AN EPITOME OF CURRENT MEDICAL LITERATURE.

MEDICINE.

55. Diagnosis and Treatment of Tuberculosis and Syphilis.

PRIVAT (*Journ. des prat.*, April 16th, 1910) refers to several important points which aid in distinguishing syphilitic and tuberculous disease of bones and joints. With regard to situation, he points out that when two symmetrical articulations are simultaneously involved, or even when one is involved soon after the first, or if two bones of the same name are affected, one should think of a syphilitic origin, as symmetry points to syphilis as the cause. If a patient presents several foci of disease in different parts, and if these show themselves at the same time, one should suspect a syphilitic origin, as multiplicity of situation points to syphilis. In the same way the presence of dactylitis, especially if there be another bone affection, or if there be glandular enlargement, is strongly suggestive of syphilis. The author points out that tuberculous disease may be markedly influenced by the existence of either acquired or hereditary syphilis, and this explains how it is so much improvement can sometimes be obtained in cases of Pott's disease by antisyphilitic treatment. If in a case of chronic joint disease there occurs neither limitation nor a tendency to a vicious attitude, and especially if after prolonged immobilization movements at the joint do not appear to be much interfered with, one should suspect syphilis. Absence of pain on movement of an affected joint, absence of pain during the day with violent nocturnal pains not relieved by fixation of the joint and relieved only by movement of the joint, certainly point to the probability of syphilitic disease. Palpation of an affected joint may help considerably in the differential diagnosis of tubercle and syphilis: if one finds that not only does the bone appear enlarged, but the neighbouring muscles as well, or if one finds hard masses surrounded by softer areas one should suspect the latter origin, as syphilis constructs whilst tuberculous destroys. Radiography also may be of service: in syphilitic joint disease the articular ends of the bones preserve their outline, but the bones themselves are less permeable to x rays. Hydrarthrosis, as is well known, is often syphilitic, but what is probably less recognized is that syphilis may cause purulent effusions into joint cavities. This pus is thinner than that of tuberculous origin, is ropy and sticky. A tuberculous abscess opened aseptically and sufficiently early rarely ends in a fistula, whilst this is a frequent result in abscesses of syphilitic origin. A tuberculous fistula has a rugged orifice, the pus is yellowish, thick and grumous, and the fistula continues an indefinite time. The orifice of a syphilitic fistula is flat and punched out, and the borders are pigmented; the pus is whitish, liquid and ropy, and the fistula heals readily. With regard to treatment, the author advises that, in those cases in which there is some doubt as to the diagnosis, both antisyphilitic treatment and treatment for tuberculous disease should be carried out simultaneously and thoroughly.

56. Visceral Angioneuroses.

COHEN (reprinted from *New York Med. Journ.*, February 19th, 26th, and March 5th, 1910) uses the term "visceral angioneuroses" to indicate those manifestations of disordered function which arise from circulatory disturbances rather than from primary tissue change in the affected organs, and suggests their relationship to angioneuroses of the skin. These visceral crises of vasomotor ataxia are manifestly phenomena of inco ordination, the local circulation having become unbalanced, the peripheral and central circulatory mechanism being no longer in equilibrium. While asthma is the best known angioneurosis in the respiratory tract, the occurrence of similar phenomena of angioneurotic oedema in the larynx and pharynx, and in other parts of the body, giving rise to gastro-enteric, hepatic, renal, and other visceral crises, must be borne in mind. Haemorrhages are frequent, and may occur anywhere, and the haemorrhagic tendency is shown by the occurrence of purpuric or ecchymotic spots. Venous congestion may be sometimes sufficient to produce intermittent or permanent local varices and even haematomata. The manifestations of vasomotor ataxia may be general, regional, or multiregional, and in either of these the mechanism may be constrictive, dilative, or mixed—the latter, in which dilatation and constriction of vessels are found simultaneously in the same patient, being the most common form. Any of these varieties may be paroxysmal or non-paroxysmal, of brief or protracted duration, and of frequent or infrequent recurrence, either periodical or irregular in time. In the diagnosis of visceral angioneurosis primary infections or structural lesions must be excluded, and the patient must present certain physical characteristics and reactions to environmental change, as well as a personal or family history pointing to such pathogenic tendencies. The physical characteristics and reactions to environment may not all be present in every case, but a sufficient number will be found at one time or another for purposes of diagnosis. The characteristic signs consist in vascular changes in the skin—for example, mottling, blanching, pigmentations, urticaria, purpura, eczema, or oedema, and either profuse or scanty perspiration, with abnormal response to emotion, heat, cold, or pressure. Changes in the vascularity and colour of the nail beds, showing a deep red terminal line and a white central area, are characteristic; white in the eyes, widening of the commissure, dilatation of the pupils, and tremulousness of the lids upon light closure, with occasionally ptosis, pain, and distension of the retinal vessels, are among the pathognomonic signs. The thyroid gland is generally enlarged and soft and the cardiac rhythm easily disturbed, but it is rarely irregular, unless there is an actual lesion. The family history is almost invariably rich in metabolic, nervous, or angioneurotic disorders, and tuberculosis, rheumatism, gout, and diabetes are often found. Underlying all these various manifestations there would appear to be a fundamental imperfection, which may originate in a disturbance of the normal alterations in the calibre of the interstitial lymph spaces, resulting in pressure changes, and it is to such inco-ordinate changes in tissue tension, as well as to alterations in the calibre of blood vessels, that these protean manifestations of the common disorder may be attributed. Throughout the text notes of 46 cases are given, exemplifying the particular form under consideration.

57. Influenzal Meningitis.

AGER AND AVERY (*Archives of Ped.*, April, 1910) discuss the case of a healthy child of six months brought to hospital on account of a convulsion followed by slight fever. He had had a cough for several days; he was breast-fed, and weighed 21 lb. The abdomen was tender everywhere, there was slight rigidity and definite tenderness in the back of the neck, and the temperature was 100°. Four days later the condition pointed definitely to meningitis; there was head retraction and opisthotonos. Some cerebro-spinal fluid was drawn off for examination; the child gradually became worse and died five weeks after the onset of the disease. A *post-mortem* examination showed an intensely congested dura, very friable brain tissue, and the ventricles so distended that the serum immediately broke through. There were two small areas of thick yellow exudate over the upper part of the motor area, some exudate about the base, and patches of it in the sinuses, while the frontal lobes were covered with a thick coating of it. The bacteriological examination discovered an organism the characteristics of which were similar to those distinctive of the bacillus of influenza. Considering the pandemic nature of influenza, the number of cases of influenzal meningitis reported is very small. It is possible that the condition is more common than is supposed, as it can only be differentiated from meningococcic infection by cultures.

58. Houston's Valves a Cause of Constipation.

AMONG the numerous agencies which cause constipation, Matignon (*Gaz. hebd. des sci. méd. de Bordeaux*, February 13th, 1910) cites the valves of Houston, those two, three, or occasionally four, folds of mucous membrane which are found at intervals, both horizontally and longitudinally, in the lower 3 in. of the rectum. These folds enclose circular but not longitudinal muscular fibres, and they can be easily seen on examination by means of a rectoscope. Their hypertrophy causes either fragmentary or ribbon-shaped stools, and purgatives, effective at first, soon lose their power, the patient feeling no relief from an evacuation, but suffering from the sensation of constant pressure,

with distension, burning, and tenderness on palpation. The only curative treatment is the removal of the hypertrophied mucous folds, either by the knife, the cautery, or clamping.

SURGERY.

59. Arterio-Venous Anastomosis.

Monod and Vanverts (*Archiv. gén. de chir.*, Nos. 4 and 5, 1910) publish the results of a study, based on clinical and experimental data, of the value of arterio-venous anastomosis as a means of assuring the transmission of red blood to the capillaries through veins, and applicable in practical surgery to cases of arterial obstruction with ischaemia of the peripheral parts. In the course of this paper the authors consider at length the following questions: (1) Is this anastomosis practicable? (2) Is it possible, after the communication has been established, for the blood to take a retrograde course in the veins? (3) What results have hitherto been obtained from experimental and clinical work? (4) Is such intervention attended by any danger? The conclusions to which the authors have been led by their full and laborious research cannot be regarded as very favourable to this method of dealing with the results of arterial obstruction. The best they can say for it is that though the enthusiasm of some advocates of arterio-venous anastomosis is evidently exaggerated, recent experiments and clinical results present promising presumptions which forbid an *a priori* rejection of this operation, particularly in cases in which gangrene, though imminent, has not yet occurred. The operation, it is held, is justifiable only under certain favourable conditions. The patient must not be very old, must not be cachectic, and the general condition must be capable of resisting operative shock resulting not only from the anastomosis but from an amputation that may be necessary after a short interval. Moreover, the arterial degeneration must not be too far advanced, the general circulation of the limb should be relatively satisfactory, and the devitalized parts evidently free from infection. This combination of favourable conditions is very rarely found in aged, atheromatous subjects, that is to say, in cases in which the operation is usually indicated. In such cases the authors hold that the surgeon should practise amputation either at once or after inspection of the vessels at the seat of a proposed anastomosis has shown that, in regard to the latter operation, there is a very slight chance of success. Reference is made to two cases, one reported by Imbert, the other by Torrance, which indicate, in the opinion of the authors of this paper, that arterio-venous anastomosis may be practised with good prospects of success in certain cases of serious injury of a limb in which one or more important arteries are involved. If it be impossible to effect an end-to-end reunion of the divided artery, the circulation in the injured limb might be maintained by attaching to the central end a vein of sufficient calibre. Another mode of application of arterio-venous anastomosis in surgical practice has been carried out by Tuffier, who, he believes, prevented gangrene of a suspect stump by anastomosing at the time of the amputation the open ends of the main artery and vein.

60. Anaesthesia for Removal of Enlarged Tonsils and Adenoids.

Ernest Jutte (*Med. Record*, May 7th, 1910) advocates a method of continuous anaesthesia which does not interfere with the surgeon's work. A wide-mouthed bottle with a double perforated rubber stopper, which holds two tubes, is used. One tube reaches the bottom of the bottle, the other just passing through the stopper. The long tube is connected with a double bulb, the short one with a metal mouthpiece such as is used by dentists. Narcosis is induced by the drop method, until the patient is well under. The metal mouthpiece is hooked around the mouth gag and ether vapour forced into the mouth of the patient by the rubber bulb. Narcosis can be kept up for a long time.

61. Traumatic Rupture of the Spleen.

Potherat (*Bull. et mém. de la Soc. de Chir. de Paris*, No. 18, 1910), in a report on a case communicated by M. Viart, of recovery, under very unfavourable conditions, after removal of a ruptured spleen, discusses at length the indications and prognosis of splenectomy in the treatment of this injury. The diagnosis of rupture of the spleen in cases of abdominal contusion is usually very difficult, and in most of the recorded instances the lesion was not revealed before the abdomen had been opened and search made for some doubtful source of internal haemorrhage. Although this symptom, especially when intense and rapidly developed, would by itself indicate immediate laparotomy, it would be advisable, Potherat states, to localize the lesion if possible, as the surgeon by attacking the injured spleen directly and by a convenient external incision, might save much precious time in a very grave operation. It is suggested that in some cases of splenic rupture a precise diagnosis might be made by a careful investigation of the conditions of the accident, by evident localization of the injury, and by the undoubted signs of internal haemorrhage with an absence of blood in the urine. The exact seat of the impact of the violence causing splenic rupture seems to be regarded by Potherat as a point of minor importance, as he believes that this injury is due in cases of contusion of the abdomen to indirect and not to direct force. It would be very difficult, he points out, for the injuring agent to act directly on the spleen through the abdominal wall so as to produce a rupture of this organ, which is not only well protected by the thoracic wall but also, except in rare instances of old and extensive adhesions, is very mobile. The force applied to the surface of the abdomen excites, he holds, an active and sudden contraction of the whole of the abdominal enclosure, comprising both the diaphragm and the floor of the pelvis. The blood, under the influence of this pressure, accumulates in the larger vessels and also in the spleen. The sudden and forcible compression of this vascular organ causes rupture of its friable tissue and laceration of its weak capsule. Reference is made to several recorded cases of traumatic rupture of the spleen in which, notwithstanding the extent of the injury to this organ, the symptoms were not menacing, and the patient remained in a good and promising condition for some days after the receipt of injury. Such records, however, should not, Potherat holds, lead the surgeon to delay intervention in any case in which he has good reason for suspecting rupture of the spleen. In discussing the technique of splenectomy Potherat recommends in the male a vertical lateral incision, and in the female, in whom the base of the thorax is much less divergent than in the male, a median incision of the abdominal wall, with a short transverse cut to the left from its lower extremity. As the main object of surgical intervention in cases of ruptured spleen is to arrest haemorrhage, no attempt should be made, except the lesion be a slight one, to preserve the wounded organ. Splenectomy, which, as has been shown by recent statistics, has saved many lives and been attended of late by a progressive diminution of mortality, ought, it is strongly urged, to be regarded as the operation of choice.

OBSTETRICS.

62. The Eclampsia of Labour.

Rudaux (*La Clinique*, April, 1910) refers to his previous work on this subject, in which he advanced the view that the eclampsia met with during labour is of a special type, that it differs from the eclampsia of pregnancy in its pathology and in its clinical manifestations, and that it is not a disease but a symptom produced by absolutely different causes. He reports the case of a young primipara with strong neuropathic tendencies and inheritance. During her pregnancy frequent examination showed the urine to be free from albumen, and the daily amount passed did not fall below one and a half pints. Labour occurred at term, and was perfectly normal, lasting about twelve hours, the patient being kept more or less under chloroform during one hour. Twenty minutes after delivery, without any warning, she had a convulsive seizure of the clonic type, which lasted for two minutes. She gradually recovered consciousness, but half an hour later a second attack occurred, leaving her in a somnolent condition. Eight similar attacks occurred during the day, the patient becoming profoundly comatose. Catheterization of the bladder produced a very small quantity of urine, which was dark in colour and contained albumen. The treatment included absolute quiet, irrigation of the intestine, chloroform during the crises, an injection of 3 grams of chloral (repeated thrice in twenty-four hours), and only water to drink. As the blood pressure was not much increased venesection was not attempted, but the loss from the womb was more than usually abundant. The next day the crises had ceased and her condition had improved, although the blood pressure was still above normal and there was general drowsiness. She was able to drink freely of milk and Evian water. A pint of urine drawn off with the catheter showed a very

small trace of albumen, which disappeared on the third day, when micturition became normal. On the sixth day she had an attack of pyelonephritis of the right kidney, which cleared up under urotropine, her subsequent recovery being satisfactory. In this case there were no prodromal symptoms; the attack came on suddenly, the bladder being practically empty and the albuminuria disappearing in a few days. Evidently this kind of eclampsia has a mechanical origin. The retention of urine may be due to pressure on the ureters and oedema of the kidneys. It is also probable that the blood contains large quantities of toxins generated during the effort of labour. Eclampsia of this type must be regarded as one of the accidents of labour which can be neither foreseen nor prevented.

63. Pendulous Abdomen: Rupture of Parietes during Pregnancy.

WALTHARD (*Monats. f. Geb. u. Gyn.*, May, 1910) reported before a medical society last winter an instance of pendulous abdomen of extreme type. A slough of the size of a small plate developed in its most prominent part. As there was a wide gap between the recti at that part the affected parietes consisted of a thin sheet of integument, fascia, and peritoneum. The patient was pregnant, and the uterus pressed against the sloughy tissues, which yielded. The skin became acutely inflamed all over the pendulous parietes, and as the consequent discharge, which teemed with echinococci, touched the peritoneum it set up plastic inflammation. Deposits of lymph developed around the protruding uterus. Total hysterectomy with resection of the pendulous sac was performed, and the patient recovered.

GYNAECOLOGY.

64. Grape-like Sarcoma of Cervix.

PROUST AND BENDER (*Ann. de gynéc. et d'obstét.*, March, 1910) report a typical case of sarcoma botryoides or sarcoma papillare hydropicum of the cervix, on which Pfannenstiel, Pick, and Curtis have written. Their patient was 44 years old, the periods were regular from puberty to the age of 42, when haemorrhages set in, at first almost regularly once a week but ultimately they became constant. For a month before the patient came under observation a reddish fetid serum flowed away with the blood. The patient was in good general health and quite free from pain. On examination a lobulated mass, strikingly similar to a bunch of black grapes, was seen projecting from the vulva. It filled the vagina, and was traceable upwards to a pedicle which entered the cervical canal. Its substance was much softer than that of a uterine fibromyoma but not friable or diffluent. On bimanual palpation the uterus did not appear enlarged and the fornices were free. The accessible lobules were cut away with scissors and the curette used freely. Then, as an extemporary microscopic examination gave rise to a suspicion that the mass was sarcomatous, or certainly not myomatous, Pozzi removed the uterus by total abdominal hysterectomy, and the patient recovered. The characteristic pathological elements were discovered on microscopic research. There were many cystic spaces lined with cylindrical epithelium; they represented uterine glands involved in the growth. There were likewise islets of cartilage tissue. The free surface was invested with stratified pavement epithelium, and the essential part of the tumour was made up of typical oval and fusiform embryonic connective-tissue cells.

65. Vicarious Epistaxis in the Menopause.

MACHT (*Amer. Journ. Obstet.*, April 1st, 1910), refers to Puech, who collected 200 cases of vicarious menstruation, out of which ten were instances of epistaxis; others found that bleeding from the nose was proportionally far more frequent. Macht believes that vicarious menstruation is by no means common, and not all reported cases can bear close scrutiny. He publishes what he considers to be an authentic example of vicarious epistaxis, not, however, in the young and vigorous, nor in a subject where the catamenia were suddenly suppressed, but in a patient aged 40. She was a Russian Jewess who had borne nine children, the youngest being 7 years old; she had miscarried once. The catamenia were established at the age of fourteen, and were always regular excepting during pregnancy. At about the age of 37 they became scantier, and at 39 ceased altogether. Simultaneously with the cessation of normal menstruation the patient began to suffer from periodic haemorrhages from the nose, occurring regularly at the time of the expected period, and accompanied by frontal headaches and severe flushes of the face. These haemorrhages varied in severity, but usually lasted no longer than a day. The septum nasi was slightly curved, and the vessels of its mucosa on the left side bled when examined. No other morbid conditions were detected in the nasal cavities, or in the throat, eyes, and ears. Trichloracetic acid was applied to the bleeding vessels, and gave relief, the "vicarious" period being afterwards reduced to slight though regular oozing. The hot flushings were relieved by sumbul. There was no evidence of visceral disease, thoracic or abdominal, the mobility of the uterus was impaired and the cervix lacerated.

THERAPEUTICS.

66. The Tuberculin Treatment of Tuberculosis.

As is well known, the late Professor Robert Koch continued to work right up to the time of his death with the products of the tubercle bacillus in order to improve the tuberculin preparations and to obtain a method of treatment which would satisfy all requirements. A considerable number of preparations were produced from Koch's laboratory, and, with this material at his disposal, Jochmann has attempted to form a comprehensive idea of the relative value of these variations of tuberculin. He now publishes his results (*Deut. med. Woch.*, May 26th, 1910). The tuberculins may be divided into two groups—(1) those which represent the soluble products of the bacilli when grown on fluid media, and (2) those which represent the products of the bacilli when removed from the medium in which they are grown and finely ground up. A.T. (old tuberculin) is gained by growing tubercle bacilli on glycerine broth, concentrating the fluid to one-tenth of its original volume and filtering the fluid from the bacilli. Jochmann begins by injecting 1 mg. of A.T. and increasing the dose gradually without producing a marked febrile reaction until 1 gram is reached. No rule can be laid down as to the rate of increase or the intervals between the injections, since each case has to be treated on its own merits. He does not find Saathoff's suggestion, that the reaction might be estimated by the local reaction at the site of injection, of value. He watches the temperature carefully, and is also guided in his subsequent procedure by such symptoms as headache, stomach-ache, nausea, and malaise. Next he tried a preparation made from a culture of tubercle bacilli on a fluid medium which did not contain any albumen. He found it easier to complete the course without a reaction with this form of A.T., and noted that very susceptible persons tolerated it well. Good results were also obtained with an A.T. which had been concentrated to one-quarter of its original volume instead of one-tenth. The second group includes the bacillary emulsions. B.E. is a glycerine-sodium chloride emulsion, while T.R. is an emulsion in distilled water. He gives 0.001 mg. of B.E. to begin with, and increases the dose gradually to 10 mg. At times this preparation produced infiltrations and abscesses, but in each case the pus was found to be sterile. Sundry other modifications of B.E. did not yield good results. The suggestion to mix A.T. and B.E. is not, in his opinion, sound, since some patients are extremely susceptible to the one or the other, and better results can be obtained by giving both separately, so that the dose of each can be varied at will. T.R. is given in the same doses as B.E. He has not obtained satisfactory results by giving tuberculin in capsules or other preparation by mouth. In tuberculosis of the lymphatic glands in children he obtained excellent results with A.T., and at times also with T.R. Tuberculosis of bone and joints yielded less favourable results to tuberculin. A few cases improved greatly under the treatment, but on the whole he is inclined to recommend tuberculin especially for those cases which do not do sufficiently well with local surgical treatment. Pulmonary tuberculosis in children was much improved by tuberculin, but that of infants was not influenced. While he realizes that it is difficult to judge the effect of treatment in pulmonary tuberculosis of adults, he has come to the conclusion that satisfactory results are obtainable in the early stages and in the second stage. Improvement was always achieved in the third stage, but in mixed infection tuberculin is not to be recommended. He has obtained good results in lupus, and recommends tuberculin as an adjuvant to local measures such as pyrogallic acid, Finsen light treatment, *x*-ray treatment, etc. He mentions that bovine tuberculin answers extremely well in those cases of lupus which are caused by the bovine type of bacillus. In judging the results of the treatment he again disagrees with Saathoff, who believes that the increase of weight may be taken as an indicator of the

beneficial effect of the treatment. After discussing the appearance of antibodies in the serum, he concludes that it is at present impossible to interpret the significance of these bodies or to identify them with substances which are concerned in the cure of the disease. Finally, he states that it is, in his opinion, advisable to begin with A.T., and to use B.E. at a later date. While he expresses himself cautiously as to the length of time during which the treatment should be continued, he suggests that the physician should aim at removing all clinical symptoms. The patient should be tested by von Pirquet's method after three or four months, and if the result be positive a second course of tuberculin should be undertaken.

67. X Rays in the Treatment of Angiomata.

ELECTROLYSIS and radium-therapy are the methods more usually favoured in the treatment of angiomata, but Barjon of Lyons (*Arch. d'élec. méd.*, April 25th, 1910) exalts the *x* rays as an agent of equal value, painless in application (unlike electrolysis), and giving results as perfect therapeutically and as aesthetic as those obtained with the rare and costly radium. He records 22 observations of cases in which radio-therapeutic treatment has been practised. In 18 of this number the treatment has been concluded for eighteen months or longer, so that a fair basis is afforded for judgement, and the results can be regarded as definite. The angiomata treated ranged from small superficial growths—birthmarks, strawberry- and raspberry-like stains—to subcutaneous tumours of blue and violet colour, and even to deep and diffuse swellings. Most of the patients were infants, and the rays were applied usually while the children were sleeping or receiving nourishment; rarely was it necessary to immobilize them by means of linen bands and sandbags. The part to be irradiated was surrounded by thin sheets of lead, and in some cases the whole of the applications were made without filtration; in others, after a few sittings in which the full naked dose was given, filtration was resorted to with the object of causing a more useful dose to be absorbed in the deeper tissues. The rays employed corresponded in quality to Nos. 5 and 6 Benoist, and in quantity the dose administered each time was from 5 to 8 H. Sometimes this was given in one sitting, at others in separate sittings with very short intervals between them. At the end of three weeks a fresh dose was started, and the duration of treatment extended over several months—the average being from two to five months—while the total dose ranged from 20 H. to as much as 100 H. in exceptional cases. When the treatment was interrupted for two or three months on obtaining a first amelioration, there were signs of the recrudescence of the tumours, which, however, quickly disappeared upon resumption of the treatment. In superficial angiomata the author was uniformly successful, but with angiomata which were diffuse and deep, extending into the cavities of the face, the results were more doubtful. Five of the cases belonged to this order. In two, both infants, he obtained as good results as in the superficial variety. In the three others—patients aged 10, 20, and 21 years—he was unsuccessful, and ceased treatment. The comparatively full age of the patients probably militated against the success of the method. In each of the three cases the resisting angioma was of congenital origin.

68. Aristochin.

DESIDERIUS LEVAI (*Pest. med.-chir. Presse*, No. 9, 1910) strongly recommends aristochin as a substitute for quinine in a children's practice. Aristochin is a white powder free from taste and smell, insoluble in water. It contains 90 per cent. of quinine, a larger percentage than any other known preparation. The absence of taste makes it possible to give the drug in water, milk, cocoa, etc., and the almost insuperable difficulty of inducing children to take the ordinary quinine preparations is altogether done away with. At the beginning Levai only gave aristochin in cases of malaria and intermittent fever, later in pertussis, and for the last four years in typhoid fever. The results in typhoid fever are exceedingly good. Levai has given it in 300 cases and has never seen any unpleasant side-effect. It has an effect in lessening the apathy and somnolence, and other nervous symptoms; it makes the whole course of the disease more bearable to the patient, and when combined with hydrotherapeutic measures has a real effect upon the so-called typhoid condition. The dosage of aristochin is similar to that of quinine, but much larger doses can be given because of the absence of unfavourable side-effects. As a result of his own experience the author affirms that aristochin is the best available preparation of quinine for children.

PATHOLOGY.

69. Wassermann's Reaction.

F. GLASER AND G. WOLFSOHN (*Wien. med. Klin.*, 1909, Nos. 46, 47, and 48) have tested the practical value of Wassermann's reaction in a large number of surgical and medical cases, many of which they were afterwards able to examine *post mortem*, and thus to "control" their results. The reaction was positive in 19 out of 106 surgical cases investigated by Wolfsohn. Some of the most interesting results were obtained in joint and muscular rheumatism; 5 out of 22 showed a positive reaction, and an antisyphilitic cure was quickly followed by recovery. Out of 14 cases of tumour, one showed a positive reaction; the case was one of carcinoma of the portio uteri in a woman with a history of syphilis. The diagnosis of carcinoma was confirmed by examination, and the great lesson of the case is that a suspicious tumour should not be treated as syphilitic in origin because of a positive Wassermann reaction, lest valuable time be lost. In 1 out of 4 cases of disease of the nervous system, and in 1 out of 5 of abdominal disease, the reaction was positive; in each class of case a positive reaction may be decisive as to the method of treatment. Glaser has 500 medical cases, in 130 of which the reaction was positive; 75 of the 130 were, however, cases of syphilis, secondary, tertiary, or congenital, and if these be separated from the others, the result was 55 positive cases out of 425; 73 cases, 21 positive and 52 negative, were examined *post mortem*. The cases giving a positive reaction fall into different groups according as there was or was not a history of syphilis, any sign or symptom of syphilis before death, or any sign of recent or old syphilis discovered at the autopsy in cases which ended fatally. In a series of 5 cases in which there was no history nor any clinical symptoms the anatomical examination after death confirmed the positive reaction by disclosing the presence in one case of an isolated gumma of a muscle, in a second of syphilitic intestinal ulcer, in a third of mesaortitis luetica, in a fourth of scars on the kidney substance, and in a fifth of pachymeningitis haemorrhagica interna. In another series of 5 cases of phthisis the only sign of syphilis was a positive Wassermann reaction discovered after death; at the necropsy the condition of the lung was suggestive of old syphilis. These cases are of interest as seeming to support the view that syphilis affecting the lung predisposes to phthisis. In 3 cases with a positive reaction the history was negative; there were no symptoms of syphilis, and no syphilitic condition was discovered at autopsy. Various explanations of these cases are suggested. It is, for example, possible that some syphilitic area in the body was overlooked in spite of careful investigation. It is suggested that spirochaetes might be present at some spot without giving rise to discoverable anatomical changes, or that, in spite of the negative history, infection might have occurred and have left no certain sign of syphilis behind. In support of the last hypothesis is the fact that in 10 of the cases advanced arterio-sclerosis suggestive of a syphilitic origin was found at the autopsy, while in the third—a case of cancer of the lung—the cancer may possibly have originated on the site of an old syphilitic scar. The authors' conclusions are that: (1) The results of *post-mortem* examination show that Wassermann's reaction supplied a correct diagnosis in cases in which there was no history or sign of syphilis discoverable during life. (2) The three cases which gave *post-mortem* negative results, but in which a positive reaction was obtained during life, are not incompatible with an old syphilitic infection. (3) As a rule, if the Wassermann reaction is positive a syphilitic area will be found *post mortem*. (4) In these cases of latent syphilis with positive reaction the only syphilitic lesion discovered may be an old scar, and therefore it cannot be taken as proved on anatomical grounds that an active virus is present, necessitating active antisyphilitic treatment. On the other hand, the possibility of the presence of an active virus with a consequent need of treatment cannot be excluded. (5) From a positive reaction conclusions as to prognosis are to be drawn only with the greatest care, while a negative reaction can supply only probabilities. (6) In a few cases of scarlet fever (in the author's series eases with uraemia), a fixation of complement may occur. In order to make a differential diagnosis between nephritis after scarlet fever and syphilitic nephritis, different antigens are, according to Bruck, to be made use of and observations made as to whether the complement-binding materials disappear out of the blood. (7) Obviously Wassermann's reaction is a help to diagnosis in medicine, both with respect to the main disease and to side conditions.