

AN EPITOME OF CURRENT MEDICAL LITERATURE.

MEDICINE.

56. Extensive Thrombosis in Heart Disease.

F. GLASER (*Med. Klin.*, October 19th, 1913) records a case of thrombosis following heart disease in which the left arm, the left side of the chest, head, and neck were involved. The patient was a servant girl, aged 24, who developed articular rheumatism seven years earlier. She was admitted to hospital for dyspnoea and general weakness. She was very anaemic, and the haemoglobin was 60 per cent. The apex beat was in the anterior axillary line, and the cardiac dullness extended one fingerbreadth beyond the right sternal margin. A soft diastolic murmur was audible over the aorta, and the second pulmonary sound was slapping. A systolic and a presystolic murmur were audible over the apex of the heart. After the patient had been in hospital for three months without much improvement a tender swelling of the size of a walnut appeared under the right sterno-mastoid muscle. There were signs of pulmonary infarct, and the patient became very restless. Nine days later the right side of the face became swollen, and the hard and tender parotids made the ears protrude. The right upper arm was 9 cm., and the right forearm was $7\frac{1}{2}$ cm. wider in circumference than the corresponding measurements on the left side. The sclera were jaundiced, and the right side of the chest was boggy. When this condition had lasted about three weeks, during which there were recurrent attacks of pulmonary infarct, the patient died. The necropsy showed stenosis and incompetence of the mitral valve, incompetence of the aortic and tricuspid valves, endocarditis verrucosa recurrens, hydropericardium, hydrothorax, ascites, anasarca, jaundice, multiple pulmonary infarct, and thrombosis of the superior vena cava, and of the subclavian and jugular veins on both sides. The author can find records of only four cases in which such extensive thrombosis, involving the large veins of the chest, and following heart disease, occurred. In one of these, reported by Cheadle, Lees, and Poynton, bilateral parotitis was observed. Thrombosis of the branches of the superior vena cava in chronic heart disease is more common, and in 1900 Gallavardin collected 25 cases, 23 of which were observed in women, usually under the age of 30. Probably chlorosis favours thrombosis, for the factors disposing to thrombosis, such as a sluggish circulation, changes in the quality of the blood, and faulty nutrition of the blood vessels, are present in chlorosis.

57. Mild Manifestations of Syringomyelia.

C. BURNS CRAIG (*Medical Record*, October 25th, 1913) points out that there is a group of cases, which may be called mild or incipient, whose real status passes unrecognized until they drift into the neurologist's clinic. The history of such cases arouses suspicion of their true nature; thus, a stiffness, numbness, and loss of dexterity in the fingers, gradually increasing in severity, usually without pain, associated at one time or another with an accidental painless burn; a slowly healing and painless traumatic sore on the hand; an injury to the hand, seen by the patient rather than felt, makes it possible to hazard the diagnosis. The suspicion is readily confirmed on physical examination. He records three cases in point. In the first one a young man showed as his earliest symptom a difficulty in using his left hand in playing his violin; he could not hold a cigar easily and had difficulty in putting his fingers into a baseball glove. In the second case the first symptoms were of rapid onset. A young man, who was an expert swimmer, went for a swim in the ocean and found he could not make his usual powerful arm strokes. The same evening he woke from a light sleep with severe precordial pains; he rose off the bed, but fell, owing to weakness of his left leg, and then found he could not use his left arm. It is suggested that he probably had a haemorrhage into the syringomyelic cavity. The third patient, a man of 39, had ten years previously felt numbness in his right little finger; two years later it affected the whole of the right arm, the right trunk, and right lower extremity; five years ago the right little finger began to curl in, and he could not straighten it. The later changes in these three cases are not dealt with in this abstract. In summing up these cases, the writer comments on the mild degree of the muscular atrophy, trophic changes, and motor weakness, as indicating the

remarkable manner in which the depredation of the spinal gliosis is confined, in the early stages at least, to the sensory tracts conducting thermal and painful sensibility, tactile and postural sense being unimpaired. He urges the great importance of making tests for the various forms of objective sensibility even in the very early stage of the paraesthesia.

58. The Cuti-Reaction in Syphilis.

GAVINI (*Rif. Med.*, September 27th, 1913) discusses the various attempts made to diagnose syphilis by the help of a cuti-reaction, and showed how discordant are the results. He then gives his experience with Noguchi's luetin as the agent for producing a cuti-reaction. Of the 117 syphilitic cases 35 gave an intense vesico-pustular reaction, 35 a papular reaction with erythematous halo, 13 a papular erythema lasting more than seven days, and 69 were negative. Of the 55 non-luetic cases 1 gave an intense vesiculo-pustular rash, 7 a papular erythema, and 47 were negative. The single case which gave a well-marked reaction was a child admitted for lupus of the nose and elbow, who subsequently was found to give a positive Wassermann result, and was probably a syphilitic case. Amongst the syphilitic cases the cuti-reaction was least marked in the early stages of syphilis—for example, a positive result was obtained in 38 per cent. of the cases of secondary syphilis, whilst in tertiary syphilis the percentage rose to 51 per cent. In two cases of parasyphilis a doubtful reaction was obtained in one. Looking at the cases as a whole the author is clear that a specific and diagnostic reaction can be obtained after vaccination with Noguchi's luetin. The characteristic reaction consists of papules surrounded by an erythematous halo and lasting more than seven days; in cases where the reaction is intense this papular rash becomes vesicular in places. The cases where the result is weak and doubtful do not invalidate these conclusions. As will be seen from the statistics the cuti-reaction is not so certain or so constant as the Wassermann test, but may be looked upon as an efficient complementary test. Like the Wassermann, it is influenced by antispecific treatment, changing from positive to negative.

59. The Cerebro-spinal Fluid and Tremor in Children.

LO RE (*Rif. Med.*, November 29th, 1913) reports three cases of tremor in young children, with details as to state of the cerebro-spinal fluid in each case. (1) A child, 26 months; well up to 12 months; since then it suffered from chronic dyspepsia, and at the time of admission showed rhythmical movements of the right upper extremity, with very slight rigidity. Kernig and Babinski signs both absent. The tremor became general after a few days, and resembled a chronic shiver. Lumbar puncture gave a fluid with normal pressure, containing $\frac{1}{3}$ gram albumin, 99 per cent. lymphocytes, and 1 per cent. large mononuclears. Bacterioscopic examination negative. The child recovered in a few days. (2) Child, aged 17 months; dyspeptic and rickety. On admission there was generalized tremor. Kernig and Babinski negative. Lumbar puncture, normal pressure, albumin $\frac{1}{2}$ gram per cent., lymphocytes 91.5 per cent., large mononuclears 7.5 per cent., and polynuclear 1 per cent.; no bacteria. This was on March 9th. The tremor varied, sometimes better, sometimes worse. On April 13th the child was re-admitted, and then showed definite rigidity, and lumbar puncture showed $\frac{1}{2}$ gram albumin, 82.30 per cent. lymphocytes, 11.5 per cent. large mononuclears, and 6.19 per cent. polynuclears. The child died of bronchopneumonia on April 23rd, and a chronic fibrous cerebro-spinal pachymeningitis was discovered, also an acute cerebral leptomeningitis. (3) A child, aged 14 months, also suffering from chronic dyspepsia and generalized tremor. Lumbar puncture gave $\frac{1}{2}$ gram albumin, 97.22 per cent. lymphocytes, 1.85 per cent. large mononuclears, and 0.9 per cent. polynuclears. This child recovered. The author points out that all three cases suffered from chronic dyspepsia, and that probably there was a chronic poisoning from intestinal toxins. In reply to the objection that hundreds of babies suffer from chronic indigestion and yet do not display symptoms of meningism, he assumes that the cases that do are predisposed to neurosis by inheritance or otherwise.

SURGERY.

60. The Surgical Treatment of the Lung.

IN a post-graduate lecture SAUERBRUCH gives a general survey of the development and present position of the surgery of the lung (*Muench. med. Woch.*, August 26th and September 2nd, 1913). He traces the beginning of modern surgical treatment of affections of the lung to the introduction of x rays, the ingenious proposals of methods and the employment of one of the two methods of operating with increased or diminished atmospheric pressure. In order to understand the technique and advantages of the latter, he gives a careful description of the various effects of so-called operative pneumothorax. At first, the method of diminished pressure was employed, in which the patient, operator, and assistant were placed in a chamber, while the head of the patient passing through an opening in the chamber and the anaesthetist remained outside. The neck was surrounded by a collar of rubber, which fitted exactly, and thus prevented the diminished pressure in the chamber from being raised from without. When the chest was opened the negative pressure (equal to about 7 mm. of mercury) sufficed to keep the lung expanded, since the pressure of the inspired air was high enough to distend it. The second method of raised pressure was effected by an oxygen apparatus which was attached to the anaesthetic mask, and raised the pressure in the respiratory passages sufficiently to allow the lungs to remain distended, even when air was freely admitted into the pleural cavities. The author gave verbal and pictorial descriptions of the forms of apparatus used by him in the Zürich clinics. Having dealt with a number of points in technique, he passed on to consider the conditions for which operative interference had been applied. Starting with injuries, he showed how lung surgery had completely altered the treatment of the more severe forms. Rupture of the lung should be treated by thoracotomy, and the prospects of recovery are good, as he showed from cases of his own. He then turned his attention to the development of haemothorax and pneumothorax in connexion with penetrating wounds of the lung. "Tension" pneumothorax, in which the air passes into the pleural cavity, but is prevented from passing out again by a valve-like opening either of the chest wall or of the lung, is always a direct indication for operation. On the whole, he found that considerable care must be exercised in the selection of cases for operation, since the majority of wounds of the lung heal without operation. He also dealt with injuries to the abdomen and chest, for which the operative treatment is best undertaken as a primary thoracotomy. Primary and secondary tumours of the lung have been treated successfully by removal of the tumour or of the lobe. The author has carried this out in one case for a primary carcinoma, but these cases are extremely rare. Abscess of the lung is another class of cases in which the surgical treatment may save life. He regards every case of chronic suppuration with fetid pus as an indication for operation. Pneumotomy should be performed in two sittings if the condition of the patient allows of this, unless adhesions have bound the lung to the chest wall. The abscess should be opened by cautery. The next class of case dealt with is bronchiectasis. One of the primary difficulties in these cases is the rigidity of the dilated bronchus, which renders it useless in the majority of cases to employ resection of ribs and similar operations. Phrenicotomy combined with thoracotomy at times suffices to produce a shrinkage of the lung and partial cure of a bronchiectasis. Another method which is at times crowned with success and which is well tolerated is ligation of the pulmonary artery. If this fails, the amputation of the affected lobe may have to be resorted to; but it should always be remembered that this operation is a dangerous one, which requires considerable care. Finally, the subject of the treatment of pulmonary tuberculosis is dealt with. Passing over the operation of the division of the first rib planned by Freund, he considered the various operations devised to collapse the lung. The operation he prefers is thoracoplasty of Brauer and Friedrich. After discussing at some length the rationale of this and similar operations, including artificial pneumothorax, he described some of his own cases. Of 113 patients treated by thoracoplasty, 77 were suffering from pulmonary tuberculosis, 2 died of the operation, 11 died later of tuberculosis, 17 were definitely cured, 19 markedly improved, and may include some cases of complete cure, 4 remained unaltered, and in 3 instances the condition became worse after operation. The next operation which he has applied for this affection is phrenicotomy. He has employed it in 23 cases, but has come to the conclusion that alone it rarely, if ever, leads to complete cure. It may, however, be of

immeasurable benefit when combined with one of the other operations. Lastly, he spoke of the introduction of a hard paraffin plug into tuberculous cavities, according to Bär. The technique appears to be very difficult, and the selection needs to be made with great care, but the author has convinced himself that under certain circumstances this method should be recommended. A large number of details are given, but space forbids these from being dealt with in this place.

61. The Noguchi Luetin Reaction in Syphilis.

FOSTER (*Amer. Journ. of Med. Sci.*, November, 1913) considers that the Noguchi luetin test in certain cases of syphilis affords a means of diagnosis which is specific, reasonably delicate, easy of application, and harmless to the patient. The test was applied after the method recommended by Noguchi to 75 persons, 70 of whom were, or had been, infected with syphilis, while the remaining 5 were used as normal controls, 0.07 c.cm. of the luetin emulsion being injected intradermally into the left arm and the control emulsion into the right, the inoculations being very superficial, so as just to raise the epidermis. Both the luetin and control emulsions produced a circumscribed, elevated, blanched swelling about 4 mm. in diameter, which entirely disappeared in about half an hour. After twenty-four hours in positive cases more or less inflammatory reaction, as manifested by a distinct, circumscribed, indurated, bright red papule, surrounded by a hyperaemic areola, occurred at the luetin site, and in some cases a similar but less indurated reaction at the control site, but this latter gradually fades and disappears within three days. From the end of forty-eight hours up to the seventh day a marked inflammatory reaction occurs in the luetin papule, which becomes larger, more indurated, and surrounded by an inflammatory areola with radiating lines of telangiectasis. Generally there is no accompanying systemic reaction, though a few cases may complain of soreness and itching. At the end of a week the reaction begins to fade with some desquamation over the inflamed area, the induration remaining for several days, to be followed by a bluish discoloration, lasting two or three weeks. The test was applied in 13 cases of secondary treated syphilis, in 5 exhibiting striking tertiary lesions, in 52 in the stage of latency or cure, and in 5, presumably free from disease. Positive reactions occurred in 77 per cent. of the cases of secondary treated syphilis, in 80 per cent. of the tertiary cases, in 88 per cent. of the latent cases; while of the 5 apparently normal controls, 1 gave a positive reaction, this being a healthy young soldier, who denied absolutely the possibility of infection, and in whom the Wassermann test was negative, but whose maternal grandmother suffered from tabes, thus raising the question as to whether a state of allergy transmitted from a luetic maternal grandmother might explain the positive reaction, since it has been shown experimentally that the state of allergy or anaphylaxis (upon which the luetin reaction depends) may be transmitted through the female from a sensitized guinea-pig to her offspring. The facts that a positive Wassermann test is indicative of metabolic substances in the serum due to a present or recent activity of the spirochaetes on the tissues, and that a positive luetin reaction indicates a state of hypersensitiveness to the specific proteins of the spirochaetes induced by a period of cessation of the introduction of these proteins prior to the injection of the luetin are borne out by the practical results in this series of cases, those reacting most intensely to the one test being negative to the other. While these cases show the value of the test in diagnosis in the tertiary and latent stages of syphilis, its greatest value appears to be as a means of prognosis, and a provocative injection of salvarsan, followed by the application of both Wassermann and luetin tests, is suggested as a rational means of determining whether treatment has been sufficiently intensive to effect a cure.

62. Cystic Breast: Tubercle and Cancer.

MADAME GOSSET AND P. MASSON (*Revue de gynéc. et de chir. abdom.*, October, 1913) publish, with drawings of sections, an elaborate report of 75 tumours of the breast, the clinical notes being given as well as the histological descriptions. All sections have been prepared after the newest approved methods. Especial care has been taken to make out the signification of coincident cystic and solid tumours. To this end 38 epitheliomas (glandular infection in 28) were examined, 10 being uncomplicated, 25 associated with cystic disease, and 3 with tubercle; also 3 specimens of pure cystic disease and 4 of cystic disease and adeno-fibroma. Gosset and Masson analyse several cases which tend to show that an infective agent, tubercle

or simple irritation from trauma, is capable of setting up those hyperplastic lesions characteristic of cystic disease. All chronic inflammations of the mammary parenchyma not due to malignant disease may end in the development of cysts. Contrary to the opinion of Reclus, cystic disease is very often followed by cancer. Gosset and Masson suspect it will invariably become malignant if not removed, and they have seldom found cancerous tumours in a breast free from cystic disease or distant hyperplastic lesions. They hold that the American method of diagnosis by frozen sections made during the operation is inconclusive and unsatisfactory.

OBSTETRICS.

63. Rupture of Uterus in Fifth Month of Pregnancy.

E. BOVIN (*Hygieia*, October, 1913) records the case of an unmarried woman, aged 24, who declared herself a primipara, but who subsequently was found to be a multipara. She stated that she menstruated last in the middle of September, 1912, that abdominal pain began on January 21st, 1913, and that it had continued at short intervals till she was admitted to hospital on the 22nd, when a slight haemorrhage was found to have stopped. On account of a temperature of 101.6° no internal examination was made, and it was thought that, as the labour pains were active, the abortion would be completed spontaneously. At first the pulse was 112, and the uterus did not quite extend upwards to the level of the umbilicus. Two hours later the uterus reached this level, and diffuse tenderness of the lower abdomen was most noticeable in the middle line. The abdomen was, however, flaccid. A few hours later an internal examination was made. The external os was far back in the pelvis and admitted only one finger. No abnormality was discovered. An hour later the patient suddenly became pale and pulseless, and died in a few minutes. The necropsy showed much fluid blood in the abdominal cavity. A large haematoma in front of the left side of the uterus had stripped up the serous lining, which had given way at one point, whence the blood had escaped into the abdominal cavity. The haematoma communicated with the interior of the uterus by a longitudinal tear extending from a point just above the external os to the upper portion of the body of the uterus. The cervix showed no other lesion, and the vaginal fornices were uninjured. A 15 cm. long unmacerated fetus had escaped from the uterus completely, and lay in the cavity formed by the haematoma. The placenta was still attached to the right upper portion of the uterus, which had not been involved in the rupture. Although the position of the tear in the uterus coincided with that usually found after spontaneous rupture at term, the author is sceptical as to its spontaneity, for there were no signs of erosions or scars to account for it. It is more probable that the cervix had been wounded and infected during an attempt to induce abortion, and that when labour pains began the wound instead of the os had been gradually enlarged till it transmitted the fetus into the haematoma. The circumstantial evidence in support of this hypothesis was full and convincing.

GYNAECOLOGY.

64. Non-Ovarian Pelvic Dermoids.

VAUTRIN (*Ann. de gynec. et d'obstet.*, November, 1913) dwells on the dangerous complications which are frequent when dermoids, independent of the ovary, develop in the female pelvis. They are found in the folds of the broad ligaments, in Douglas's pouch, in the parasacral regions, and in the subperitoneal space above the levator ani. But there remains the most important variety, which is that type of dermoid found in the vesico-uterine space in the median line. They push down the uterus, press on the bladder, and rise till the peritoneum lies behind, and the abdominal parietes in front of their outer limits. They contain the same dermoid elements found in their homologues in the ovary, and though they do not open up the layers of the broad ligaments, their contents often grow through their walls and diffuse themselves over neighbouring tissues. These non-ovarian dermoids develop in women between 20 and 50 years of age. When the bladder is not involved these tumours may be enucleated with little difficulty, as in 2 cases related by Vautrin in full. But troublesome and dangerous complications necessarily follow the invasion of the bladder by dermoid

elements. In one instance Vautrin removed a retrovesical dermoid after hairs had been passed during micturition. The tumour was removed, yet dysuria continued, and Vautrin made a vesico-vaginal incision, and extracted a dermoid structure, fig-shaped, 2 inches in long diameter, loose, and loaded with phosphates; convalescence was rapid. The patient had recently, before the operation, recovered from typhoid fever, and these dermoids, Vautrin notes in speaking of the case, are very susceptible to general infection. He operated in one instance where sepsis had followed abortion. The tumour suppurated and opened into the bladder, but its removal was effected and the vesical wound successfully sutured. Neglected cases, where dermoid elements fill the bladder, involve not only continual torment but also ultimate infection of the upper part of the urinary tract. Fortunately, thanks to bolder operating, these advanced cases are now seldom met with.

THERAPEUTICS.

65. The Sedative Action of Lumbar Puncture.

E. SZEDLAK (*Pester Med.-Chir. Presse*, November 2nd, 1913) has performed lumbar puncture in about 250 cases for diagnostic purposes, and has noticed that in most of these restlessness and excitement diminished or even disappeared. This led him to practise lumbar puncture as a purely therapeutic measure among the most restless inmates of a hospital for nervous diseases. Lumbar puncture is known to relieve the headache, somnolence, vomiting, and other disturbances following epidemic cerebro-spinal meningitis, tuberculous meningitis, and hydrocephalus, in which the intraspinal pressure is raised. It may be that in some cases this pressure is also raised in certain forms of insanity, and that the stimulus to which the cortex is subjected by this pressure can be removed by the withdrawal of some cerebro-spinal fluid. Again, if the mental symptoms be due to an accumulation of toxins in the cerebro-spinal fluid, a reduction of its volume should be beneficial. The author does not include in his report those cases in which a general anaesthetic was given during lumbar puncture, as the resulting beneficial effects may partly be traced to the anaesthetic. In most cases he dispensed with anaesthetics, and when the patients were very restless he secured the pelvis with a cloth drawn downwards and backwards by two attendants, while a third attendant held the patient's head in his armpit so that the body of the sitting patient was carried forward as far as possible. Thus secured, even the most restless patient is not likely to break the needle. The intraspinal pressure was as high as 300 to 500 mm. or more in the most violent patients, and the liquor squirted forcibly out of the needle when it was opened. Not more than 10 to 15 c.cm. were withdrawn at one puncture, lest the sudden reduction of pressure should be harmful. In some cases the immediate result was striking, the restlessness disappearing completely. Sometimes this effect lasted only a few days, and a repetition of the procedure became necessary. No good effect was observed in a case of encephalopathic psychosis or one of alcoholic psychosis. In the first case the patient died after six days' continuous and severe psycho-motor disturbance. The necropsy showed a large haemorrhagic infarct of the right parietal lobe. No improvement was effected in a case of paranoia, but in most cases of restlessness in dementia praecox, psychosis epileptica and maniaco-depressiva, dementia paralytica progressiva and melancholia excellent results were obtained. The author gives details of 7 cases in which lumbar puncture was very beneficial.

66. Prophylactic Typhoid Vaccination.

LAMB (*Archives of Internal Med.*, November 15th, 1913) records the results of experiences with prophylactic typhoid vaccination, and its effects upon menstruation. All observers agree that, in spite of precautions, nurses, doctors, and hospital attendants run a greater risk of contracting the disease than the ordinary citizen, the source of infection being either the patient or articles which have come in contact with typhoid cases. Vaccine should not be used after it is three months old, and the usual dosage recommended is that adopted in the United States Army, of three inoculations at ten-day intervals, the first of 500 million, and the second and third of one billion each, such method conferring immunity for at least three years. As some nurses under observation reacted rather markedly, one class received four doses of 100, 200, 400, and 600 million at five-day intervals; but as this involves a lengthened time, and (among women) delays caused by

menstrual periods, the more recent routine adopted was three doses at from seven to ten-day intervals, the first of 300 million, the second of 700 million, and the third of one billion. Women are more apt to have reactions than men. For those in whom an abnormal reaction might be predicted from such causes as lowered resistance, chronic disease, etc., four doses at seven-day intervals commencing with 200 million are advised, but in all others the three graduated doses are preferable. Patients who have had an attack of typhoid should not be inoculated, as the disease confers life immunity, and inoculation is apt to be followed by bad reactions. Of 203 persons inoculated among doctors, students, nurses, and attendants, there were no cases of typhoid and no untoward effects from the vaccine. Of 100 records in which the effects of vaccination upon menstruation were studied fourteen showed very distinct changes, probably due to the effect of the vaccine itself; 53 per cent. showed some type of menstrual disturbance, while 47 per cent. were unaffected. From the fourteen definite instances cited a very striking relationship is seen to exist between the vaccine and menstrual disturbances, which is of interest, in view of the similar disturbances seen in typhoid fever. These changes are of only temporary significance, and have no lasting effects, as in none was there any disturbance after six months had elapsed. During pregnancy vaccination should be avoided unless there was some special indication for its performance. In order to reduce menstrual disturbances from vaccination to a minimum the first inoculation should come within a few days after a period, and then there will be sufficient time for the second and third injections at seven-day intervals before the succeeding period. Since instances of aggravation of existing chronic conditions are recorded in association with prophylactic typhoid vaccination the relation of the vaccine to the development of various diseases was noted. In thirteen of the patients affections of the respiratory tract followed, and, although many were probably coincidences, the impression remains that in some cases resistance is sufficiently lowered to favour the chances of such infections. Appendicitis was noted in five instances, though in only one could the vaccine be suspected as an accessory cause. In one patient with extensive scabies the condition almost completely disappeared during the course of inoculations, to reappear after their cessation. With regard to three patients who later developed tuberculosis, in none was the relation between the vaccine and the disease sufficiently close to be suggestive.

67. Noviform, a Substitute for Iodoform.

Of all the substituted products for iodoform, those which are built up on a bismuth basis have proved themselves most satisfactory. The requirements of an antiseptic to be used in the place of iodoform should be relative non-toxicity, the absence of the unpleasant penetrating odour, and a non-irritating action; it should possess a bactericidal action, should be deodorizing, and have the power of stimulating granulations, and of drying up weeping surfaces without the formation of scabs. Lastly, it should be stable to light and readily sterilized. M. KASBOHRER (*Muench. med. Woch.*, November 4th, 1913) considers that these qualities are combined in the case of noviform, which is the tetra-bromide of benzo-catechin bismuth. He has used this substance in the form of powder, suppositories, 10 per cent. gauze, and 10 per cent. olive oil suspension. These preparations acted well in aseptic and infected wounds. In carbuncles, abscesses, phlegmons, fistulae, etc., plugging with noviform gauze led to surprisingly rapid healing. Sloughing wounds soon cleaned up under the use of noviform, and healthy granulation tissue formed, while the discharge was quickly reduced in amount. He experienced very good results in ulcers of the leg. After a hot bath, the ulcer was covered with a few layers of noviform gauze, and then covered by Unna's zinc "glue." At first this dressing was changed as soon as the secretion soaked through. Later it was changed once every six or eight days. The pain and itching soon disappeared, and the healing progressed so rapidly that after from six to twelve changes of the dressings, the ulcer was completely healed. He further remarks that noviform acted well in burns. He has not observed any toxic effects of the compound.

68. Palladium Hydrate (Leptynol) in Obesity.

W. GORN has tried the effect of a preparation of colloidal palladium hydrate called leptynol for the reduction of excessive fat deposit in cases of euphoria, and is pleased with the results obtained (*Muench. med. Woch.*, September 2nd, 1913). He states that in no case were any

local or general untoward symptoms noted, which could be referred to the preparation. The substance must be injected 2 or 3 cm. deep into the fatty tissue, since it always produces infiltrative foci when injected subcutaneously. He has come to the conclusion that local irritation is always the result of faulty technique in the injection. During the course of injections a special diet must be strictly followed. This consists in giving 2 litres of milk in five portions daily. The patients do not, he states, complain of hunger as long as they receive the injections, and thirst can readily be combated by giving ice to suck. He has succeeded in reducing the weight of various patients by 8, 7.6, and 7.4 lb. per week after injecting 80 or 100 mg. of leptynol. Other patients were reduced to a smaller extent. The temperature is rarely and only to a slight extent raised. Of importance is the beneficial action on the heart as a result of the reduction of fat. While the author is not yet in a position to state what effect this treatment has on the general mental processes in akinetic conditions in psychasthenia and similar mental affections, he is inclined to ascribe the improvement noted to a regulation of the oxidation processes which appear to be disturbed in these affections. At all events, it seems to him that the psychiatric physician is able to obtain marked improvement in a certain class of case which he is able from experience to select without difficulty.

PATHOLOGY.

69. Spirochaetes in the Brains of General Paralytics.

NOGUCHI reported a short time ago that spirochaetes could be shown to be present in the cortex of persons suffering from general paralysis of the insane. Hoffmann appears to have been one of the first to attempt to confirm this by injecting the material into the testes of rabbits, while a number of other observers confirmed Noguchi's statement that the organisms could be demonstrated by the dark field illumination microscope. HANS BERGER considered it of such high importance to clinical medicine that he has attempted to control the find in connexion with his own patients (*Muench. med. Woch.*, September 2nd, 1913). He selected 20 cases and obtained small cylinders of brain, gained from the frontal lobe by means of Pfeiffer's trocar and cannula. The material was immediately placed in warm sterile saline solution, cut up into very small pieces with fine, sterile scissors, ground up in a mortar, and the suspension injected into the testis of a healthy rabbit. The puncture did not appear to have done the patients any harm, save in one case, in which a severe haemorrhage took place and led to death after five days. It was discovered at a later date that the patient was known to be a haemophilic, and since he was a very advanced case, rapidly nearing the end, Berger comforts himself that this unfortunate accident was not so very deplorable. In one case the puncture disclosed an internal hydrocephalus, and effected an undoubted, albeit temporary, improvement. In the rest of the cases no influence of the puncture was noticed. In regard to the results of the implantation of the cerebral material into the rabbit's testis, no pathological changes were produced in 17 cases, nor could any spirochaetes be found in the organ after four months, which is stated to be the usual incubation period for rabbits for experimental syphilis. The cases were advanced and typical ones of general paralysis. In 4 of them death has since taken place and the diagnosis was confirmed. A positive result was obtained in the remaining 3 cases. In the first, no spirochaetes were found in the testis, but an infiltration formed in the epididymis, and in this infiltration spirochaetes were discovered. The case was typical. In the second, two whitish nodules were found in the epididymis. Microscopically an area of small cell infiltration was seen around the nodules and some areas of necrosis. Typical spirochaetes were found in the latter by means of Levaditi's staining. The third case showed sparse spirochaetes in some nodules situated under the tunica vaginalis. While the author was unable to discern any essential clinical differences between the 17 cases in which no spirochaetes were found and the 3 in which they were found, he throws up the question whether the finding of spirochaetes should not be regarded as an indication for energetic antisiphilitic treatment. This treatment, he considers, should be to a large extent local, and in view of the absolute hopelessness of the cases, should be driven to the utmost limit, even within the danger zone.