substitutes.

C. Letang,
E. Denton, Mc Namara,
D. Gibson, G. Muller, E. Cullen,
S. D'Costa, B. Beetles, C. Periera, N. D'Vaz, McInnes.
B. N. BEETLES,
Captain.

FOOT-BALL

Our Foot-ball team this year has two new finds in Cullen and Sircar. Though we have lost our best player, Ghani, who has left College we hope to go a long way in the tournaments. The Inter-Collegiate Foot-ball tournament has commenced early this year and we have played two matches so far. The first was against the Pachiappa's team and won by 6-0 and the second against Loyola in which we again won by 4-2. We are to meet more formidable rivals hereafter and if luck be not against us, as it was last year, we hope to do well.

A. GOPALA MENON,
Captain.

In Lighter Vein.*

Prof.—What is the difference between ammonia and pneumonia?

Student.—Ammonia comes in vottles and pneumonia in chests.

John was sent to study mathematics and the teacher told him it was a true science.

'For instance,' he said, 'if it takes one man twelve days to build a house, then twelve men can build it in one day.'

John replied.—'And if it takes two hundred and eighty-five men to build it in one hour, seventeen thousand two hundred and eighty men in a minute, then one million, thirty six thousand and eight hundred men can put it up in a second. Now I do not believe they could lay a single brick in that time. Again, if one ship can cross the Atlantic in 12 days, twelve ships could be able to cross it in one day. I do not believe that either, so I am not going to study mathematics, and Johnny left the teacher studying it himself.'

Done on the wrong side.

One.—He was as mad as he was last night.

Other.—How come?

The previous one.—He slept in one of those new fangled beds that wash your face, comb your hair, shine your shoes and give you a cup of hot coffee.

The Other.... What of it?

The previous one....He got in the wrong way and it poured the coffee down his pants, washed and combed his shoes and blackened his face.

1st neighbour.—How do you like the new doctor?

2nd neighbour.—He is a jolly good man.

1st neighbour.—Yes, and takes life so easily!

Friend.—But Dr. Scott, why don't you prescribe for yourself, instead of calling in Dr. Bobbs.

Dr. Scott.—I can't afford it. My charge is twenty shillings and Dr. Bobbs charges only five.

* The Student Editor (M.N.M.) thanks the contributors of the 'In Lighter Vein' for

In Lighter Vein

Surgeon on his rounds.—"Good morning, Mr. Noff. How are you feeling to-day?"

Mr. Noff.—"Can't grumble".

Surgeon.—"What! are you so bad as that?"

Student (to the Surgeon): "What did you operate on the man for, Sir?"

Surgeon.—50£.

Student.—"Yes, Sir. But I mean what did the patient have?"

Surgeon.—50£.

Patient.—(at the E. N. T. Department) "Well, Doctor. I am suffering from 'Mastitis'. Will you examine me please?"

Young Doctor.—(Surprised and rather shy) "Excuse me, madam, that does not come in my province, you see. You have to consult the General-Surgeon."

Patient.—"But doctor, I have pain in the ear, fever and so on."

Doctor: (bursting out into laughter) "Ah! I see! 'Mastoiditis' is it?"

Victim of motor accident.—"Hallo! Is that Dr. Hicks? I have just turned turtle. Will you please come along immediately?"

Dr. Hicks.—"Sorry. Wrong number. I believe you want the Zoo."

Doctor.—Do you use toothpaste?

Patient.—Gracious! No, None of my teeth are loose.

Physics lecturer.—Explain Centrifugal force.

Bright Student.—Anything on a round object which is rotating is thrown from it.

Lecturer.—Can you give an example?

Student.—On a talking machine the notes are thrown out from the record.

Veteran Medical Examiner.—(To a young medical student.) What muscles will I call into play if I raised my foot and kicked you?

Young Student.—(With a menacing glare). The flexor and extensor of my right arm.

Prof.—What is the most deadly poison known?

Bright Pupil.—Embalming fluid! You are dead before it touches you.

Patient.—"But doctor, are you sure it is Pneumonia? sometimes the doctors treat a case for Pneumonia and the Patient dies of something else."

Doctor.—"No. But when I treat a case for Pneumonia, he won't die of anything else."

"Taunts in a will"

To my wife.—I leave her lover, and the knowledge I was not the fool she thought I was.

To my beloved Son.—I leave the pleasure of earning a living: 35 years he thought that pleasure was mine.

To my dear daughter.—I leave £ 20,000, she will need it, for the only good piece of business her husband ever did was to marry her.

To my valet.—I leave all the clothes he has been stealing from me for the last ten years. And lastly

To my chauffeur.—I leave my Car, he has recently ruined, and want him to have the satisfaction of finishing the job.

Roll of Honour.

The Madras Medical College Council have awarded the following Medals and Prizes for the session 1930-31 :—

MEDALS.

The Johnstone Gold Medal (Best out-going student) K. K. Chintan Nambiar.

The Chipherfield Gold Medal (Midwifery) A. Seshagiri Rao.

The Bharathi Lakshmi Gold Medal (Midwifery) Miss B. Mahadevan.

The Rajah Sir Ramaswami Mudaliar Gold Medal (Midwifery) A. Seshagiri Rao.

The Savalai Sethuram Gold Medal (Diseases of Children) R. Srinivasan.

The Bannerman Gold Medal (Bacteriology) K. V. Narayana Iyer.

PRIZES.

The First Seetha Bai Prize (Countess of Dufferin Fund Scholars) Miss S. P. Itty.

The Second Seetha Bai Prize (Countess of Dufferin Fund Scholars) Miss S. Janaky.

The Maitland Memorial Prize (Clinical Surgery) R. Srinivasan.

The Branfoot Memorial Prize (Midwifery) K. K. Chintan Nambiar.

The Sibthorpe First Prize (Surgery) Miss D. Shanthasundari.

The Sibthorpe Second Prize (Surgery) M. Venkatarama Sarma.

The Price Memorial Prize (1st in Medicine) Miss D. Shandhasundari.

The Allan Ewan Grant Prize (2nd in Medicine) M. Ambu.

The George Smith Prize (Pathology) P. K. Velayudhan.

The Mc Nally Memorial Prize (Hygiene) P. C. Kohsy.

The Muhuidin Sharif Memorial Prize (Materia Medica) Muhd. Jehangir.

The C. Raitt Dunhill Prize (Physiology) K. Ramakrishna Upathyaya.

The Thompson Memorial Prize (Anatomy) Miss. L. Chacko.

Madras Medical College Association.

STATEMENT OF ACCOUNTS FOR 1930-31.

The Accounts of the above association have been passed by the old Committee of the Association which met yesterday at 1 p.m. They are submitted to the General Body for approval.

As will be seen from the following the accounts have been audited twice, from 26-4-'30 to 10-11-'30 and again from 10-11-'30 to 30-4-'31. This is because the accounts of the Association were handed over to the undersigned as Treasurer of the Association, from the Secretary, as per resolution passed by the Committee in November 1930.

The year began with an opening balance of Rs. 132-4-0 (*vide* Appendix I). At the time the accounts of the Association and the Magazine were not separated. At the end of the year (30-4-1931) Rs. 201-5-8 of which Rs. 38-7-11 belongs to the Magazine account (*vide* appendix III) and Rs. 163-7-9 to the Association account (*vide* Appendix IV).

The financial position of the Association and the Magazine Fund can therefore be considered to be very satisfactory, considering the fact that the year 1930 has been characterised by a world-wide trade depression and slump.

The undersigned wishes to thank the different members of the Committee and the General Body as a whole for their hearty co-operation.

17th July 1931.

(Sd.) M. NARAYANA PAI,
Honorary Treasurer.

APPENDIX I.

*Receipts and Payments Account of the Madras Medical College Magazine for the period from
26th April 1930 to 31st December 1930.**

RECEIPTS.		Rs.	A.	P.	PAYMENTS.		Rs.	A.	P.
To G. W. Roberts	...	192	4	0	By Loan taken in 1927-'28 from Dr.	...	110	0	0
" Less Cheque not realised	...	60	0	0	Guruswamy Mudaliar refunded	...	482	12	3
" Subscriptions from students	...	132	4	0	Printing, Stationery and Postage	...	4	13	0
" " " staff	...	906	0	0	Conveyance charges	...	3	3	0
" " " Mofussil	...	50	0	0	Miscellaneous	...	62	0	0
" Advertisements	...	236	0	0	Staff	...	10	0	0
" Librarian as per contra	...	5	0	0	Audit Remuneration	...	18	4	0
		18	4	0	Librarian as per contra	...	84	0	0
					Col. Pandalai	...	572	7	3
					Closing balance as per cash book	...			
					Total...		1,347	8	0

Examined and found correct subject to our separate report of even date.

MADRAS, }
9th February 1931.

(Sd.) G. M. THAMBIDURAI.

Secretary, M. M. C. A.

(Sd.) K. JOHN & CO.,
Public Accountants and Auditors.

* Ought to be read as 10th November 1930.

(True copy.)

APPENDIX II.

*Receipts and Payments Account of the Madras Medical College Association for the period from 26th April 1930 to 31st December 1930.**

RECEIPTS.	Rs. A. P.	PAYMENTS.	Rs. A. P.
To Subscription from students ...	464 0 0	By expenses for organising meeting etc. ...	7 2 9
" " Moffussil Doctors. ...	4 0 0	" Conveyance charges ...	2 6 9
" " Doctors, General ...	10 0 0	" Printing, Stationery and Postage ...	14 3 0
" Hospital ...	...	" Graduates reception ...	451 8 9
		" Balance as per cash book ...	2 10 9
Total ...	478 0 0	Total ...	478 0 0

Examined and found correct subject to our separate report of even date.

MADRAS, }
9th February 1931. } (Sd.) G. M. THAMBIDURAI, (Sd.) K. JOHN & CO.,
Secretary, M. M. C. A. Public Accountants and Auditors.

* Ought to be read as 10th November 1930.

APPENDIX III.

Receipts and Payments Account of the Madras Medical College Magazine for the period from 10th November 1930 to 30th April 1931.

RECEIPTS.	Rs. A. P.	PAYMENTS.	Rs. A. P.
To Opening Balance ...	572 7 3	By Printing and Stationery ...	1,132 14 7
" Subscription ...	280 8 0	" Postage ...	19 9 6
" Advertisement ...	375 0 0	" Purchase of Magazines ...	2 4 0
" Advance by the Librarian ...	3 6 0	" Salaries ...	34 0 0
" Sale of Magazines ...	13 5 5	" Sundries ...	11 0 6
		" Cooly ...	4 4 0
		" Bank charges ...	0 4 0
		" Refunds ...	4 14 0
		" Closing balance as per cash book ...	38 7 11
Total ...	1,244 10 6	Total ...	1,244 10 6

MADRAS, }
29th April 1931. }

(Sd.) M. NARAYANA PAI,
Hon. Treasurer.

(Sd.) K. JOHN & CO.,
Public Accountants and Auditors.
(Sd.) G. M. THAMBIDURAI,
General Secretary.

APPENDIX IV.

Receipts and Payments Account of the Madras Medical College Association for the period from 10th November 1930 to 30th April 1931.

RECEIPTS.	Rs. A. P.	PAYMENTS.	Rs. A. P.
To Opening Balance	2 10 9	By Salaries	16 4 0
" Subscriptions	...	" Stationery	2 1 0
" Advance receipt from the Vice-President	72 0 0	" Postage	4 3 6
" Amount deposited in Bank in June	84 0 6	" Conveyance and Cooly	2 4 0
" Amount not found in books and now brought to account	29 9 0	" Closing balance as per cash book	163 7 9
Total	188 4 3	Total	188 4 3

Examined and found correct subject to our separate report of even date.

MADRAS,

29th April 1931.

(Sd.) M. NARAYANA PAI,
Hon. Treasurer.

(Sd.) K. JOHN & CO.,
Public Accountants and Auditors.
(Sd.) G. M. THAMBIDURAI,
General Secretary.

(True copies.)

University of Madras

MEDICAL EXAMINATIONS, JUNE 1931.

The following is the list of successful candidates at the Medical Examinations held in June 1931:—

Medical College, Madras.

PRE-REGISTRATION EXAMINATION.

SECOND CLASS.

Rank.	Regr. No.	Name of candidate.	Rank.	Regr. No.	Name of candidate.
1	80	Subaraman, A. N.	30		Krishna Bhatta, B.
2	93	Venkata Rao, K.	32		Lakshminarayana Ayyar, A.
3	76	Srinivasan, S. K.	35		Madhavan Nayar, P.
4	12	Chan Sahib, G.	36		Mahadevan, Sumati.
5	77	Srinivasa Rao, B.	37		Morika, Abusha Bibi.
6	96	Velayudhan, A.	38		Marthandam, L. R.
7	27	Kesavan, C. K.	40		Mathew, K. M.
8	49	Pachawati, I. K.	41		Mathew, T. M.
9	51	Paulose, K. I.	42		Muhammad, K. G.
10	46	Narasimhachari, N.	44		Muthulakshmi, P. S.
11	31	Krishna Nayak, P.	48		Natarajan, M.
12	63	Sam Johnson, Y.	50		Panchapakesan, K.
13	43	Muhammad Ikram.	53		Rajagopala Reddi, R.
	3	Ballantine, Rosaline Edith.	54		Rama Ayyar, V.
	8	Brown, Catherine Mary.	56		Ramachandra Sarma, S.
	9	Burby, G. A.	57		Ramachandra Sastri, P.
	10	Canna, Freany, A.	61		Raman Tampi, A.
	11	Chandi, Jacob.	62		Rangachari, N. A.
	13	Chokkalingam Pillai, S.	64		Sampath, A. R.
	18	Gopalakrishna Ayyar, T. P.	66		Samuel, Annamma.
	19	Gundu Rao, M.	67		Sankaran Pillai, K. N.
	20	Jacob Muthalali, M. K.	73		Sivabushanam, K.
	21	James, F. M.	75		Soundararajan, A. C.
	22	Joshee, C. L.	78		Sriramamurti, K.
	23	Kalyanarama Ayyar, P. K.	82		Sudakar Rao, R.
	24	Kameswaramma, G.	84		Thangamma, K. G.
	25	Kasim, P. A.	85		Thomman, K. C.
	26	Kesavalu, S.	86		Titus, T.
	28	Keshava Nayak, K.	88		Varghese, K. L.
	29	Kochukuttan Thampuran, K.	89		Venkatachalam, P. V.
			97		Venkatakrishnayya, S.

FIRST M.B. & B.S. EXAMINATION.

PART I.

Register number and name of candidate.

101	Abraham, K. J.	116	Dwaraka Bai, G. S.
103	Achyuta Panikkar, M.	120	Gourisankar, T. D.
106	Avudhappan, T. S.	122	Isvaran, N.
107	Beetles, E. A.	123	Jagadisan, A. N.
110	Chakrapani Menon, M.	125	Janardhanan, T.
111	Chandrasekhara Ayyar, G. V.	126	John, J.
114	Damodara Malappa, B.	127	Joseph, C.
115	Damodara Taravanar, T.	130	Kantappa Hedge, K.

FIRST M.B. & B.S. EXAMINATION (contd.).

PART I—(Contd.).

Register number and name of candidate.

131	Karunakaran Nayar, K.	155	Pereira, H. J. A.
132	Kittoo, S. R. E.	157	Radhakrishna Reddi, G.
133	Koman, Premeela.	158	Raghavachari, G.
134	Krishna Prasad, R.	164	Rudrans Amma, G.
138	Luke, V.	165	Santanam, N.
145	Muktha Bai, B.	166	Saraswati, M. K.
146	Muniswami Chetti, M.	171	Srinivasan, O. V.
147	Narasimhachari, R.	173	Subramanya Chetti, M.
149	Narayanan Kutti, A.	175	Thomas, K. E.
151	Padmavati, K. K.	176	Thomas George
152	Paranjoti Prakash, D.	177	Vaidyalingam, K. V.
153	Paul, M. A.	182	Visvanathan, V. N.

PART II.

SECOND CLASS.

Rank.	Regr. No.	Name of candidate.	Rank.	Regr. No.	Name of candidate.
1	281	Siva Rao, C. J.	238		Manjappa, H.
2	305	Yegnanarayanan, M. S.	240		Mathai, P. M.
3	225	Krishnamurti Rao, P. S.	255		Raghava Ayyangar, S. A.
4	275	Sankaran Nayar, K. N.	256		Raghavachari, K.
5	191	Balakrishnan, V. K.	257		Rajabather, A. T.
6	288	Thomas, P. G.	260		Rajaram, S. R.
7	195	Cheriyian, Mary T.	261		Ramachandran, M. S.
	189	Asirvadam, M.	264		Ramakrishna, C. M.
	193	Burby, G. E. J.	266		Kamankutti Wariyar,
	204	George, P. V.			T. V.
	205	George Fletcher, S.	267		Kaman Pillai, N.
	207	Gopalan Nayar, P. T.	272		Kodricks, J.
	209	Govindan, S.	278		Shankara Adyanthaya,
	210	Govindarajan, S.			N.
	215	Jagannathan, N.	285		Sumitra Rao, H.
	229	Krishnaswami, A.	289		Titus, K. K.

(Not Classified).

Rank.	Regr. No.	Name of candidate.	Rank.	Regr. No.	Name of candidate.
	190	Balakrishna, V.	239		Manuel, A. S.
	194	Chandramouli, S.	270		Rangaswami, A. R.
	226	Krishnan, K. S.			

* Yet to pass Pharmacology.

SECOND L.M. & S. EXAMINATION.

Register number and name of candidate.

† 259. Rajarajan, T. K.

† Obtained M.B. marks in Physiology and Anatomy.

SECOND M.B. & B.S. EXAMINATION.

SECOND CLASS.

Rank.	Regr. No.	Name of candidate.	Rank.	Regr. No.	Name of candidate.
1	348	Narayana Menon, M.	5	377	Vaz, O. G. C.
2	378	Velayuthan, P. K.	6	324	Joseph, C.
3	311	Bhaskara Menon, T.	7	328	Koshi, P. C.
4	329	Krishna Menon, M. K.	8	364	Sivasankara Pillai, K.

SECOND M.B. & B.S. EXAMINATION—(Contd.).

SECOND CLASS—(Contd.).

Rank. Regr. No. Name of candidate.

9	351	Purushottam Pai, A.	26	333	Kuriyan, V. T.
10	362	Santhasundari, D.		368	Subramanya Ayyar, S. V.
11	369	Subramanyan, N. C.	28	330	Krishna Rao, B.
12	320	Govindan, V.	29	325	Kalyani Ammal, E. V.
	367	Srinivasan, R.		300	Pubalarayan, G.
14	349	Ponnamma, K.		308	Atotamamba, K.
15	376	Varghese, A. D.		310	Bhagavat, T. G.
16	318	Francis, A. M.		321	Jagannadharaju, M.
17	346	Muthukaruppa Pillai, S.		331	Krishnaswami, V.
18	326	Kesavaraj, R. S.		339	Manavikraman Raja,
					P. K.
19	312	Bushanam, David.		343	Martinus Shebagh, A.
	332	Kumara Pillai, S.		352	Rajagopal, K.
21	327	Kolappa Pillai, N.		361	Sadasivan, V. R.
	370	Subramanyan, T. S.		366	Srinivasan, N.
23	316	Dhanapati, Y.		371	Sudarsanam, G. C.
24	375	Trivikrama Pai, R.		379	Venugopalachari, M.
25	307	Alexander, Candhi.			

THIRD L.M. & S. EXAMINATION.

Register number and name of candidate.

* 309	Balakrishna Marar, P. V.	365	Soolapani Wariyar, N.
* 356	Ranga Rao, K.	† 374	Thomas E.

* Obtained M.B. marks in Pathology only.

† Obtained M.B. marks in Pathology and Hygiene.

FINAL M.B. & B.S. DEGREE EXAMINATION.

PART I.

Register number and name of candidate.

381	Alikunhi, P. M.	394	Mascarenhas, F. P.
382	Ambu, M.	396	Raja Varma.
384	Balakrishna Menon, A.	397	Ramachandran, A.
385	Chinnayya, Thelma E, A.	399	Ramanathan, T. R.
386	David, C.	402	Saradambal, L.
390	Joseph Selvam.	403	Seshagiri Rao, B.
391	Krishnamurti Rao, B.		

The following candidates qualified for the M.B. & B.S. Degree :—

Rank.	Regr. No.	Name of candidate.	Rank.	Regr. No.	Name of candidate.
1	431	Chintan Nambiyar, K. K.	428		Chandra Rao, K.
2	435	D'Silva, C. B.	433		Cotelingam, J. D.
3	496	Srinivasan, P. R.	434		Dharmarajan, C. K.
4	491	Seshagiri Rao, A.	449		Jagannatharaju, M.
5	445	Harivital Rao, P.	452		Kondalarayudu, K.
6	413	Lakshminarayana	467		Narayana Menon, V.
		Aithala, K.	468		Narayanan, Nayar, V. R.
7	442	Govindarajulu, V.	474		Parthasarathi, K.
8	501	Subbaraya Prabhu, M.	484		Rangachari, V.
9	415	Nanjappa, D. R.	516		Vaidyanathan, P.

The following candidates appeared for the Final M. B. & B. S. Degree Examination, but qualified for the L.M. & S. Degree :—

Register number and name of candidate.

432	Chokkalingam, P. M.	499	Sriramulu, G.
454	Kumara Pillai, V.	505	Sundaram, T. P.
464	Muhammad Abdul Hadi.	522	Venkatarangam, M. P.
488	Sampath Ayyangar, N. K.		

FINAL L.M. & S. DEGREE EXAMINATION**PART I.**

Register number and name of candidate

† 383	Balaji Singh, B.	• 400	Ravi Varma (49th Prince of Cochin).
• 387	Dharmapalan, P.	• 405	Vadivelu, P.
† 393	Lakshmi Ammal, T.	† 418	Samuel Reddi, N.
• 398	Ramachandran, A. K.		

• Obtains M.B. marks.

† Obtains M.B. marks in Forensic Medicine.

PART II.

† 423	Balakrishnan Nayar, M. K. R.	§ 603	Subrahmanyan, V.
446	Krishnamurti, V.	507	Sundararajan, M. S.
447	Isaac J. E. David.	509	Thambidurai, G. M.
† 463	Madhava Menon, P.	• 510	Thirakal, P.
† 483	Ramaswami, K. S.	524	Veekatesubrahmanyam, V.

• Obtains M.B. marks in Obstetrics and Gynaecology.

† Do. Medicine.

† Do. Surgery.

§ Qualified for L.M. & S. Degree by combination of results.

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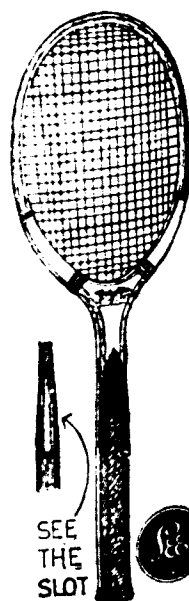
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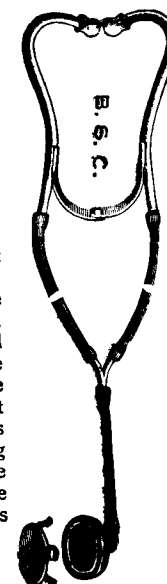
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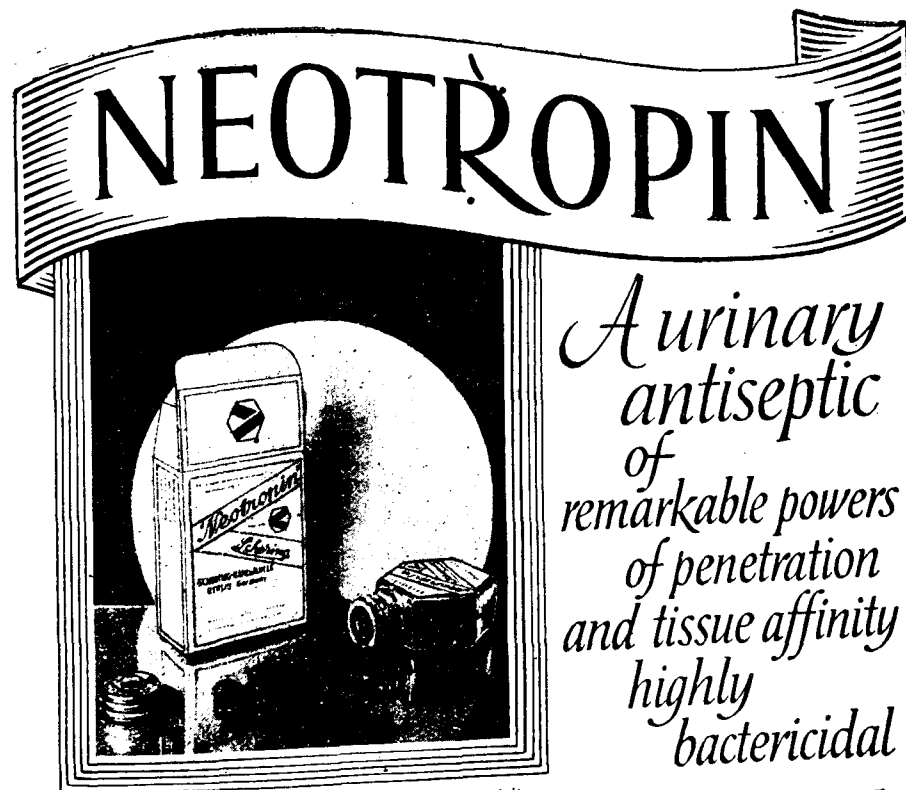
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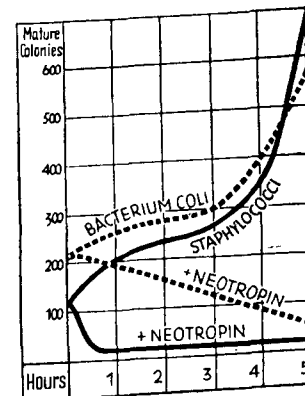
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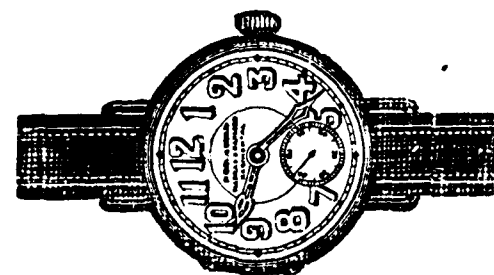
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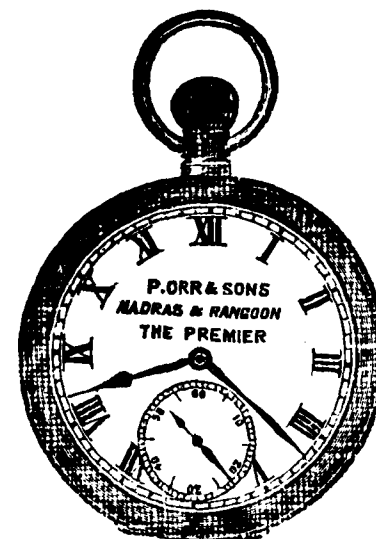
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