

# EPITOME OF CURRENT MEDICAL LITERATURE.

## MEDICINE.

### 174. The Etiology and Treatment of Rickets.

JUNDELL (*Hygiea*, November 30th, 1921) is sceptical as to the soundness of the modern teaching that rickets is simply the response to a lack of vitamins in the food. He adduces many arguments in favour of his hypothesis that the disease is the result of faulty formation of endogenous ferments (hormones), the result of overloading the nutritive functions of certain of the endocrine glands by an ill-chosen and too generous diet. Working on this hypothesis, he has treated his cases of rickets on a system which he calls "relative inanition." By this process of partial starvation he claims to have achieved excellent results, and if the disease has not progressed too far, semi-starvation alone is enough to effect a rapid cure. And when relative inanition is supplemented by a phosphorous fish oil régime, even the worst forms of rickets can be cured in one to two months. But fish oil alone (he refers presumably to cod-liver oil and the like) cannot prevent the outbreak of rickets if the child continues to be overfed. The author's system of relative inanition consists of cutting down the total calorie supply to 65 to 70 calories per day per kilogram body weight (the normal being 100 calories per kilogram body weight). This means giving about 60 to 75 c.cm. of milk per kilogram body weight daily, and small quantities of sugar, cereals, and fresh vegetables and fruit. And, according to the age of the child, other foods can be given, such as eggs, fish, and meat. The child's weight is stationary or diminishes under this treatment, which does no harm because it is not continued for long, and which is justified not only by its rapid effect on rickets, but also on such allied conditions as laryngo-spasm and other manifestations of spasmophilia.

### 175. Quinidine in Cardiac Therapy.

WYBAUW (*Le Scalpel*, January 14th, 1922) says quinidine must not be looked upon as a cardiac tonic. Its chief action is to re-establish normal rhythm in cases of arrhythmia in auricular fibrillation. In auricular flutter and extra-systoles it is of little or no use. Hence the great importance of diagnosing the exact nature of the cardiac irregularity. The absence of presystolic murmur is constant in fibrillation. Digitalis may be given at the outset, and then quinidine in adequate doses, 1.25 to 1.50 grams per diem. When the heart is regular it is advisable to give digitalis in small doses for four days, then quinidine for five days, and after two days' rest start the cycle again. In some patients quinidine upsets the stomach, and when this is the case it is better not to persevere. Symptoms of quinine poisoning may also occur (singing in the ears, cyanosis, erythema, etc.). In the author's experience quinidine is contraindicated in advanced cases; in old sclerotic patients, and in some old-standing cases who have become accustomed to the cardiac irregularity, it is better to leave things as they are. In some cases, though the fibrillation is cured by quinidine, the pulse remains quick. Probably quinidine acts by prolonging the duration of the refractory period during which a muscle fibre remains insensible to a fresh stimulus. The heart can be regulated in about 50 per cent. of the cases, but it is difficult at present to say beforehand what case will respond.

### 176. Treatment of Syphilis with Salvarsan Alone.

KREFTING (*Tidsskrift for Den Norske Laegeforening*, January 15th, 1922) reviews his experiences of salvarsan during the past ten years. He has given 10,200 injections of old salvarsan, 2,100 of neo-salvarsan, and 200 of silver salvarsan, and has never seen alarming symptoms. He thinks that most of the salvarsan fatalities can be traced to over-dosage and faulty technique; possibly also to salvarsan which has deteriorated, and to its simultaneous exhibition with mercury. He has seen 19 cases of reinfection, all of which satisfy the most stringent standard set for the diagnosis of reinfection. He classifies the 1,749 cases of syphilis which he has treated with salvarsan alone under ambulatory conditions according as the disease was primary, secondary, tertiary, or latent. The primary cases are also classified according as Wassermann's reaction was positive or negative before treatment, and according to the dosage of salvarsan. All his 169 cases of primary syphilis with a negative Wassermann before the institution of treatment (which consisted of at least three injections) remained symptom-free, and the Wassermann reaction continued to be negative. The author concludes that in this class of case five intravenous injections

(0.50 to 0.60 gram for men, and 0.30 to 0.40 gram for women) at fortnightly intervals are sufficient to cure the disease. For serum-positive cases in the first stage the first five injections at fortnightly intervals should be followed by more (number not stated) injections at three or four weeks intervals. Secondary and tertiary syphilis also the author finds that salvarsan alone is usually adequate.

### 177. Luminal in Epilepsy.

JACKSON and FREE (*Therap. Gazette*, December 15th, 1921) studied the continued use of luminal in twelve individual cases of epilepsy, with a view to ascertain its effects upon those cases with post-epileptic furor and confusional states, and upon the seizures, as well as the results from long usage and following its withdrawal. They confirm existing opinion as to its power of reducing the number of seizures, the dosage, and the absence of untoward effects from its use; but in five of the cases treatment was continued over a further period of nine months. By charting the number of seizures before and during administration, and after its withdrawal, it was seen that luminal in  $1\frac{1}{2}$  grain daily doses reduces the convulsion curve, but that after a time the effect is lost, and there is a secondary elevation of the curve. This can be again lowered if the dose is increased, to be followed later by another secondary rise. Complete withdrawal is followed by a distinct elevation, which in two of the cases resulted in severe seizures, status epilepticus, and death. While reducing the number of convulsions the drug does not effect a cure, its prolonged use is dangerous and its withdrawal requires great care. In two of the cases the degree of post-epileptic furor and confusion was lessened. While giving temporary relief its routine use is questionable, because the establishment of tolerance necessitates higher dosage, and because of the dangers of its continued use and withdrawal.

### 178. Displacements of the Trachea.

ARMAND-DELILLE, HILLEMAND, LESTOCQUOY, and MALLE (*Bull. et Mém. Soc. Méd. des Hôp. de Paris*, December 29th, 1921) discuss the displacements of the trachea in chronic pulmonary tuberculosis; they found marked deviation in 10 out of 300 cases, nearly as frequently to the left as to the right. The condition resembles a pulmonary cavity, but betrays itself by digital palpation and retraction of the corresponding half of the thorax, with displacement of the apex beat. Radioscopic examination shows shadow up to the level of the seventh cervical vertebra, which passes obliquely to the right or left, and reaches the sterno-clavicular articulation, bordering on the apex of the lung; or a marked vertebral shadow, covering the first and second dorsal vertebrae, and describing a curve at the apical summit, adjoining the sterno-clavicular articulation, and returning to the median line; or, again, the trachea is displaced *en masse*, and may follow a line parallel with the border of the sternum. LAUBRY and BLOCH (*Ibid.*) describe the same condition in which the oesophagus was also displaced, but to a less extent, with the trachea, and the four authors first quoted corroborate this condition, which may be the cause of the dysphagia of which patients sometimes complain.

### 179. Marking Ink Poisoning.

BORINSKI (*Deut. med. Woch.*, December 15th, 1921) observed that marking inks belong to two main classes. In the one black colour is obtained by the reduction of certain metals such as silver; in the other the colouring matter is some organic substance, usually aniline black. With the increased cost of metals since the war the aniline marking inks have grown in popularity. But they are dangerous unless the directions given for their use are conscientiously followed and the chlorhydrate of aniline is converted into the stable non-toxic aniline black by washing garments in cold soapy water and a little soda before use. The author reports two small epidemics of aniline poisoning in hospitals where infants' napkins were used without preliminary washing, with the result that several of the infants collapsed suddenly with cyanosis and other signs of acute poisoning. In one case the urine was found to contain p-aminophenol—a decomposition product of aniline. The author refers to two other recent reports on poisoning by marking ink (*Deut. med. Woch.*, No. 39, and *Muench. med. Woch.*, No. 13), the writers of these accounts making out that the poisoning was due to nitrobenzol. The author could not find this substance in either of the two kinds of marking ink he examined; both kinds contained 16 per cent. of aniline.

**180. Treatment of Bilharzia.**

TSYKALAS (*Wien. klin. Woch.*, December 1st, 1921) states that the frequency of bilharzia in Egypt is shown by the fact that 60 to 87 per cent. of the 13 million inhabitants of Egypt suffer from the disease. His practice is to inject intravenously 1.0 to 1.2 grams of emetine in the course of eight to ten days, in doses of 0.1 to 0.12 gram daily. This method has no bad effect on the general condition, whereas the same amount given in smaller doses, such as 0.05 to 0.06 gram daily in the course of sixteen days, or in doses of 0.1 to 0.12 every other day, have had the most alarming results, and have even proved fatal. Emetine not only acts on the cause of the haematuria—namely, the ova of distoma—but also kills the embryos in the ova. The treatment is continued in mild and moderate cases for ten days, in severe cases for twelve days, and in women and children six to eight days. It is interrupted on the eighth day if signs of intoxication, such as diarrhoea or repeated vomiting, occur. If the haematuria does not cease after this treatment, one is justified in concluding that organic changes in the bladder and kidneys are present, for which local measures must be employed. Of 2,000 cases treated with emetine in this way more than 90 per cent. made a complete and permanent recovery.

**181. Morbilli Bullosi.**

MORTON (*Brit. Journ. Child. Dis.*, October to December, 1921) records an example of the rare condition known as morbilli bullosi, in which an eruption resembling pemphigus is combined with the ordinary rash of measles. The patient was a girl, aged 7½ years, who was stated to have had measles two years previously. After a prodromal stage of three days, in which the symptoms were headache and a discharge from the eyes, a rash resembling measles developed on the trunk and limbs. On the following day, twenty-four hours after the first appearance of the rash, a bullous eruption developed, beginning on the chest and rapidly spreading in fresh crops to other parts of the body. On admission to hospital, on the sixth day of disease, in addition to a generalized morbilliform rash, the face, trunk and limbs were covered with bullae of all sizes up to an inch in diameter, many of which had ruptured, leaving the epidermis wrinkled and hanging in shreds, exposing deep red patches of bare skin. Death took place on the seventh day of disease. Apart from a bronchopneumonic condition of the right lung nothing abnormal was discovered at the autopsy. All the previous cases of morbilli bullosi have been described by German writers, with the exception of one reported by Neff (*American Journal of Diseases of Children*, September, 1920).

**182. Infantile Amoebic Dysentery.**

SPOLVERINI (*La Pediatria*, January 1st, 1922) publishes five cases of amoebic dysentery occurring in young children. None of these cases were recognized as such at first, and, although none of the cases were very severe, the disease lasted several months in some of them. The occurrence of amoebic dysentery in places where it had hitherto been unknown is one of the remote results of the war. Contagion clearly occurred through sleeping in a common bed in three cases. As soon as specific treatment (intramuscular injection of emetine hydrochlorate) were given the symptoms soon cleared up. The chief object in publishing these cases is to point out the necessity, in similar cases of mild chronic diarrhoea, of examining for the amoeba.

**183. Saturnine Asthma.**

TEDESCHI (*Rif. med.*, November 26th, 1921) reports two cases of asthma which seemed to be causally associated with lead poisoning. The author discusses the various possible ways in which lead might set up asthma, and decides that frequently the so-called saturnine asthma is really a phase of uraemia or of the cardio-renal effects of the poison. But there are other cases of bronchial asthma where the saturnine element is preponderant, and where the lead poison may be looked upon as the chief factor. Such cases are, however, rare.

**184. Treatment of Favus.**

ACCORDING TO MIRAMOND DE LA ROQUETTE (*Journ. de radiol. et d'électrol.*, November, 1921), favus is very prevalent in Algeria, as was shown by conscription among the natives. Before the war persons affected with favus were excused military service or discharged from the army; but subsequently they were incorporated and special treatment was adopted. During 1921 1,200 natives were treated and cured at the physiotherapy centre at Algiers. Treatment consisted in epilation by x rays and daily applications of sulphur and salicylate ointment for six to eight weeks.

**SURGERY.****185. Haemorrhage during and after Tonsillectomy.**

COAKLEY (*Journ. Laryngology and Otology*, January, 1922) advocates treating haemorrhage during and after tonsillectomy, whether it be operative, recurrent, or secondary, by ligation of the vessels, and deprecates reliance upon such methods as pressure, styptics, suturing the faucial pillars, etc. The technical difficulty of applying a ligature in the tonsillar fossa is overcome by the use of a straight or curved haemostat with sufficiently long handle, an ordinary Allis haemostat, with four mouse teeth and a 7-inch handle, being the best. When the bleeding point has been secured, a slip-knot is tied in a 14-inch long silk ligature, the loop being just large enough to pass over the handle of the haemostat. The non-slip part of the loop having been grasped close up to the knot by a pair of slightly curved long-handled forceps, the loop is carried by the forceps down the shank and over the end of the haemostat, so as to engage the vessel, when the free end is drawn tight, and the haemostat and forceps are removed. Although only a slip-knot, it is found that when pulled tight it does not slip, and the ends can be cut off close. By having several forceps and slip-knots ready vessels can be successively ligated as rapidly as could be done in an open wound. Recurring haemorrhage within twelve hours, due to imperfect ligation, should be treated in a similar fashion, and especially in patients with cardiac or renal disease, or a high blood pressure, careful watch should be kept for such recurrence. In secondary haemorrhage, arising about the fifth day or later, and due to sloughing, it is more difficult to grasp the bleeding point, and pressure will in most cases control the haemorrhage. In the absence of haemophilia, and even in patients with a prolonged coagulation period, it is claimed that tonsillectomy with ligation of the vessels is a comparatively safe operation, the loss of blood being negligible, post-operative bleeding rare, and, by early detection, easily controlled before serious loss occurs.

**186. The Incidence of Cancer in Extreme Old Age.**

BERNER (*Norsk Mag. for Laegevidenskaben*, January, 1922) has investigated the phenomenon of an apparent decline in the incidence of cancer in advanced old age. He remarks that it would be strange if extreme old age should exhibit comparative immunity to malignant disease. As the following figures show, no such immunity exists, and the apparent decline in the incidence of malignant disease in advanced age is due to the fact that this disease eludes diagnosis more frequently in old age than earlier. The author has scrutinized the records of necropsies at the Ullevaal Hospital in Christiania for the ten-year period 1909-18, and has found that of the 710 cases in which cancer was found there were 113, or 15.9 per cent., in which the disease was not clinically diagnosed. In as great a proportion as 29.3 per cent. the clinical verdict on the cause of death in these cases was debilitas senilis. In 56 cases the persons concerned were over 80, and of these 46.4 per cent. were not known to suffer from malignant disease before death. On the other hand, of the 229 cases in which the patient's age was under 60, only 7.4 per cent. had not been diagnosed as malignant before death. As under hospital conditions nearly half the cases of malignant disease in advanced age were unrecognized before death, it is probable that this oversight is very common in general practice.

**187. Post-typhoid Chondritis.**

COTTON (*Boston Med. and Surg. Journ.*, December 22nd, 1921) reports two cases of post-typhoid chondritis of the ribs, in both of which there was a very persistent infection of the wound by *B. typhosus*. In both cases small abscesses developed over the left costal cartilages (fourth and fifth), the pus from which gave *B. typhosus* cultures. The abscesses were excised and the cartilages curetted. A persistent sinus for four months in the first case necessitated a second operation, when all the cartilage and perichondrium from the sternum to the end of the rib was excised and the wound allowed to granulate up. The infection in this case affected a clean cut small area deeply within the rib cartilage, only manifesting itself after perforation and the formation of a secondary abscess. In the majority of such cases the condition arises (as in the second case) in the perichondrium and not inside the cartilage. More frequently such complications subside without coming to operation.

**188. Reinjection of Effused Blood.**

THIES (*Zentralbl. f. Gynäk.*, October 22nd, 1921) has seen 10 untoward effects in forty patients after subcutaneous injection of the blood which they had lost in abdominal or vaginal operations; haemoglobinuria occurred in none, albuminuria in one only. His method was that of Schäfer

and Landgraf; blood lightly expressed from swabs and filtered was mixed with that collected in vessels, was diluted with Ringer's solution in the proportion of two to three, and was administered about three hours after operation. Thies also records seven cases of ruptured ectopic gestation in which, after operation, the effused blood, similarly prepared, was reinjected, in part intravenously but mostly subcutaneously. He finds that it is not safe to inject intravenously blood which has been effused for considerable periods of time. It is claimed that satisfactory improvement in the action of the heart is obtained after intravenous injection of comparatively small amounts of blood; the rest should be injected subcutaneously and become slowly absorbed.

#### 189. Cancer and Metastases in Bones.

CATSARAS (*Ann. de méd.*, October, 1921) remarks that metastases in the skeleton are extremely frequent in cancer of the breast or prostate, fairly frequent in cancer of the thyroid and hypernephroma, less frequent in cancer of the uterus, gall bladder, intestine, and oesophagus, and rare in cancer of the liver. As a rule primary adeno-carcinoma of the liver does not give rise to metastases, or if they do occur it is principally in the lymphatic glands at the hilum of the liver, where they follow the course of the lymphatics, or in the lungs via the hepatic veins. These metastases sometimes assume a green coloration caused by the production of bile in the newly formed cells. With the exception of a case reported by Schmidt, Catsaras has been unable to find a single previous case on record of a primary cancer of the liver with metastases in the bones. The case reported by Catsaras was that of a man, aged 65, in whom hepatic cirrhosis was associated with a primary carcinoma of the liver with a metastasis in the upper end of the femur, where it gave rise to a subtrochanteric fracture.

#### 190. A Thermo-Laryngoscope.

SAMENGO (*La Semana Médica*, 1921, 45) describes the instrument, termed by him the thermo-laryngoscope, which he has devised to obviate the necessity of interrupting laryngoscopic observations in order to reheat the mirror after a film of condensed moisture has formed on it as it has become cool. The mirror is warmed continuously by an electric current, obtained from a pantostat or series of dry cells, which passes through the hollowed handle to a small disc-shaped chamber situated behind and in contact with the mirror and containing a suitable resistance. For diathermic or other surgical interventions in the larynx or pharynx the author fixes his instrument in position by means of an adjustable support applied to the head and malar regions of the patient; the surgeon's hands are thus freed. The thermo-laryngoscope (preferably with a mirror of nickel) and the adjustable support permit also of control of helio-therapeutic applications in cases of laryngeal tuberculosis.

#### 191. Treatment of Cold Abscesses with Injections of Cod-liver Oil.

KIJZER (*Nederl. Tijdschr. v. Geneesk.*, November 5th, 1921) states that since the end of 1918 he has systematically treated all cold abscesses by puncture and injection of sterilized cod-liver oil, the results being as follows: (1) Rapid softening and formation of a homogeneous creamy pus containing numerous white cells; the pus was always sterile, so that the abscess could not be attributed to septic puncture. (2) A slight reaction in the neighbourhood of the abscess shown by the skin becoming redder and warmer. (3) After an initial increase there was a rapid diminution in the quantity of pus, followed by formation of connective tissue and cure. Injections of cod-liver oil appear specially indicated when there is a danger of iodoform poisoning, particularly in infants and old persons. The quantity of cod-liver oil injected was about a third to half the amount of pus removed by puncture. In addition to pure cod-liver oil Kijzer also employed a 20 to 40 per cent. suspension of bismuth carbonate in cod-liver oil, which was of value in diagnosis, fistulous tracks being rendered visible in the skiagram.

#### 192. Lumbar Puncture in Intracranial Haemorrhage of the Newborn.

DE STEFANO (*La Pediatria*, January 1st, 1922) says that lumbar puncture is definitely indicated in intracranial haemorrhage of the newborn. It should be practised as soon as possible, and repeated if necessary several times. There is no danger if it is done with careful technique. The effect is both immediate and remote, and tends to lessen nervous symptoms of encephalic origin. In addition injections of adrenaline, calcium chloride, or normal serum may be given.

## OBSTETRICS AND GYNAECOLOGY.

### 193. Antistreptococcal Serum in Puerperal Fever.

AN exhaustive study of the value of antistreptococcal serum in puerperal sepsis has been made by KRONGOLD-VINAVER (*Annales de l'Institut Pasteur*, December, 1921, No. 12). A bacteriological examination of the lochial secretions of women after childbirth was made within forty-eight hours after delivery by means of a swab taken from the neck of the uterus. The inoculated swab was dipped in a tube of broth and cultures made from this on different media; 626 women were examined and 241 showed the presence of streptococci in the lochial discharges. Puerperal fever never developed among the 385 women from whom streptococci could not be recovered; but amongst the 241 cases showing the presence of streptococci 41 developed a rise of temperature subsequently. Such a series of cases provides strong confirmation of the clinical experience that the streptococcus is by far the most frequent cause of puerperal fever, and, as the author observes, it points to the importance of examining the secretions after labour so that the physician may be forewarned if streptococci are present. The absence of streptococci, on the other hand, may be taken as a reassuring pronouncement. The antistreptococcal serum used for the treatment of these cases was prepared by the injection of a horse with a single dose of living virulent streptococci, the animal being bled a fortnight later; the protective properties of the serum were standardized on mice. For the treatment of cases of puerperal sepsis the serum was injected in doses of 60 c.cm. subcutaneously for three consecutive days, or 20 c.cm. diluted with saline intravenously. Of the 41 cases which showed puerperal sepsis of greater or less degree, the author is able to report 38 recoveries as the result of the serum injections, the only method of treatment employed. In only 5 of the cases was the streptococcus recovered from the blood, and 3 of these cases were fatal. In all the cases antistreptococcal serum was injected on the first indication of a rise of temperature, and this early treatment may account for the favourable results. A full history of 43 cases of puerperal fever, with notes on the serum treatment and temperature charts, is given by the author. It is of interest to note that among the 241 strains of streptococci recovered after parturition only 4 were virulent for mice. No parallelism appears to exist between the animal virulence and the haemolytic properties of streptococci and their pathogenic properties for women. This work points plainly to the advisability of a routine examination of the uterine secretions after delivery. If streptococci are present steps should be taken so that, if the patient manifests a rise of temperature, active treatment with antistreptococcal serum may be instituted immediately.

### 194. Exudative Erythema.

DAVIS (*Brit. Journ. Derm. and Syph.*, January, 1922) records two cases of exudative erythema associated with malignant disease of the uterus. Although pregnancy may be associated with a toxic eruption, the coincidence of a uterine neoplasm with such an eruption has not previously been noticed. In the first case an inoperable spindle-celled sarcoma involved the bladder and uterus, and, seven months before the end, an urticarial rash appeared on the forearms, and gradually spread over the abdomen, back, and legs. When at its worst it consisted of circinate patches of erythema with raised edges, and this persisted till shortly before death. The second case presented a widespread irritating circinate eruption, raised at the edges by exudation, and thickest on the extensor aspects of the legs and thighs, but affecting every part except the face, scalp, and the palmar and plantar surfaces. As she gave a history of continuous "menstruation" for two years she was curetted and an adeno-carcinoma found and removed, and with recovery the eruption disappeared. The only other recorded instances of uterine neoplasms causing toxic symptoms are three, reported by Gaston, of alopecia areata associated with fibroids.

### 195. Abdominal Application of Radium for Inoperable Cancer of the Cervix.

SCHWARTZ (*La Gynéc.*, September, 1921) records four cases of inoperable cancer of the cervix treated by laparotomy and intrapelvic applications of radium emanation enclosed in hollow needles 27 mm. long, to which a linen thread and, enveloping this, an india-rubber tube of 2 mm. diameter were attached, being made to protrude at the lower angle of the abdominal wound and removed after a period of two to five days. The needles were placed (1) in the incised vesico-uterine fold parallel to the anterior surface of the cervix, (2) beneath the recto-uterine peritoneum parallel to the posterior surface of the cervix, and (3) after opening of the parametrium by incision of the round ligaments, in the

actual substance of neoplastic infiltrations or of cancerous lymphatic glands. Subsequently the peritoneum was sutured with care. The total abdominal dose corresponded to from 13 to 54 millicuries destroyed. Vaginal and cervical applications of radium were made at the same time, but might preferably be made, according to Schwartz, at an antecedent séance. In one case, that of a patient with a myomatous uterus, bilateral adnexal cysts and extensive infiltration of the broad ligament of one side, the abdominal radium applications were preceded by subtotal hysterectomy, which by removal of the primary centres of growth would permit, it was hoped, of freer access of the emanation to the more distant foci. One patient succumbed, with symptoms of peritonitis, six days after operation and one day after removal of the tubes.

196. PROUST (*Gynec. et Obstét.*, 1921, iv, 5), using a modified Schwartz technique (see EPITOME, August 20th, 1921, 170), has treated three cases of cervical cancer by intra-abdominal radium applications. The first patient, in whom the broad ligaments of both sides were invaded, and who received application during four days of ten tubes each containing 2 mg. of radium element, followed eleven days later by intra-uterine application of 30 mg. for four days, appeared to be in good health four months later. The second patient, in whom the immediate results were satisfactory, has been lost sight of. The third patient died of pneumonia three months after treatment. Proust remarks that at present intra-abdominal radium applications are only indicated in extremely advanced cases in which a vaginal application sufficiently potent to destroy the tumour cells would be dangerous to the patient.

#### 197. Pelvic Varicocele.

ACCORDING to CASTANO (*Revista Española de Obstet. y Ginec.*, July, 1921), pelvic varicocele may be due to intrapelvic congestion resulting from congenital or acquired syphilis. The subjects most liable to pelvic varicocele are, as a rule, those who eat copiously of meat, are constipated, and have undertaken laborious work before puberty. The condition is characterized by sclerosis of the venous walls and phlebitis involving the adjacent nerves. In spite of good general health the patients complain of constant discomfort in the vagina, vesical and rectal tenesmus, and premenstrual discomfort; the most characteristic symptom, however, consists in vaginal hypersensitiveness. Leucorrhoea is usual, and menorrhagia is frequently present. On examination tenderness is found in the vaginal fornices, which are rugose, oedematous, and congested; varices are present in the vaginal walls, but disappear in the Trendelenburg position. Early treatment is required, in the author's opinion, in order to prevent the production of uterine and adnexal lesions which later may require hysterectomy. The operative treatment advocated by the author consists in laparotomy, rendering the pelvic veins turgid in order to inspect the lesions, incision of the infundibulo-pelvic ligament, and removal in two centimetres of their course of the venous trunks which accompany the ovarian artery.

### PATHOLOGY.

#### 198. Observations on the Significance of Prowazek's Corpuscles in Trachoma.

LUMBROSO (*Arch. des Institut Pasteur de l'Afrique du Nord*, No. 4, 1921) reports a number of observations which he has made to determine the etiological significance, with regard to trachoma, of the corpuscles of Prowazek. These corpuscles consist of certain cellular inclusions in the form of small round or ovoid granules, resembling cocci, situated in close relation to the nucleus. Around them is a peculiar envelope, regarded as a reaction on the part of the cell. The corpuscles themselves were described in the first place by Prowazek and Halberstedter as chlamydozoa and were held to be specific to trachoma. In all, 87 cases of conjunctival affection have been studied, including trachoma, blenorhoea neonatorum of both gonococcal and non-gonococcal origin, phlyctenular conjunctivitis, and conjunctivitis due to the Koch-Weeks bacillus and to the bacillus of Morax-Axenfeld. With regard to trachoma, the corpuscles were found in 63 per cent. of recent cases and in 15.8 per cent. of cases which had passed into the cicatricial stage. On the other hand, in cases of blenorhoea neonatorum of non-gonococcal origin they were never found to be absent. In no other conditions could their presence be demonstrated. From these experiments he comes to the conclusion that the corpuscles represent the etiological agent of a specific conjunctival infection which is frequently associated with recent cases of trachoma. When it occurs under these conditions it furnishes an example of a

mixed infection. It seems probable that the actual disease initiated by this agent is none other than blenorhoea neonatorum, judging from its constant presence and peculiar abundance in this disease. It is only fair to say that not too much stress should be laid on this opinion, as no more than five cases of this affection appear to have been examined.

#### 199. An Intracutaneous Reaction for Tuberculosis of the Skin.

BUSACCA (*Wien. klin. Woch.*, November 24th, 1921) states that studies on anaphylaxis have shown that tuberculous subjects are hypersensitive to normal horse serum. It therefore occurred to him that he might avail himself of this fact for the diagnosis of tuberculous skin lesions. As it was desirable to avoid a violent general or local reaction, the intracutaneous method of inoculation appeared a suitable method. The investigation was carried out first with 0.1 c.cm., and later with 0.2 c.cm. of normal horse serum. A positive reaction was shown by the appearance round the site of injection of an erythematous area, with an infiltrated centre showing one or two vesicles. The reaction reached its height in twenty to twenty-six hours, and disappeared without leaving a trace within forty-eight hours, though in very marked cases it might persist for two or three days. General symptoms were never observed, and the injection did not cause the patient any more pain than other intracutaneous injections. A positive reaction was never found except in cutaneous tuberculosis and lupus erythematosus, the exact figures being as follows: Of 119 cases of cutaneous tuberculosis, 94, or 80 per cent., were positive; 18, or 14 per cent., negative; and 7, or 6 per cent., indefinite; of 4 cases of lupus erythematosus, 1 was positive and 3 negative. Three cases of pulmonary tuberculosis all gave a positive reaction. The reaction was more intense in the initial stage than in advanced cases, in localized than in diffuse forms, and in active than in torpid forms. The superiority of the reaction over von Pirquet's test was that the horse serum reaction was only positive when the disease was fully developed. Its sole drawback was that it was positive in only 87 per cent. of the cases of tuberculosis, but it is generally known that the ordinary tuberculin reactions are positive in 90 per cent. only, irrespective of the form of the disease in which they are used.

#### 200. The Oculo-Cardiac Reflex in Tuberculosis.

THE oculo-cardiac reflex, which is obtained by observing the effect on the blood pressure and pulse of pressure on the eyes, has been made the subject of an investigation reported in the *Gazette des Praticiens* (January 1st, 1922). In a normal response the pulse is diminished four to twelve beats per minute, but it is well known that in cases of hypersecretion by the thyroid the pulse may be slackened by more than twenty beats per minute by pressure on the eyes. The authors of the present investigation report that in mild cases of tuberculosis the reflex is normal. In more advanced cases with impregnation of the system with tuberculous toxins, although the defensive mechanisms may be adequate, a disturbance of the sympathetic system is manifested by an abnormal oculo-cardiac reflex. In such cases the reflex is usually exaggerated, the pulse being slowed twelve to twenty beats. On the other hand, in the presence of more marked intoxication with insufficient defensive response, the general hypotonic condition of the sympathetic system is characterized clinically by an abolition of the oculo-cardiac reflex. Although the response to this reflex is not to be taken as an absolute index of the patient's resistance to the infection, yet the authors suggest that the reaction may be of value from the point of view of prognosis. The reaction is not on a par with immunity tests, such as demonstrate the presence of protective substances in the blood, but is an indication of the extent of intoxication or severity of the disease.

#### 201. Muscular Tonus.

BANÚS (*Arch. de méd., cir. y esp.*, November 15th, 1921) states that it has been definitely established by recent investigations that there are two perfectly distinct elements in muscular activity. This physiological duality has a corresponding anatomical basis, and the organs and nervous system which regulate both are perfectly distinct. Voluntary muscular contraction represents the kinetic element of muscular action. Its organ is the muscular fibre and its nervous system the general sensori-motor system or pyramidal tract. Tonus, on the other hand, represents the static element of muscular contraction. Its organ is the sarcoplasm and its nervous system a complex structure known as the extra-pyramidal system. All forms of voluntary kinetic activity have their equivalent in static involuntary activity. While in the physiological condition both forms of muscular activity go hand in hand, certain pathological changes may dissociate them and give rise to syndromes characterized by disturbance of muscular action.