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Some Practice !

We have repeatedly criticized the attitude of the Government towards the question of allowing the medical officers in their service to engage in *unrestricted* private practice. We confess that we have not yet been able to report any success in our endeavours. All that has been achieved up to now have been contradictory statements from responsible authorities. Sometimes it is given out that the Government is fully aware of the disadvantage of the existing arrangement, and that the paucity of well qualified medical men stands in the way of their interference. Unfortunately for the government, the public has not much faith in this excuse. It was once given out by a very responsible officer that the privilege of unrestricted private practice was not desirable. It looked at the time that some practical results were to follow from the open avowal of such conviction. The profession was rudely disappointed when on a later occasion the same officer publicly acquiesced in the existing arrangements. From the mental vacillation that have been observed in the officers at the top, one could easily understand the indifference to this growing evil. The medical services have long enjoyed this privilege. They say that it is implicit in the rules governing these services. Any suggestion of interference with this privilege is resented vigorously by the members. They often affect dismay at the prospect, claim protection against such encroachments and plead for sympathy from the public. Since there is some misapprehension in the minds of the latter about this question we shall state here our views as clearly as we can.

We may mention at once that we have not the slightest desire to curtail any of the privileges that members of the services might be entitled to as a condition of their entry into them. But we are certainly unwilling to be witness to the innumerable ways in which these privileges are abused. It would help clearness if we briefly illustrate these abuses. It is eminently correct for medical men in the services to render medical aid to people where other medical men are not available. It is very right that the public should command their service when equally competent men are not available. If there be a person of outstanding merit in the employ of the government, practitioners should have the freedom and facility to get the benefit of a consultation with him in the interests of suffering humanity. But we are sure the public and the government would agree with us, that it is not particularly in the interests of the public or the state that government servants should waste their time examining proponents for life insurance societies. Nor is it desirable that these officers should agree to be medical advisers to private firms. And whatever might be the arguments or excuses put forth in favour of these men establishing and running nursing homes and clinical laboratories, the public instinctively feels that it is not quite the proper thing.

In the recent years a number of special departments have been opened and various specialists appointed to these places. Many of these men are kept on in the same place for years together on the plea that their specialist services are indispensable. When

these desire to take up private practice it is expected that they would confine themselves to their specialities. It would be as incongruous for the radiologist to prescribe for a common cold as a bacteriologist treating a case of conjunctivitis. And yet, the bacteriologist might take a smear of the discharge and the radiologist might press diathermy into service. And both might honestly feel that they are strictly keeping to their specialities. We are sure that the public would be immensely benefited if these specialists are enabled to realize their spheres a little more clearly.

In one of the early numbers of the Bulletin, we referred to government medical officers running dispensaries and drug stores under fanciful pseudonyms of laboratories and clinics. We believe that it resulted in a circular drawing the attention of the persons concerned to the undesirability of such activities. We do not know exactly how much of the evil has been curtailed. Some sign boards have probably moved a few yards away from these places. If the heads of the administration feel that they are going to rectify these evils by issuing circulars and exhortations they are thoroughly mistaken. People who are out for money are not going to be influenced by talking of 'academics.' People who are out for exploiting the profession and the credulity of the sick public are not likely to be deflected from their course by excellently worded exhortations about the nobility of the profession, or the sacredness of their responsible trust.

All administrations have rules and regulations. But rules and regulations are notoriously circumvented. If one is prevented by rules from running a laboratory or a nursing home, one could easily find an obliging relation to come to one's rescue. In such circumstances appeals and exhortations

might be very praiseworthy. Admonishment might be excellent. But we are inclined to believe that administration would be more useful. And a resourceful administrator would find enough means in the existing rules and regulations to put an end to these irregularities without much difficulty. Have we the man?

X-Ray Practice.

The recent advances in Physics have given us very many methods of treatment, and most of these have been much perfected during the past ten years. As a consequence, medical radiology and electricity has expanded a good deal necessitating costly and massive apparatus of a complicated nature to be specially housed, cared for and operated by specially trained doctors and technicians. Every year sees some improvement in the apparatus, technique or other methods of approach.

A recent Government Order lays down that in the X-ray departments future entrants will only be allowed private practice in their own speciality with their own apparatus. It leaves the question of those who already there *sub judice*. Be that as it may, one recognises the risk to those who are already engaged in this sort of work and it is again added to by the introduction of radium. Special risk allowances should be given to those who are already engaged in these pursuits, every one would admit; while a major portion of the work is concerned with catering for the requirements of patients in the Hospital, the much-vexed question of allowing out-patient practice and splitting of fees from the percentage allowed to those working in the department by the Government is yet to receive satisfactory solution. It is very undesirable to permit even present incumbents to engage in out-patient practice during their routine working

hours using Government apparatus. In no other department of the Government does this practice find a parallel. The earlier this anomaly is removed the better the outlook that will prevail. If the work is mainly concerned with the hospital patients, prolonged stay of patients in the hospital would be greatly obviated and more beds made available without leaving arrears. Only restricted out-patient practice which cannot be done outside should be permitted where other outside facilities are not available.

In Western countries, things are very much different. A good many institutions are managed by specially trained technicians and the cost of running is very much cut down. As more and more advancement is taking place, the technician also is requisitioned to show more scholastic and technical abilities. A single technician carries out the ortho-diagraphic and electro cardiographic work at the National Heart Hospital in London, which is a premier institution in the Empire and handles many cases referred by outside physicians. In the Tuberculosis Dispensary at Edinburgh, a senior sister is in charge of all the electrical apparatus of that department—Fluoroscopy, X-ray, ultra-violet rays, etc., with two or three technical assistants to carry out details. This sort of system can be introduced by employing graduates in physics specially trained in the up-to-date technics. The interpretation of results may be left to the physicians and surgeons. Modern physicians and surgeons have a fairly good knowledge to follow most of the X-ray findings provided. In difficult cases specialists in each clinic are the ones to interpret the readings connected with their specialities. As a roentgenologist is held responsible for the work done, he will have the freedom to select his *modus operandi* as much as the surgeon in planning out special methods of

approach in operating on particular cases. The clinical background of the patient should also be provided so that the roentgenologist may more intelligently formulate plans for tackling certain problems. The final interpretation can only be done in the wards by physicians and surgeons who are daily following the clinical history of cases.

There should be more co-operation between the clinician and the roentgenologist. Though the latter may be an efficient medical man, yet his part will cease as soon as the technical details have been carried out. The findings must be properly correlated with the clinical details already in hand and not *vice versa*. One should not forget that a roentgenogram is quite different from a photograph, the latter being a graphic reproduction of varying degrees of intensity of light reflected from a surface, while the former is a graphic reproduction of varying degrees of trans-radiances of a solid. In other words it is the province of the radiologist to decide in the case of a foreign body in the system the desirability of taking the stereoscopic picture and in the case of a suspected mediastinal pleural effusion the advantage of films made from three different directions—antero-posterior, oblique, and lateral. These are the things that should really engross the mind of the roentgenologist who wants to adequately elucidate the problems facing the clinician in the wards

Patients receiving radiation and other treatment should now and again be directed to the clinician who it is that should finally decide whether the improvement desired has been effected or whether the type of treatment followed should be modified or whether the patient is reacting deleteriously to this form of therapy.

Medical men, when they have branched out to special technical lines

like medical radiology and electricity are not expected to be fully conversant to the various clinical aspects. These are in the province of the clinician and he alone will be the final authority in the direction and management of the cases. The physician who handles a syphymomanometer need not necessarily know the different parts of his instrument nor the surgeon the complicated arrangement of a surgical diathermy apparatus.

Inguinal Herniae and Hernioplasty.

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Historical survey.—Hernia was known to Egyptians as early as 3000 B. C. and was treated by bandaging. Galen in the second century A. D. considered that hernia was due to a rupture of peritoneum. This apparently is the origin of the popular word "rupture". In the eighteenth century a greater advance in the knowledge of hernia and its anatomy took place. Czerny introduced the method of high ligation of sac without opening the external oblique. This was popular and is still practised by some in this country and goes by the name "old method". Bassini introduced the method of hernioplasty in 1883-84 and it became the standard method of treatment. Recurrences induced surgeons to modify the operation in various ways.

Injection treatment.—This was first introduced by G. Heaton in 1832 and improved by I. Mayer in 1927-30. This method is only applicable to selected cases. If an operation subsequently becomes necessary the dissection becomes very taxing and prolongs the operation.

Truss.—This in some form or other has been known for centuries. In 1806 the English cross body truss was introduced. Since then many modifications have been introduced.

I shall discuss here only two of the commonest types—the oblique and direct types of inguinal herniae.

OBLIQUE INGUINAL HERNIA.

In this the sac emerges through the internal ring lateral to the deep epigastric vessels and passing down the canal emerges through the external ring and extends downwards into the scrotum. Hence according to the length of sac, three clinical degrees can be made.

1. Bubonocoele or incomplete hernia—in this the hernia is entirely within the inguinal canal.

2. Complete type—in this the hernia just emerges from the external abdominal ring.

3. Inguino-scrotal type—in this the hernia has passed down into the scrotum.

Frequency.—In the males 95 per cent of all herniae are of inguinal type and 70-80 per cent of them are of oblique type. In women 45-50 per cent of herniae are of inguinal type (Watson), 98 per cent of which are oblique type. The sex ratio for oblique herniae is 10 males to 1 female. Though 4.4 per cent of male children in the first year life have oblique herniae (Keith), yet 66 per cent of these are cured spontaneously or by a simple truss (Bull) About 1.2 per cent of male adults between 20 to 30 suffer from herniae.

Oblique hernia is more common on the right side than on the left, in the ratio of 3:2. This is probably due to later descent of testis and later closure of processus vaginalis. In the male

oblique hernia may become bilateral in 25 per cent of sufferers.

Etiological factors.—Persistence of a patent processus vaginalis in part or wholly, Keith found a patent funicular process in 30 per cent of infants up to four months after birth, and in 12 per cent of adults. In women, canal of Nuck was found patent in 10 per cent (Nobbe). Others give higher percentages for both sexes. It is now generally accepted that in 90 per cent of oblique herniae a congenital defect in the closure of processus vaginalis exists leaving a potential sac. Though, this is, about equal in the two sexes, the incidence of hernia is ten times greater in the male sex. Hence other factors must influence this incidence. These factors are :

1. The processus vaginalis is longer and wider in the male ; the internal and external abdominal rings and the inguinal canal are wider owing to the descent of testis. The drag on the patent process is in different directions in the two sexes. In the male the increase in size and weight and mobility of the dependent testis exerts a forward and inward pull on any little cone of peritoneum tending to elongate it into a sac. In the female the peritoneal process is adherent to the round ligament which is subjected to a pull backwards towards the pelvis by the uterus (Hitzrot). The incidence of oblique hernia in the two sexes before puberty is much more even.

2. Inadequacy of the inguinal sphincter surrounding the cord. The contractile conjoined tendon acts like a shutter against the fixed inguinal ligament and closes the canal snugly round the cord during abdominal strain (Keith). Hence a congenital or acquired weakness of this sphincter or its failure to act quickly and efficiently during sudden abdominal strains permits a wedge action of a cone of peritoneum. This weakness of sphincter may be a hereditary one (want of full development),

atrophy of muscles by diseases, injury to the nerve supply of conjoined tendon as after McBurney and Davis incision, thereby leaving the internal abdominal ring patent enough to accommodate an entering cone of peritoneum pushed forward by increased intra-abdominal pressure. Frequent repetition of this action is necessary. Postures, in which the thigh is slightly flexed, relax the conjoined tendon. If in this position abdominal pressure is suddenly increased the sphincter is taken at a disadvantage. This occurs in coal-heavers, plate layers, etc., or in patients with chronic bronchitis, etc.

3. Factors which cause repeated sudden increase in intra-abdominal pressure as lifting heavy weights, chronic cough, urethral obstructions, chronic constipation, abdominal tumours, increase of intra-abdominal fat, etc.

In the first two decades of life inguinal hernia is of indirect type due to the presence of a congenital sac or ectopia testis. The third decade shows the least liability. From the fourth decade onwards the incidence again rises but the hernia is of direct type.

DIRECT HERNIA.

In this the sac presents through the inner part of inguinal canal, medial to the deep epigastric vessels. It stretches out the transversalis fascia or in 10 per cent of cases pushes through gaps in the fascia. From the fourth decade onwards the incidence of hernia rises and is 50 per cent more common than in the first three decades. This is partly due to increasing weakness of the sphincter, increase of fat and causes that give rise to the abdominal strain as chronic cough, chronic constipation, enlarged prostate, etc.

25-30 per cent of inguinal herniae belong to this type and 98 per cent

of direct herniae occur in males, 50 per cent of recurrent herniae belong to this type. In 60 per cent it is liable to become bilateral. It is prone to recur after operation in 30-50 per cent of cases treated by Bassini operation.

Anatomy.—In these cases the conjoined tendon is attenuated and the lowermost fibres of internal oblique and transversalis are inserted into the lateral border of rectus muscle 3.5 cms. above the pubic bone. Sometimes this distance may be 5-7 cms. especially in recurrent herniae. Thus the "inguinal triangle" of Polya is bounded above by the lower border of internal oblique and inguinal ligament below with the base formed by the outer border of rectus for a distance 3-7 cms. The floor is formed by transversalis fascia. This fascia is thin in the lower and middle part of the triangle. Above on the medial aspect it is strengthened by more or less vertical fibres which arch over to the outer side where the cord emerges between them. There may be one or more gaps, in the weakest part of the fascia in a 10 per cent of cases, through which a peritoneal cone may be dragged out by a subserous lipoma (Cloquet) or be pushed forward.

The causes may be stated as :—

(1) Congenital deficiency of conjoined tendon. (2) The greater development of cremaster is at the expense of the conjoined tendon, requiring a wider inguinal canal. (3) Increased sub-peritoneal and intra-peritoneal fat that occurs after 45. (4) Presence of a large external ring in 2 per cent of cases. (5) Increased intra-abdominal strain. (6) More than 50 per cent of recurrent herniae belong to this type and are due to damage of conjoined tendon especially if poorly developed. The sac first stretches out the transversalis fascia and then appears below the conjoined tendon where it is deficient or stretches

out the thin tendon. It next meets the aponeurosis of external oblique and projects upwards over the internal oblique. But if the external ring is wide it pushes through it and ascends upwards showing little tendency to descend into the scrotum. The sac is usually dome-shaped and bladder is often adherent to its medial wall. Sometimes (in 25 per cent) there is a small indirect sac which may also enlarge giving the "pantaloon or saddle back" sac. When such a double sac is large the obliterated hypogastric artery may be found stretched across it. In about 10 per cent of cases where a peritoneal cone is pushed through a gap in the transversalis fascia the sac protrudes through the external ring and resembles an indirect hernia. This type is liable to strangulation and incarceration. Whether these openings are congenital or acquired is not known. Direct herniae rarely grow to large size and rarely become scrotal. Strangulation and incarceration are also rare except where a cone of peritoneum has been pushed through openings in the fascia mentioned above. These patients may complain of chronic constipation and indigestion which will persist after operation. Pain is absent in 90 per cent. In pantaloon sac (25 per cent of cases) usually the direct sac is larger.

TREATMENT OF OBLIQUE HERNIA.

In infants and children a simple wool truss and attention to any exciting cause as phimosis, stone in the bladder, etc., should be given. After the age of 10 herniae should be dealt with by operation as early as possible before they become complete and cause atrophy of conjoined tendon. Herniae with ectopia testis should be dealt with much earlier at the age of 5-10 as the testis should be brought down to the scrotum for its development. After the age of 55 operative treat-

ment except for strangulation or incarceration, is inadvisable. Long standing large inguino-scrotal herniae are best left alone. The openings are so large that strangulation is rare. These are generally irreducible and the abdominal cavity usually is unable to accommodate all the hernial contents. Respiratory difficulty and distension are likely to follow the operation. If reducible, after reduction the patient should be placed in the Trendelenburg position for some days before operation is undertaken. This habituates the abdominal cavity for the extra contents. In the second decade of life a hernia should be operated as early as possible for fear of strangulation, especially in places where adequate surgical aid may not be available. Secondly, with time it becomes larger and causes atrophy of the sphincter and requires a more elaborate hernioplasty.

Operation.—The following important principles should be observed in this:—
 (1) A free exposure of the entire inguinal canal, pubic attachments of conjoint tendon and of the inguinal ligament by slitting the aponeurosis of external oblique. (2) Treatment of the sac by the highest possible ligation and tightening of peritoneum all round especially that covering the Hessel-dach's triangle and extirpation of sac. (3) Reconstructing the canal by plastic methods where the conjoint tendon is found atrophied or poorly formed. (4) Prevention of any weak spots in the floor of the canal especially at the medial end. (5) So that the union of fascia and muscle may be firm, it is necessary to denude these of all areolar tissue by gauze dissection. (6) Suture material should be fine chromicized catgut, size 1 silk or Pegenstecher's linen thread. The material used should not be absorbed within three weeks, the period required for firm fibrous union.

In young people the sac is congenital and the conjoint tendon is adequate if the hernia has been of short duration or controlled by a truss. Here a high ligation and excision of sac may be enough. Some may require suture at the inner and of the canal to broaden the attachment of the conjoint tendon. But where the conjoint tendon is rather poor Bassini or one of its modifications will be required.

Ferguson Coley operation.—In this the conjoint tendon is sutured to the inguinal ligament in front of the cord. This operation with high ligation of the sac is the best for complete and scrotal herniae of children, oblique herniae in women and herniae with undescended testis as the cord traverses the shortest distance and is well protected.

Andrew's Imbrication method with displacement of cord—In this the external oblique is so cut as to provide a fair sized lower flap. After excision of sac, the conjoint tendon is sutured to the inguinal ligament and the upper flap of external oblique is sutured to the inguinal ligament behind the cord on the medial side and in front of the internal oblique lateral to the cord. Then the lower flap is folded over the cord and sutured to the upper flap of the external oblique. This method is useful in oblique herniae of young men where the conjoint tendon is not completely atrophied. The cord is still protected by the external oblique.

Halsted-Andrew method.—In this the cord freed of cremaster muscle is placed subcutaneously and imbrication of the two flaps of the external oblique behind the cord is done over the canal and also over the internal oblique for a distance of one inch lateral to the cord. This operation is useful for adults with oblique hernia where the conjoint tendon though thin is not

completely atrophied. If the conjoined tendon is too thin to be brought down and the external oblique has been stretched and is lax, strips $\frac{1}{4}$ " wide and 3-4" long may be detached from each flap, their inner attachment being left intact and used to suture the lateral border of the rectus and the conjoined tendon to the inguinal ligament. This provides a living fascial wall to the inguinal triangle. For larger herniae, recurrent herniae and direct herniae, the follow modification (Downes') of the above operation is advisable.

Direct herniae. — Uncomplicated direct herniae are best treated by truss. The only indications for operation are (1) pain, liable to occur in sacs with narrow necks, (2) strangulation or incarceration.

Operation:—After clearing the canal of areolar tissue, the transversalis fascia is incised as far as the deep epigastric vessels. By pulling on the cord one can demonstrate the small indirect sac and by manipulation this can be enlarged and the direct sac converted into an indirect one, and dealt with. Where only a direct sac is present it is ligatured with a purse string suture and excised. Next, the transversalis fascia is closely sutured round the cord and the floor tightened by pleating the fascia. Next, an incision is made in the anterior rectal sheath. This now permits the suture of the lateral border of the rectus and remains of the conjoined tendon to the inguinal ligament. Then the triangular flap of the rectus sheath is next sutured to the inguinal ligament. Then the overlapping of the two flaps of the external oblique is done as given under the previous method.

In cases of recurrent herniae with large rings or large direct herniae Gallie's fascial suture should be done. Strips of fascia lata, $\frac{1}{4}$ " wide and 10" long, are taken and a basket work

lacing is done to incorporate the internal oblique and the edge of the rectus muscle above with the inguinal ligament below. Turner turns up a quadrangular flap of fascia late and sutures it to the rectal sheath, internal oblique and inguinal ligament, thus providing a fascial floor to the canal. In these operations the cremaster should be resected in cases of large herniae as otherwise the cord becomes too thick and some defect is still left either at the internal ring or near the pubic angle.

BIBLIOGRAPHY

- Andrews E. & Bissell, A. D.—Surg. Gyn. & Obst. April 1934.
 Coley, B. L.—Ann. Surg., LXXX, 1927,
 Cowell, E. M.—Lancet, i. 478, 1927
 Galli, W. E. & LeMesurier, A. B.—Brit Jour. Surg., XII, 289 1924
 Gray, St. G. B. D.—B.M. J. ii. 12, 1932.
 MacGregor, W. W.—Surg. Gyn. Obst. XLIX, 510, 1927
 Nelson.—Loose Leaf Surg. Vol. IV.
 Turner, P.—Guy's Hosp. Gazette April 1933.

Non-Surgical Drainage of the Biliary Tract.

The Meltzer-Lyon Test

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The Meltzer-Lyon test, or non-surgical drainage of the biliary tract, is a procedure which has been primarily designed for the investigation of the condition of the gall-bladder and the bile passages, but it has also been made use of, in a modified form, by McClure and others, for the study of the functional integrity of the liver.

The test is based on: (1) Meltzer's theory, that there is a reciprocal and contrary innervation of the gall-bladder and the sphincter of Oddi (guarding the opening of the common bile duct into the duodenum); and (2) his observation, that when a 25 per cent solution of magnesium sulphate is

applied to the second part of the duodenum (where the biliary papilla is situated), relaxation of the sphincter of Oddi takes place and a flow of bile results.

According to Meltzer's theory, which has not yet been placed on an unassailable basis, when the sphincter of Oddi is relaxed the gall-bladder contracts and expels its contents, and *vice versa*. Lyon argues, on this theory, that when magnesium sulphate relaxes the sphincter, the gall-bladder contracts and expels its contents into the duodenum. He mentions also a true "hormonic" effect of the magnesium sulphate on the gall-bladder, whereby the salt produces a direct contraction of the viscus, independent of that which may be produced by the relaxation of the sphincter of Oddi.

The procedure adopted in the performance of the test may be briefly stated.

A carefully sterilized duodenal tube is introduced into the duodenum, and when its metal tip is in the second part, 75 c.cm. of a 33 per cent solution (by volume) of magnesium sulphate is run down it by gravity, through an attached funnel. Before all the fluid has run down the funnel, the external end of the tube is pinched and the funnel removed. Soon after, the duodenum is drained by syphonage, no suction being employed. A continuous flow will easily be established in all cases where there is no biliary obstruction.

The first part of the fluid drained will consist of the solution of magnesium sulphate, slightly tinged with bile. This is soon replaced by a flow of light golden-yellow bile, which is collected in a vessel labelled "A". This flow quickly changes and a darker coloured bile, which may even be brownish, comes through. This is collected in a bottle labelled "B".

The dark bile is gradually replaced by a pale golden stream, which is collected in a vessel labelled "C".

Lyon says that the first portion of bile ("A" bile) comes from the common bile duct, the second part ("B" bile) from the gall-bladder, and the third ("C" bile) from the hepatic ducts and the liver. If what he maintains is correct, these samples could be made use of for studying the pathological changes which occur in the different situations from which they are derived.

Some observers have raised objections to this test. It is contended that the sphincter of Oddi is not a real sphincter; that the gall-bladder is not a contractile organ; that Meltzer's theory is not correct; that magnesium sulphate has no specific effect on the gall-bladder; and that the different samples of bile, as obtained with this test, do not all come from the situations indicated by Lyon.

There is proof that the sphincter of Oddi is a true functioning sphincter. The circular arrangement of smooth muscular fibres in the wall of the common bile duct at its lower end (where the sphincter of Oddi is situated) is anatomical evidence in favour of the existence of the sphincter.

Herring and Simpson have shown that the average secretion pressure of bile in the dog is about 300 m.m. of bile. Archibald has found that the sphincter can withstand a pressure of even 600 m.m. of water without any leakage occurring through the duodenal orifice. Elman and McMaster have recently noted that the resistance offered by the sphincter of Oddi varies, but may be as high as 300 m.m. of bile. From these findings it may be concluded that it is a functioning sphincter.

There is sufficient evidence to show that the gall-bladder is a contractile viscus. Its anatomical structure, namely the possession of a muscular coat is in favour of its being a contractile organ. Chiray and Pavel have shown that spontaneous contractions of the gall-bladder occur, that these contractions are of two types—one of long duration and slow speed and the other of short duration and higher frequency, and that they are of small amplitude; they find also that such contractions are capable of causing the expulsion of bile into the duodenum. Cade has noted, by means of cholecystography, "distinct contractions of the gall-bladder" in dogs, after the application of magnesium sulphate to the duodenum. The cholecystographic studies of Boyden and Whitaker show that in man (and in cats) the gall-bladder expels its contents by contraction of its intrinsic musculature. More recently McMaster and Elman have observed that in the unanaesthetized dog contractions of the gall-bladder, of sufficient force to expel part of its contents, do take place; and they contend, as Lyon does, that in the anaesthetized animal such contractions could not be made out because of the anaesthesia and the trauma, which upset the "easily disturbed" reflex mechanism on which the contractions depend. Higginson and Mann also have found that the gall-bladder expels its contents by contractions of its muscular walls.

Wilkie, in an excellent summary of the nervous control of the biliary passages, shows that they are under the dual influence of the vagus and the sympathetic. From this summary it could be gathered that Meltzer's theory is essentially correct. McMaster and Elman have recently brought forward other evidence in favour of the theory. But Chiray and Pavel believe that there is no reciprocal innervation be-

tween the gall-bladder and the sphincter of Oddi.

Lyon's view, that magnesium sulphate has a true "hormonic effect" on the gall-bladder is not tenable. But the absence of such an effect does not interfere with the usefulness of the test. Of course, magnesium sulphate is not the only substance which could bring about a relaxation of the sphincter of Oddi. Such substances as olive oil and peptone solution may also be used for the same purpose. But, according to Lyon, magnesium sulphate seems to be more efficacious than the others. However, Boyden has found that a mixture of egg white and cream has the greatest effect in bringing about the relaxation of the sphincter.

According to Chiray and Pavel the effect of the magnesium sulphate cannot induce to a motor reflex whereby the gall-bladder is made to evacuate its contents. Martin believes that the magnesium sulphate acts not by paralysing the sphincter but by paralysing the duodenal muscle.

The evidence for believing that the second specimen of bile obtained by Lyon's method comes from the gall-bladder may now be briefly cited. This specimen is darker and more concentrated than either of the other two specimens. If we remember that it is a function of the gall-bladder to concentrate bile, as shown by Rous and McMaster, nearly 11 times as it stores it, and that no other part of the biliary system has this power, it is easy to understand that this concentrated sample comes from the gall-bladder. Winkelstein and Aschner, who do not hold Meltzer's theory, say that they have observed the "B" bile come from the gall-bladder, as Lyon maintains. In favour of Lyon's view there is good a deal of clinical evidence, into which we need not enter here.

Einhorn says that the "B" bile need not come from the gall-bladder, as he has obtained this fraction from cholecystectomized individuals. Lyon says that such a fraction could be obtained from persons without a gall-bladder, but only when there is obstruction—stricture—in the common bile duct, whereby bile is dammed behind the stricture and becomes concentrated. Einhorn has further noted that he could obtain the "B" bile in both of two consecutive tests, made one immediately after the other, and he states that, if the "B" fraction came from the gall-bladder, it should not be obtained with the second test, as in the first the viscus would have emptied itself. Lyon maintains that this occurs only when there is either atony of the gall-bladder (when it will not empty completely) or partial obstruction in the cystic duct (when the viscus could not empty itself completely).

There is another view, put forward by Sachs, Howard and Barry, who hold that the "B" bile does not come from the gall-bladder alone, but from the other parts of the biliary system as well. It is very likely that the "B" bile is a mixture of the bile from the gall-bladder and that from the hepatic ducts and the liver; for, the liver is secreting bile at all times and there is a continuous outward flow of the secretion through the hepatic ducts from the liver. All that could be and need be maintained is that the "B" fraction is mainly of gall-bladder origin.

Another objection, and a practical one, which has been raised against the test is that it requires the assistance of radiology for its proper performance. But the assistance of X-rays is by no means essential for determining whether the duodenal tube has entered the second part of the duodenum; for,

as Piersol and Bockus have shown, this could be done by clinical means.

As a diagnostic procedure, the test is of considerable value. Of course, it gives definite information regarding the patency of the duct-system. Moreover, by a combined microscopic and bacteriological study of the different samples of bile, it is possible, as Lyon maintains, to obtain information which would help in the differential diagnosis of pathological conditions of the biliary tract.

1. In inflammation of the common bile duct, in the "A" bile there will be "numerous flocculations which will cease to appear or become distinctly less numerous as the gall-bladder bile is expelled" (Lyon). The microscopic picture presented by these flocculi is characteristic. If the process be due to cancer, free blood will be present in the specimen. The epithelial cells present will be of the medium columnar variety, but there will be an admixture with the short (cubical) variety as well.

2. When there is inflammation or infection in the gall-bladder, as in cholecystitis, the "B" sample will give characteristic evidence. If there be empyema of the gall-bladder, there will be pus in this specimen. Lyon mentions the withdrawal of pure pus in the "B" sample in this condition. The epithelium characteristic of the gall-bladder is of the columnar variety.

"B" bile which is decidedly darker than normal, dark brown to black, indicates gall-bladder stasis.

In cholelithiasis, early, sometimes "sand" may be obtainable in the "B" bile. This may be noticeable in the centrifugalized deposit under the microscope.

When there is obstruction in the cystic duct it may not be possible to obtain any "B" bile, if the obstruction be complete; but if it be incomplete, small quantities may be obtained intermittently.

In obstruction of the common bile duct no bile will be obtainable.

White says that the absence of dark "B" bile repeatedly may indicate some pathological condition of the gall-bladder, cystic duct obstruction, a gall-bladder full of stones, very thick gall-bladder bile, or extensive adhesions about the gall-bladder. In cholecystitis. Mann has shown that the concentrating capacity of the gall-bladder is impaired.

3. When the inflammation is in the hepatic and smaller bile ducts, the "C" bile will contain numerous short (cubical) columnar epithelial cells. The other specimens also will show the same kind of cells. But the important point to bear in mind is the persistence of the cubical epithelial cells in the "C" bile.

Hurst says, "By Lyon's method it is possible to recognize inflammatory exudates from the mucous membrane of the gall-bladder, such as leucocytes, disintegrated columnar epithelial cells, and occasionally red blood corpuscles, and to determine the nature of any biliary infection which may be present." Piersol and Bockus have found the test a useful diagnostic adjunct.

Jones has criticized the "deductions as to the localization of biliary tract pathologic changes on the basis of so-called "A", "B", and "C" biles." He advocates the use of the bile for the analysis of its pigment and cholesterol content and of the cellular elements which may be present in it. He finds that such analyses give infor-

mation of much value in the study of biliary tract disease and of hepatic function.

McClure and his co-workers have elaborated a system of analysis of the bile withdrawn by duodenal drainage for the total pigments, bilirubin, bile salts, and cholesterol. They use oleic acid instead of magnesium sulphate for inducing the relaxation of the sphincter of Oddi, because oleic acid, while acting as a "uniform stimulant to the flow of bile", has no depressing effect on the biliary function of the liver. McClure, Huntsinger and Gottlieb have noted that the concentrations of the total pigment, bilirubin, bile salt and cholesterol in the bile is diminished in conditions with impaired hepatic function, and that when the hepatic condition returns to the normal, the concentrations of these substances increase to their normal values in the bile. Jones has called attention to the increased pigment content of the bile in individuals suffering from haemolytic diseases. He has also found that in cholelithiasis there is an increase in the pigment and cholesterol content of the bile.

Lyon's method of draining the biliary tract may be used not only for diagnostic purposes, but as a therapeutic measure as well.

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Eclampsia and its Treatment.

By Dr. M. S. Sundaresa Aiyar,

Shiyali.

Eclampsia is so very common, nowadays, in these parts that a general practitioner should well be acquainted with its treatment. It is usually defined as the occurrence of epileptiform fits in pregnant, parturient or puerperal women, which are believed to be due to manifestations of cerebral intoxication or over-activity, due to pregnancy. It, in a majority of cases, associates first pregnancies and it is but natural to attribute its causes to some error in metabolism produced directly by the products of conception or the maternal reaction to these products. It occurs from the sixth lunar month until 48 hours after delivery and occasionally sometimes after.

The warning signs and symptoms, are headache, vertigo, pruritus, drowsi-

ness, mental irritability, insomnia, oedema, oliguria, high blood pressure and epigastric pain.

The treatment of eclampsia falls under two heads:—

(1) Medical and (2) Obstetrical.

The medical treatment is divided again into 3 stages:—

(a) In the pre-eclamptic stage, (b) during the fits and (c) in the intervals.

In the pre-eclamptic stage, purgatives such as magnesium sulphate, pulvis jalapae co or oleum recini may be administered to lessen the toxæmia. The patient may be put on glucose water for 24 hours. If there is improvement, milk or barley water may be added. For headache, at this stage aspirin and caffeine may be safely given. For pain in the epigastrium, 30 grs. of soda bicarb in 1 oz. of water given by

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the mouth induces vomiting which effects a good lavage of the stomach, relieving the pain. If the blood pressure is high and albumin present in the urine no food except glucose water by the mouth should be given. This treatment should be continued for a week and if sufficient improvement is not found, interference with pregnancy is necessary. The membranes should be ruptured, the cervix dilated to two fingers manually and the case watched for six hours. If no progress is found, a subcutaneous injection of pituitrin $\frac{1}{2}$ c.c. with $\frac{1}{4}$ gr. of morphia and 1/100 gr. of Atrophine Sulphate will prove successful. The labour would continue and end in good results. Again, if no improvement is found pituitrin alone, $\frac{1}{2}$ c.c., may be injected and the results noted. Meanwhile a hot saline douche and 10 grs. of quinine, orally, may help the situation. If breech presents, a leg may be pulled down effecting rapid delivery. In this connection it must be mentioned that caesarean section, rapid dilatation of the cervix and accouchement with forceps are contra-indicated and they produce a greater degree of maternal mortality.

During the fits, a gag should be inserted between the teeth to prevent the tongue from being bitten; chloroform may be administered if required. The sedatives that are in use are morphia and chloral hydras. Morphia may be given $\frac{1}{2}$ gr. hypodermically and followed by $\frac{1}{4}$ gr. doses every 3 hours till the fits cease. On the whole not more than 3 grs. of morphia should be administered within 24 hours. This treatment considerably lessens the fits and lowers the blood pressure. This is the treatment usually followed in private practice and is highly successful. One objection is raised to this sort of treatment, that it lessens the secretions and excretions of the body. Some people take to the free use of chloral hydrate, 30 grs., by the rectum

every 3 hrs., till the fits cease. Care should be taken to see that not more than 3 drs. are administered within 24 hours. Some are of opinion that this will cause more depressoin of the heart than morphia. When the patient is comatose or anaesthetised, a stomach tube should be passed and the stomach washed out completely with a weak solution of sodium bicarbonate. Six ounces of magnesium sulphate, in a saturated solution, should then be poured down in the stomach through the same tube. Failing the use of this tube two minims of croton oil, mixed up with butter, may well be placed on the back of the tongue. If the patient is conscious and is able to swallow it is well to give her 5 grs. of calomel with one dram of pulvis jalap co. It is better also to give her warm water enema, repeated until all the solid faecal matter is washed out. This sort of flushing the colon also stimulates the kidneys. The action of the kidneys can further be increased by hot fomentations or poultices applied to the flanks. The skin is stimulated by hot packs or by hot air-baths, the condition of the pulse being watched all along. Some people are addicted to the use of morphia $\frac{1}{2}$ gr. subcutaneously, followed by an intravenous injection of 10 c.c. of 20 per cent magnesium sulphate and if the fits recur $\frac{1}{4}$ gr. of morphia followed by the same quantity of magnesium sulphate solution intravenously. The therapeutic action of magnesium sulphate in intravenous solution is said to be profuse diuresis. When there is high arterial pressure and when the fits continue after the birth of the child, venesection should be done, 10 to 15 fluid ounces of blood being removed. This, to some extent, takes away the toxins and the remainder may still be diluted more by the administration of saline per rectum very slowly or into the cellular tissue under the breasts. In view of the tendency to oedema of the lungs in

eclampsia this line of treatment should not be persisted in. During the acute condition no food should be given. If she is conscious copious draughts of water may be given, care being taken to see that she is able to swallow.

In the intervals the patient should be placed in a darkened room, free from all external disturbances and left under the care of a skilled nurse. She must be kept on her side, and occasionally turned over to the other, to let the saliva flow out of the month.

Good results have also been reported by the use of veratrone $\frac{1}{2}$ c.c. to 1 c.c. injected hypodermically. It rapidly reduces the blood pressure and the pulse rate, this reaction of the vascular system appearing to stop the fits.

These are the methods of treatment in a case of eclampsia on medical lines.

As regards obstetrical treatment, two shades of opinion exist; one, advocating the early emptying of the uterus and the other leaving the labour alone waiting for natural delivery. I think it is better to empty the uterus after the first fit provided the circumstances are favourable for it. Otherwise it is better to leave it severely alone. It must be remembered that eclampsia usually initiates labour pains and if it has been decided to empty the uterus the membranes must be ruptured, the os dilated and when full dilatation of the os has been obtained the child may be delivered by forceps or version. If labour has not begun, then it is a difficult problem to solve. In big Hospitals, where assistance of every description can be had, vaginal hysterotomy or caesarean section is usually performed and considerable success has been reported. Other methods of accouchement force may be used, as for example dilatation by graduated dilators followed by the

branched dilators of the type of Bozzi. But in private practice we may safely rely upon medical treatment under these circumstances unless sufficient dilatation to admit a Champetier's bag can be obtained by manual or instrumental dilatation. These are the lines of obstetrical treatment that are followed in a case of eclampsia. A general practitioner should well be conversant with it and true to say in private practice medical treatment alone without resort to the bigger operation has proved of considerable success.

Earliest Students from the Calcutta Medical College who went to England for their Medical Education.

The Medical College of Bengal will complete its hundred years of existence by January 1935. The Government order founding the College is dated 28th January 1835, but the College actually began to function from the 1st February 1835.

In view of the fact that the centenary of the Medical College is very near upon us and also a very large number of our graduates are going to England it would be interesting to know who the pioneers were and what they did in England and how they conducted themselves there.

In the year 1844 Babu Dwaraka N. Tagore offered to defray the expenses of the medical education of two students of the Medical College in England. On this being announced by the College authorities three students volunteered to go unconditionally to England to complete their medical education. Dr. H. H. Goodeve, a professor of the College, offered to proceed to Europe in charge of the students who might be selected to watch over their education and he further offered to bear the expenses of

an additional student. This he offered on condition the Government allowed him half of his pay during the period he would be in Europe, counted that period towards his total service and allowed him to have lien on his post in the Medical College. The Government agreed to these conditions. Dr. Goodeve raised another Rs. 7,500 for a fourth student, the major portion of which was subscribed by His Highness the Nawab Nazim of Bengal.

On the 8th March 1845, Professor Goodeve sailed with four students by "Bentick". They were :—

(1) Bhola Nath Bose—a pupil of Barrackpore School established by Lord Auckland and who studied in Medical College for about 5 years at the expense of Lord Auckland and was the best student in Botany.

(2) Gopal Chandra Seal who obtained the Rustomjee medal for proficiency in Anatomy—a medal which is not awarded now-a-days.

(3) Dwaraka Nath Bose—a converted Christian and employed for some time as assistant to the College Museum.

(4) Surjee Coomar Chakravarty—a junior pupil of good parts and much promise.

In England these students resided with Dr. Goodeve and were treated with marked kindness and attention by Earl of Auckland, Sir Henry Willock, Sir Edward Ryan and the Professors of the University College, London, where they were placed.

Dr. Goodeve reported in his first half yearly report that during the summer session of 1845. Dwarkanath did not gain any honours, that Gopal for his proficiency in practical Anatomy was selected by Professor Quain to

dissect the subjects for his lectures—a part of considerable honour in the anatomical class, that Bholanath was third at the Botanical examination in a class of more than seventy students and only failed to obtain the silver medal by two marks but obtained a very complimentary certificate and was presented with a copy of his own work by Professor Lindley, Surjee Coomar became a favourite pupil of Dr. Grant, the Professor of Comparative Anatomy and a frequent companion of his leisure hours, thus getting valuable opportunities of learning this branch of the science.

The private conduct of these young men were most exemplary. They adopted themselves to European manners and costumes and were for the most part gentle and obedient and scarcely any fault could be found in them. The most perfect harmony and good feeling existed amongst themselves as also with the other students of their College. During the vacation Surjee Coomar accompanied Dr. Grant to Paris and acquired a tolerable knowledge of French. On the completion of the next winter term. Dwarkanath obtained the seventh certificate in Midwifery and Gopal the seventh certificate in Medicine and the ninth in Physiology. Bholanath gained two silver medals in Chemistry and Materia Medica being second in each subject and the second certificate for an essay on the constitution of ammonia (then a very difficult chemical problem). Surjee Coomar gained the gold medal in Comparative Anatomy and also the seventh certificate in Anatomy and the twelfth in Physiology. He also obtained the silver medal (the only prize) in Zoology. His paper on this subject was considered to be so superior that the examiner recommended the substitution of a gold medal but as the change would create an inconvenient

precedent the examiner's request was not acceded to.

In July 1846, Dwarkanath, Gopal and Bholanath passed the examination for the Diploma of the Royal College of Surgeons of England and became members of the College. After the conclusion of the examination "the President (Mr. Lawrence) in the name of the Board of Examiners complimented these youths highly upon the very satisfactory manner in which they had passed the ordeal. He stated that no favour whatever has been shown to them, the questions having been perhaps more searching than usual, while the replies bore more favourable comparison with those of the great bulk of English student subjected to the same test". After this Dwarkanath regularly attended the surgical practice of the hospitals and held charge of several midwifery patients under the direction of Professor Murphy to his entire satisfaction and returned back to India in 1847 when he was appointed the Resident Surgeon of the Female Hospital of the Medical College and later became Assistant Demonstrator of Anatomy to the English class which post he held for many years.

Gopal and Bholanath next passed the first examination for the degree of Bachelor of Medicine at London University (then the most difficult medical examination in Europe) and they were placed in first class. They then competed for the honours and in this more difficult ordeal they also obtained certificates. Besides these, Bholanath obtained the College Gold Medal in Botany. He made much headway in Latin. Gopal kept himself confined to hospital practice and was elected one of Dr. William's clinical clerks, one of the rarest opportunity to study diseases. Soorjee devoted his time to learn Latin,

Greek, French, German and English. During the vacation Soorjee went with Prof. Grant in his continental tour.

During the first term of year 1847, Gopal, Bholanath and Soorjee obtained in class examinations the following:—

Gopal Chandra Seal—	Certificate in Surgery.
	" in Midwifery.
Bholanath Bose—	Certificate in Surgery.
	" in Practice of Medicine,
	" in Midwifery.
	Gold Medal in Comparative Anatomy.
Soorjee K. Chakrabarthy—	Certificate in Anatomy.
	" in Physiology.
	" in Materia Medica.
	" in Chemistry.

These led Lord Brougham who distributed the college prizes on 30th April 1847 to remark about the three Indian Students in his public address.

In November 1847 Gopal and Bholanath passed their final examination for M. B. of London University and were placed in first division. Gopal was engaged in hospital practice and was appointed one of the resident house physicians of the college hospital after passing a severe examination in Practical Medicine and found no time to go up for higher degrees. In Bholanath's case the rule which compels candidates for M. D. to pass at least an year in hospital in general practice was waived and he went up for the M. D. at once and obtained it. Both Gopal and Bholanath returned to India in January 1848 in company with Dr. Goodeve.

Soorjee Kumar passed the first examination for M. B. in August 1847 and was placed in first division. He became a dresser to Mr. Lister and afterwards became clinical clerk. He was permitted by the Court of Directors to remain at least another year in England at the expense of the Government to complete his studies.

On returning to India, Dr. Goodeve solicited the Hon'ble Court of Directors to confer upon his pupils such rewards and appointments as their distinguished career in England would merit. The court entirely agreed with his sentiments and as is usual to the present day left the matter to the Government of India. On coming back to India Dr. Gopal Ch. Seal was appointed to be Resident Surgeon of the Female Hospital of Medical College with the additional duty of lecturing to the Hindustani class in Medicine, which would have been available to him had he not been to England at all. Dr. Bholanath Bose was posted in charge of a dispensary in a populous part of Calcutta.

Dr. Seal did not live long to show his merit. Dr. Bholanath Bose showed great ability and tact in the discharge of his duties as a Civil Surgeon for many years and even in his death-bed did not forget his country and alma mater. After providing for his relations with decent competence, he established a prize for the fourth year matriculated student who is best in bedside diagnosis and left enough for the establishment of a hospital and dispensary in his native village. His talents and abilities would have found a better field in Medical College but his luck was against him as these appointments were in exclusive possession of the covenantal service.

Dr. Soorjee K. Chakrabarty studied for 5 years and after obtaining M. D. of the London University in May 1850 returned to India. He embraced Christianity while in England and was known as Dr. Soorjee Kumar Goodeve Chakrabarty. Sir Edward Ryan and Mr. Charles H. Cameron requested the court of Directors to appoint him in covenanted service but without result. Dr. Chakrabarty was appointed Assistant Physician to the

Male Hospital of the Medical College. After several years of hard struggle and at the request of several distinguished men he was eventually appointed Professor of Materia Medica in the College. He gained extensive practice in Medicine specially for diseases of heart and lungs.

When we consider the achievement of these early graduates of our College we must remember that English was not then the general medium of education and they were not at first well versed in English but by dint of hard work and iron will they smothered all difficulties. Their achievements can be realised by the following observation made by Hon'ble F. Millett while distributing prizes to the students of the Medical College in 1847. "This is an experiment respecting which I was always sanguine, but the result has exceeded my highest expectations. Herein we have a noble example of what the combination of ability, determined industry and perseverance of good conduct can accomplish. These youngmen, though labouring under great disadvantage of having to express themselves in a foreign language have in honourable competition with their English fellow students, in several instances surpassed and always maintained a high position amongst them, and have won the admiration of all who have witnessed their exertions."

This episode in the history of the Medical College reflects great credit on the late Council of Education and "the highest honour on Dr. Goodeve, as well as on the successful graduates themselves and the institution in which they received the ground work of their professional education."

Calcutta M. J.,—June '34.

OF MEDICAL INTEREST.**Medico-Legal.**

Mr. Hariram Rewachand, a rich landlord of Karachi, has filed a suit claiming damages to the extent of Rs. 35,000 against Dr. Naraindas H. Mirchandani, a well known doctor in Karachi.

The plaintiff alleges that he suffered from dry eczema on the dorsum of the middle finger of each of his hands and consulted Dr. Mirchandani who assuring him of speedy and effective cure and advised him to undergo X-Ray treatment under him.

This he did and suffered in consequence of the treatment from excruciating pain, so much so that his fingers had to be amputated. The plaintiff therefore by way of damages claims the above sum.

Tax on Medical Profession.

The District Board of Broach has in levying a tax on the profession made a distinction of heavily taxing the qualified medical men, thereby placing a premium on the unregistered practitioner. By this method it would be to the advantage of the qualified man to get his name erased from the register as thereby he will save his income from this heavy drain, and particularly so in these hard days when medical men find it difficult to pull on under the existing conditions. They will certainly be deterioration in the medical service which will seriously affect the health of the vast majority of the public. It will be forcing the people to consult quacks when registered Medical men will have to increase their charges. This is a question which should immediately be dealt with by the Government of India.—
Med. Dig.

ASSOCIATION NOTES.**The Trichinopoly District Medical Association (Registered).**

A monthly meeting of the above Association was held on Saturday the 30th June 1934, at 5 p.m. in the Coronation Garden, Trichinopoly, when about 40 members were present. Lt.-Col. N. M. Mehta, I.M.S., District Medical Officer, Trichinopoly, presided. Dr. M. Safiulla, L. M. & S., was "At Home".

After reading the minutes of the last meeting by the Secretary Dr. P. A. S. Raghavan, Dr. T. S. S. Rajan read an interesting paper on "Evipan Sodium Anaesthesia" and explained the advantages and the precaution to be taken in administering the same. Dr. R. Kalamegham, B.A., M.B.B.S., made a few remarks, on the experiences at the Government Hospital, Trichinopoly. Lt.-Col. N. M. Mehta, I.M.S., made a few remarks on its limitations and concluded by saying that it had its own limited usefulness.

He then called upon Dr. S. Ramasubbu of Viraganur, to say a few words about Subsidized Medical Practitioners. Dr. S. Ramasubbu explained the need for forming a District Association of the Subsidized Medical Practitioners and that it might work as an annexe of the Trichinopoly District Medical Association. Dr. M. R. Subramanyam of Gujiliyamparai moved a resolution to that effect. Lt.-Col. N. M. Mehta, I.M.S., opined that the matter may be considered by the Executive Committee of the Trichinopoly District Medical Association and decided later.

With a vote of thanks proposed by the Secretary, Dr. P. A. S. Raghavan, to the host, Dr. M. Safiulla, to the President, Lt.-Col. N. M. Mehta, I.M.S., D. M. O., Trichinopoly, and to Dr.

T. S. S. Rajan, the Lecturer of the evening, the meeting terminated.

the gathering Thornier's Reflex-free hand Ophthalmoscope, a new ophthalmoscope recently imported.

Subsidized Medical Practitioners, Trichinopoly.

A meeting of the Subsidized Medical Practitioners of the District was held in the Coronation Gardens, Trichinopoly at 7 p.m., on 30th June 1934 under the presidency of Dr. S. Ramasubbu of Viraganur and it was resolved that an Association of the Subsidized Medical Practitioners of the District may be formed, with Dr. S. Sethurama Rao of Uppiliyapuram, as President, Dr. M. R. Subramanyam of Gujiliyamparai as Secretary and Dr. M. R. Bhat of Pulivalam, as Treasurer. It was resolved that this Association be affiliated to the Madras Provincial Subsidized Medical Practitioners Association. It was also resolved that this Association may work as a sub-committee of the Trichinopoly District Medical Association.

With a vote of thanks to the President, Dr. S. Ramasubbu, who guided the meeting and Dr. P. A. S. Raghavan, the Secretary of the Trichinopoly District Medical Association who helped them in the deliberations, the meeting terminated.

Coimbatore Medical Association.

The monthly Clinical Meeting of the Coimbatore Medical Association was held in the premises of the Moses Gnanabaranam Eye Hospital at 6-30 p.m., on Saturday 9th June 1934, when Dr. B. S. Viswanathan, Hon. Asst. Surgeon of the Govt. Headquarters Hospital read a paper on the "Evaluation of the signs and symptoms of Pulmonary Tuberculosis," with Major Cox, I. M. S., the D. M. O., in the chair. Dr. S. Gurubatham of the M. G. Eye Hospital demonstrated to

The Nuzvid Medical Practitioners' Association.

An ordinary meeting of the above association was held at Edulagudem on 24th June 1934 at 2 P.M., Dr. D. Suryanarayana Naidu presiding. After prayers, the minutes of the previous meeting were read by Mr. N. Rama Rau, the Secretary. The following resolution was unanimously passed, all standing.

"This association regrets with great concern at the untimely demise of Dr. S. Rangachari M.B., C.M., and resolves to convey its heart felt condolences to the bereaved family."

The case report of an epileptic patient was given out by Dr. N. Rama Rau; and then the history of the case of Toxaemia of Pregnancy with peculiar symptoms (pregnancy kidney) was narrated by Dr. Suryanarayana Naidu. Various other professional topics were discussed. The propositions sent by Dr. Seshanatham, L.I.M., were adjourned to a next meeting. After light refreshments, the meeting came to a close by 5 P.M.,

**Have you any message for the
Profession, any clinical
experience to give?**

SAY IT

IN THE BULLETIN