AN EPITOME OF CURRENT MEDICAL LITERATURE.

MEDICINE.

364. Crises of Hypersecretion in Gastric Ulcer.

MATHIEU (*Journ. des prat.*, October 7th, 1911) points out that these crises are found principally in ulcers of the pyloric region, although they occur in a less marked degree in the other sites of gastric ulcer. There may in these cases also be haematemesis or melaena, but the more pronounced symptom is pain. Another notable feature of these cases is the presence of a hyperchlorhydric residual fluid found in the stomach in the morning, this containing no alimentary detritus. The vomited matter may be almost black in colour or simply of a brownish tinge, like bouillon, and may fill a basin. The pain is coincident with spasm, and at first is relieved by taking food or by the administration of alkalis, but finally it resists this treatment. This is especially characteristic of pyloric or juxtapyloric ulcer. It may occur also in ulcer of the lesser curvature, but in this case there is an absence of the morning fluid with clapotage, such as is found in the former case. A diagnosis has sometimes to be made from tabetic crises. While the main symptoms are sometimes identical, in tabes there is not generally a progressive dyspepsia, and the attack is sudden, as is also its termination. On examination there is no clapotage and no pain on pressure. These crises of an ulcer in evolution must be distinguished also from the painful crises of stenosis of the pylorus of malignant origin. In these cases the hypersecretion is due to the stasis. Further, the vomited matter is of a foul and disagreeable odour. The appetite, too, of these patients is bad, and the increasing feebleness and general aspect all help to confirm the diagnosis of malignant disease. The gastric phenomena associated with uraemia may give rise to painful crises with hypersecretion, but the evident signs of Bright's disease in one form or another will prevent mistakes. The slighter forms of the condition may be healed by complete rest, and subcutaneous injections of atropine to relieve spasm. Alkalis are almost useless. Pylorectomy or gastro-enterostomy may have to be performed.

365. Pericholecystitis in Children.

SIMONINI (*La Pediatria*, May, 1911) says that this condition is commoner in young children than is generally believed; he gives brief clinical records of 17 cases in quite young babies verified *post mortem*. Out of 2,674 autopsies performed by the author on children below 4 years of age, pericholecystitis was present in 14.7 per cent. The relation between pericholecystitis and appendicitis is interesting; there may be no connexion, but if any such connexion exists it is usually from the gall bladder to the appendix, and not vice versa. Infective germs pass from the intestine without much difficulty into the biliary apparatus, and the bile has no antiseptic value. As might be expected, the *B. coli* is the most frequent offender. The author describes in a good deal of detail the appearances found in these cases, and illustrates with photographic reproductions. In some cases the gall bladder and appendix have been found bound together by adhesions; but, whilst appendicitis is rare in early infancy, cholecystitis is not infrequent. The clinical diagnosis of the condition is extremely difficult; a cry of pain, aggravated on movement, not relieved by the passage of faeces or urine, is a constant symptom. Jaundice may or may not be present. Tenderness over the gall bladder region is frequently found. The temperature in the acute phases is raised. Urobilinuria is frequently seen, and indicanuria almost constant (88 per cent.).

363. The Leucocyte Count during Sleep.

G. FULPIUS (*Sem. méd.*, June 28th, 1911) draws attention to some interesting facts in this connexion. Hitherto the influences of food, fasting, exercise, and certain medicaments have been recognized as affecting the leucocyte count. The author points out the sleep must be added as another physiological factor, which produces a marked variation of the leucocyte equilibrium. Impressed by the discordant reading of the blood in tuberculous cases, very comparable clinically, the author has come to the conclusion that the time at which the blood count is made is responsible for this. If the blood of an individual asleep or just awake is examined, it is found that the lymphocytes, which are normally 25 per cent., rise to 40 per cent. or more, while the polynuclears diminish in proportion as do the eosinophiles and basophiles. Two or three hours later, when the patient has begun to move about, the normal ratio is established. The actual total of leucocytes per c.mm. undergoes only slight variation, as do the red cells and percentage of haemoglobin. The author quotes, among other cases, that of a tuberculous patient whose blood examined during sleep gave a total of 18,500 leucocytes per c.mm. Of these, 74 per cent. were polymorphonuclears and 16 per cent. were lymphocytes. The result of an examination later in the day showed a total of 17,500, of which 80 per cent. were polymorphs and 7 per cent. lymphocytes. Indeed, a tuberculous person examined during the day may present a lymphopenia, whereas during sleep and rest there may be a normal average of lymphocytes. The author suggests that the slowing of the circulation during sleep may suffice to explain the condition as an unequal distribution of the elements of the blood—the heavier elements accumulating in the heart and great vessels, while the lighter elements circulate in the peripheral vessels. He is not, however, satisfied with such an explanation. The results obtained, however, go to show that, contrary to the usual opinion, the leucocyte equilibrium is not constant physiologically apart from the effect of food, exercise, and other influences.

367. Intradermic Reaction in the Diagnosis of Syphilis.

FONTANA (*Gazz. degli Osped.*, October 3rd, 1911) gives his experience as to the results of injecting various substances into the skin in relation to the diagnosis of syphilis. The substances used were: (1) Syphilin—that is, a glycerine extract procured from flat condylomata rich in treponemes; (2) sodium glycocholate in 10 per cent. watery solution; (3) phosphoplasmin, a preparation made from egg lecithin; (4) extract of guinea-pig's heart. Of these four substances the only one which gave at all satisfactory results was syphilin. This was tried in 67 patients, of whom 51 were syphilitic and 16 non-syphilitic. Of the 51 syphilitics 27—that is, 53 per cent.—gave a positive reaction twenty-four hours later, consisting in true skin infiltrations—not mere hyperaemic maculae, whilst in the other 16 cases only 2—that is, 12.5 per cent.—reacted. The best results (45.4 per cent.) were obtained in cases of secondary syphilis. Comparative tests in 40 cases were made with the Wassermann test, and whilst positive results were obtained in 85 per cent. of them, only 47.5 per cent. were positive to the syphilin test, which shows the superiority of the Wassermann test; but with improved technique the author believes the syphilin test may give better results in the future. The sodium glycocholate only gave 40 per cent. of positive results; probably stronger solutions might give better results, but, on the other hand, they would probably be too irritating.

368. Anarthria.

CLAUDE (*Journ. des prat.*, August 5th) relates the history of one of these rare cases. The patient was a woman who had previously had good health, and whose family history was also good. She became pregnant in January, 1908, and did well until the later months, when she suffered from headache and vomiting, finally becoming comatose. A child was born dead, the comatose condition lasting for for some days after this event. On recovering consciousness the patient was found to be paralysed on the right side and to have completely lost the use of words. The paretic symptoms improved considerably, and finally the sole trouble persisting was the aphasia. The patient understood what she was asked to do and could execute physical movements perfectly. This was proved by simply telling her to do a certain thing, but not showing her how to do it. There was no deafness, therefore. She likewise understood writing, and could carry out what she was asked to do in this way. There was, therefore, no agraphia. If asked to pronounce certain words, however, there was noted a marked defect of articulation, although even when her words were unintelligible it was possible to tell from the correctness of her syllables that she had a clear idea of the word required. There was no paralysis of the lips, tongue, or palate. The author then discusses the variety of affections for which the word "aphasia" is used. He points out that recent views seem to be that there are two principal classes which can be included in what is known as Broca's aphasia. In the one there exists both motor and

sensory troubles; in the other there is only speech difficulty. In cases in which the mental representation of the word is preserved, but the path of communication is cut between this centre and that for the movement of the lips necessary for articulation, the name of "aphemia" or "anarthria" has been given. In those cases of which this is an example there is no intellectual disability, and the patient may be able to follow her occupation, and is entirely responsible for her actions. The condition is curable by re-education of the muscles.

369. Congenital Lymphosarcoma of Spinal Theca.

G. BERGHINZ (*La Pediatria*, Naples, 1911, xix, 276) reports the case of an infant, born normally of young and healthy parents, that showed paralysis of both its legs, beginning three days after birth. A week later it came under his observation; it weighed 3 kg., and was a normal child but for flaccid paralysis and anaesthesia of the legs, beginning three fingerbreadths below the umbilicus; the anus was patent, the urine dribbled continuously, the deep reflexes of the legs were absent, and the muscles of the legs did not respond to electrical stimulation. The temperature was normal; Wassermann's reaction was absent; the child wasted and died in a fortnight. Nothing abnormal was found *post mortem* except in the spinal canal; a small-celled lymphosarcoma, 4 cm. long and nearly 2 cm. wide, was found in the lumbar region between the eleventh dorsal vertebra and the promontory of the sacrum. It was soft, gelatinous, adherent to the dura mater, and crushed the spinal cord. Berghinz's description leaves it uncertain whether the tumour arose from the dura or the periosteum. Apparently no secondary deposits were found.

SURGERY.

370. Linitis Plastica (Cirrhosis of Stomach).

HENRY H. M. LYLE (*Ann. of Surg.*, November, 1911) gives a full historical survey of this disease with a complete list of synonyms, a synopsis of all the cases known, and a bibliography of 242 references, together with a report of a case under his own observation, cured by gastro-jejunostomy. Brinton, in 1854, was the first to claim for the condition that it was a special disease of the stomach. He named it "linitis plastica," and pointed out that it was benign in nature, characterized by a diffuse or circumscribed increase in the connective tissue, involving chiefly the submucosa and to a less degree the other layers of the stomach, so that the stomach walls were markedly thickened and its lumen as markedly diminished. Clinically the disease is characterized by insidious onset, slow progressive gastric symptoms, cachexia, death. Other names suggested are sclerosis of the stomach, chronic interstitial gastritis, gastro-intestinal sclerostenosis. The pathology is not yet clear; it has been suggested that it is a stage of advanced gastritis, a primary atrophy, a result of chronic passive hyperaemia due to cardiac insufficiency, a diffuse cancer of the stomach. But amidst all the theories two main ideas stand out—one that linitis plastica is a special affection of an indefinite nature and cause, the other that it is a special form of scirrhous cancer. Two forms are recognized—the local, which is rare; the general, which is the commoner. In the latter the stomach is found to be a shrunken, thick-walled tube, often so rigid that on removal collapse of the viscus does not occur, but its original shape is maintained; its peritoneal covering is dull grey in colour and scarred in appearance. The stomach wall is greatly increased in thickness, even to six or eight times the normal, the submucosa playing the chief part in the abnormal thickening. The mucosa is often normal in appearance and function. In marked involvement of the walls the knife seems to be cutting through cartilage. Tumour formation is uncommon; it is a flat infiltrating process, and associated chronic peritonitis is generally present. Microscopically it is seen that the most marked and constant lesion is a diffuse hypertrophy of the connective tissue elements of the submucosa. The bundles of white connective tissue traverse the layers in irregular bands surrounding the blood vessels and interlacing with one another. The resemblance of this tangled interlacing of fibres to the weave of sail-cloth suggested the word "linitis" to Brinton. The symptoms are at first those of indefinite dyspepsia, then vomiting, anorexia, gastric pain, and tenderness. Vomiting is that of a small stomach intolerant of any but a small quantity of food. The points in favour of benignity are: A history of cardiac insufficiency, endarteritis; its occurrence in comparatively young people; its long duration; absence of evidences of dilatation of stomach; the slow decrease in size of stomach; the infrequency of haematemesis and melaena; the character of the cachexia, that of a starvation rather than poisoning; the appearances to the *x* rays after a bismuth meal. The treatment depends on the difficulty of establishing that the disease is not cancer, or at least a precancerous state, and so gastrectomy is the operation of choice. Gastro-enterostomy may be, and has been, successful, as in the author's case.

371. Extensive Calcification of Lymphatic Ganglia.

A CASE of extensive calcareous infiltration of various ganglionary territories, for which the authors have been unable to find a parallel in medical literature, is described by Rocher and Spéder (*Arch. d'électr. méd.*, September 25th, 1911). The patient, a woman aged 36 years, who had had enlargements in the neck from girlhood, was first treated for an ulceration of the tongue. Lingual tuberculosis was demonstrated, and to this was added an epitheliomatous reaction. An operation was performed, and it was discovered that on both sides of the neck, in the submaxillary region and above the clavicle, there were chains of very hard fibrous masses. Later there was great distension on one side of the neck, accompanied by sharp pain, both locally and by irradiation, in the occipital region and the nape. A month afterwards a cold abscess made its appearance over the sternum, and invaded one of the mammary glands. This cleared up under treatment, but a radiograph made on that occasion revealed an extensive calcification of ganglia, affecting the submaxillary, cervical, supraclavicular, and intrathoracic groups. At this time the condition was thought to be one simply of ganglionary tuberculosis, but later investigation proved the co-existence of tuberculosis and cancer in the same organs—namely, the tongue and ganglia. Radiotherapy was unavailing, and gave rise to an irregular reaction. The submaxillary and upper cervical regions at this stage were greatly tumefied; salivation was present as well as difficulty in swallowing, and there was a bitonal voice by reason of the oedema of the arytenoid region. A palliative intervention was made, but the patient died shortly afterwards. A special point of interest in the case was the radiograph, which showed on each side of the vertebral column, from the mastoid and suboccipital region to the supraclavicular, and to some extent even towards the diaphragm, abnormal shadows, arranged like knotted cords, and consisting of closely compacted opaque masses varying in size from a pea to a large bean. In places these small shadows had an opacity greater than that of the vertebrae or the ribs, and it was possible even to see the retropharyngeal ganglia in front of the mass of the vertebral bodies. The sterno-cleido-mastoid muscle was limited both within and without by the superficial and deep cervical chains. Certain of the masses were formed almost entirely of opaque deposits of nebulous aspect, others were homogeneous deposits of clear contour. The ramified and spongy aspect frequently noted in calcified glands in the lumbar and renal region most nearly approached the appearance observed in this patient.

372. Gastro-colic Fistula discovered by X Rays.

AN interesting case, incidentally proving the value of radiological screen-examination before surgical intervention, has been related by Menuet before the Société de Radiologie Médicale de Paris (*Bull. et mem.*, October, 1911). The patient, aged 24 years, began to suffer in boyhood from violent sick headaches, accompanied by abundant vomiting. Towards the age of 20 these attacks became more frequent, sometimes taking place twice a week. The vomiting was very acid and bilious, and generally appeared about a quarter of an hour after a meal. Its frequent repetition and the patient's consequent emaciation gave rise to neurasthenic troubles, with a suicidal tendency. The patient was pronouncedly of the hyperchlorhydric type. Before ultimately making a laparotomy, a radioscopic examination was undertaken, and this proved that there was no abnormality in the oesophagus, that the fundus of the stomach was two fingerbreadths below the umbilicus, that there was no gastric dilatation, and that more than normally energetic contractions in the juxta-pyloric zone appeared in association with a certain degree of pyloric stenosis. Very little bismuth was evacuated by means of the pylorus, but it was discovered that the bismuth was being passed through a gastro-colic fistula until the colon was filled with the successive ball-shaped masses of the meal. It was thus clear that this hyperchlorhydric patient had pyloric stenosis, because of the unusual energy of the peristaltic contractions and the feeble evacuation towards the duodenum, and that he had

a gastro-colic fistula, the stomach emptying into the colon. The fistula was situated at the angle formed by the transverse and the descending colon. In view of the feebleness of the patient, a rapid gastro-enterostomy was done, and the fistula was not obliterated. The patient rapidly got well, the vomiting ceased, and within six weeks he had gained 11 lb. in weight. Two subsequent *x*-ray examinations were made within three months of the operation, and both showed that the stomach was enlarged in its tubular portion, that the juxtapyloric region was the site of peristaltic contractions, that the bismuth passed with great difficulty by way of the pylorus, that the new gastro-jejunal opening had a perfect function, and that the old fistula appeared to have no functional capacity. Even when the abdominal walls were made to contract very forcefully, nothing passed directly from the stomach into the colon.

OBSTETRICS.

373. Pyelitis during Pregnancy.

ERNST VENUS (*Wien. klin. Rundsch.*, Nos. 33 and 34, 1911) reviews the literature on the subject of pyelitis during pregnancy. The etiology of pyelitis gravidarum is not yet established with certainty. Probably infection may be either an ascending infection from the bladder, or may be by way of the blood vessels or the lymphatics, the customary infection being the ascending one. Albeck found that in some cases considered to be pyelitis in pregnancy pus had been present before pregnancy began, and Kermanner looks upon the condition as often only of the nature of an acute relapse of a latent colipyelitis. Bacteriuria may exist without pyelitis, and it is certain that damming back of the urine plays a great part in the production of pyelitis. Albeck suggests that defective function of the sphincter vesicae during pregnancy may change a bladder bacteriuria into a cystitis, but that the bacteria do not make their way in the ureters unless there is stagnation of urine as a result of compression. It does not appear that the compression can always be the result of pressure by the pregnant uterus, because in a certain number of the cases pyelitis sets in during the first half of pregnancy, when pressure by the uterus on the ureter cannot be accepted as a cause. To such cases the explanation suggested by Mirabeau and Hartmann may be applicable—namely, that the mouth of the ureter is closed by the pressure of the thickened and swollen bladder wall. Hartmann has also pointed out that the swelling of the mucous membrane of the whole urogenital tract, together with the changes of form of the bladder during pregnancy, may be important factors in hindering the flow of urine and causing stagnation. The present author, while not denying the pressure of the uterus as one of the causes of pyelitis in many cases, would lay even greater stress on the causes assigned by Mirabeau. The *Bacillus coli* is the most frequent infective organism, but staphylococci, streptococci, and *Bacillus proteus* are often found. The symptoms and course of a pyelitis of pregnancy are, as a rule, somewhat typical, and the diagnosis is usually not difficult if cystoscopy and catheterism of the ureters are carried out. Appendicitis, cholelithiasis, threatened miscarriage, and paranephritic abscess are the conditions to be considered in making a differential diagnosis. The prognosis for the mother is, as a rule, good as far as her life is concerned, but not so absolutely good with regard to complete recovery. The prognosis for the life of the child is usually unfavourable, but is better the nearer to the end of pregnancy the pyelitis sets in. The treatment is in the first place conservative. Catheterism of the ureter and lavage of the pelvis of the kidney are indicated in all severe cases. Artificial interruption of pregnancy only comes into question in the rarest cases, and is only indicated in severe degenerative processes in the kidneys.

GYNAECOLOGY.

374. Interstitial (Tubo-uterine) Pregnancy and the Curette.

STONE SCOTT (*Amer. Journ. Obstet.*, November, 1911) in a clinical address on interstitial pregnancy expresses his belief that it is not nearly so rare as is usually supposed, and that the general practitioner and the obstetrician as well as the pathologist should be on the look-out for it, especially in obscure cases of suspected incomplete abortion where the curette is employed. He distinguishes three distinct varieties. The external interstitial form is that which is best known and is very dangerous. The sac develops in the outermost part of the uterine wall, including, perhaps, some of the contiguous portion of the Fallopian tube. Early rupture seems all but invariable, and the case must be treated as a ruptured tubal sac. A middle interstitial type, where the ovum develops regularly in the uterine part of the tubal canal, the uterine wall of the sac being almost equally thick on its tubal and on its uterine side, has been demonstrated, but it is exceedingly rare. It ruptures early, and, as in the external variety, its surgery is that of ruptured tubal sac. There remains the internal variety where the sac develops close to the uterine orifice of the tube. Stone Scott trusts recent reports of cases of internal tubo-uterine pregnancy and believes that he has himself observed it. He holds that it is more common than dangerous. On *a priori* reasoning the ovum might find its way into the uterine cavity, whether by development or tubal abortion. The author states positively that he has failed to find a single instance on record where a sac, interstitial at first, grew into the uterus, and continued its development normally in the uterine cavity. On the other hand, tubo-interstitial abortion, the normal uterine cavity receiving and expelling the ovum, is, he maintains, not unknown. He quotes three cases in his own practice where symptoms of abortion, painful and incomplete, developed. The curette being used, a cavity was detected corresponding to the junction of the tube with the uterus, whilst there was no evidence that the latter organ was bicornute. In a fourth case Stone Scott feels sure that he succeeded in detecting what he could not find recorded. A swelling as big as a walnut was definable on the right side of the uterus at the third month, the patient had miscarried twice, and she complained of abdominal pain and bleeding. By the fourth month the supposed fibroid was merged into an irregularly-shaped uterus, which became within a month later perfectly symmetrical. When labour occurred, the membranes were so tough that it was necessary to incise them with sharp scissors. Then spontaneous delivery followed. It is certain that the curette not rarely enters a cavity at the cornu when it is employed for an early incomplete abortion, and that in some instances that cavity lies in an "internal" interstitial sac; whilst the interpretation of the lecturer's fourth case may be disputed. He notes that most authorities ascribe to gonorrhoeal or puerperal infection all forms of tubal gestation; but all his four cases occurred in married women who had been entirely free from such infection. All, however, had previously undergone curetting for various reasons. On that account he was inclined to believe that this common therapeutic measure was the etiological factor in the production of these interstitial pregnancies.

THERAPEUTICS.

375. Silver Acetate in Ophthalmia Neonatorum.

HANS TREBER (*Wien. klin. Rundsch.*, Nos. 35 and 36, 1911) reviews the results of the prophylactic use of silver nitrate for ophthalmia neonatorum, and recommends the adoption of prophylactic treatment as a routine measure in private practice as well as in hospital practice. He does not, however, deny the possibility of setting up the so-called "silver catarrh" if a solution stronger than 2 per cent. of silver nitrate is employed, and admits that when a solution is kept for some time evaporation may lead to concentration to a greater strength of silver nitrate, enough to set up irritation when brought into use. In order to avoid this danger, silver acetate, as recommended by Zweifel (1900), is to be preferred to silver nitrate. At a temperature of 14° (58° F.) silver acetate is only soluble to the amount of 1.02 per cent., and therefore too strong a solution is impossible. Its action is as prompt and certain as that of silver nitrate, and, according to some authors, is even better. Thus Thies, in each of 2,000 infants, had 1 per cent. silver acetate solution dropped into one eye and 2 per cent. silver nitrate solution into the other. Five of the children developed ophthalmia, but in two of the cases the inflammation attacked the silver nitrate eye and not the other. To test the value of Credé's prophylactic method, as carried out with either silver nitrate or the acetate, the author has made a study of the statistics of institutions for the blind and of the cases which have come under his own care. The diminution in the number of cases in which gonorrhoea was the cause of blindness was well marked in the case of the Royal Institute for the Blind in Munich, from an average of 42.9 per cent. in the years from 1876 to

1892, when Credé's method would not have been employed for any of the cases, to an average of 25.4 per cent. in the last seventeen years, when the method would have been somewhat widely employed—that is, a fall of 16.4 per cent. The author also reports on the results of treatment in 426 births at the School for Midwives in Munich. In 14 cases, 3 per cent. of the whole, the mothers suffered from a muco-purulent vaginal discharge, but none of the children in these cases developed ophthalmia. In 7 other cases, where there was no suspicion of disease of the mother, there was a purulent eye affection in the child, but only one of these was gonococcal in character—that is, 0.2 per cent. Even this case might evidently have been avoided, and was probably due to some defect on the part of the nurse, since the inflammation affected one eye only. The article concludes with a strong recommendation for the use of the prophylatic treatment in every case, the best solution to employ being one of silver acetate.

376. Diphtheria Antitoxin.

CAILLÉ considers (*Pediatrics*, 1911, xxiii) that when scarlet fever or measles are complicated by diphtheria from the start it is unwise to wait for a laboratory report for confirmation before employing antitoxin. In some forms of bronchopneumonia diphtheria is the primary agent at work. Early and persistent dyspnoea with marked cyanosis are pronounced, and not infrequently large membranes are coughed up. In these cases antitoxin should be given freely in large doses, and 5-grain doses of camphor in oil prescribed every two hours for one day. In cases of whooping-cough antitoxin is indicated as soon as the slightest visible throat or nose exudate occurs. In stomatitis and noma the culture findings are usually negative as to diphtheria, but antitoxin is often valuable in these cases. In foul-smelling sore throat and mouth with a pus-like non-membranous exudate antitoxin frequently acts as a charm, although cultures as to diphtheria are negative. The author recommends as a safeguard for individuals previously sensitized by horse serum the use of a scratch test similar to von Pirquet's test for tuberculosis. If a minute quantity of serum rubbed into a scratch in the skin is followed by severe local or systemic reaction, its further introduction into the system in a full dose is to be avoided.

377. Electrical Treatment of Thyroideal Instability.

LAQUERRIÈRE (*Arch. d'électr. méd.*, September 10th, 1911) suggests electrization of the thyroid body in certain cases of thyroideal instability characterized by various phenomena of hypothyroidation and hyperthyroidation. He publishes three observations, the first two showing clearly the Basedow syndrome (*formes frustes*). A woman, aged 42 years, who had always been nervous and impressionable and subject to palpitation, had shown two months previously a thyroid body, the right lobe of which was more appreciable than the left. Ordinary treatment having no result, a negative galvanization of the thyroid body was instituted (current, 20 milliampères; duration 10, afterwards 15, minutes) with inhalation of ozone. An immediate diminution in the pulse-rate was noticed after each sitting, and the patient rapidly improved. Circumstances made it impossible to continue the treatment after fifteen sittings, by which time the pulse was reduced from 96 to 84, and the crises of breathlessness and palpitation were produced less easily and were less intense. Eight months later the improvement was fully maintained. The second case was that of a young woman, very obese, suffering from general ill health, with crises of palpitation and dyspnoea. The thyroid body was well marked without being, properly speaking, hypertrophied. Negative galvano-faradic treatment was directed upon the thyroid body (10 to 20 milliampères; ten-minute sittings) together with inhalations of ozone, which latter were agreeable to the patient, although six months previously they had not modified her condition. After thirty sittings the patient had greatly improved. From the first there was some amelioration, the patient becoming less subject to breathlessness, although attacks of palpitation still persisted. The third case was simply one of thyroideal instability with appreciable tachycardia (pulse 110). Galvano-faradization of the thyroid body resulted in a considerable amelioration. After twenty-six sittings the pulse was maintained at 74–80, and the palpitation and also the phobia disappeared. From these and other cases the author concludes that when an arthritic or neuropathic patient shows a marked tachycardia it is well to think of a thyroideal origin and to institute an electrical treatment bearing upon the gland itself. This is especially the case if the symptoms fail to respond or respond incompletely to an appropriate medical treatment. The best electrical procedure is negative galvano-faradization.

378. Novojodine.

DRACHTER (*Zentralbl. f. Chirurgie*, No. 34, 1911) describes the use of novojodine as a substitute for iodine in surgical tuberculosis. Novojodine, with the formula $C_6H_{12}N_4I_2$, is mixed with equal parts of talc, and forms a light brown powder, without odour, insoluble in the usual solvents. In addition to other preparations, it can be obtained as a 5 per cent., 10 per cent., or 20 per cent. novojodine gauze. Novojodine in contact with the tissues splits into iodine and formaldehyde. Schattenfroh found that in blood serum, pus, and physiological salt solution, in dilutions of 1 in 1,000, it has a strong disinfectant action superior to that of iodoform. The present author has tested novojodine clinically principally in tuberculous diseases, especially of the bones and joints, and also in tuberculous fistulae and abscesses of the soft parts. In open tuberculosis with suppuration novojodine was found to reduce the amount of pus and to aid in quickly drying up the wound and in the formation of healthy granulations. Tuberculous wound cavities were either filled with a suspension of novojodine or packed with novojodine gauze, and almost invariably the treatment led to a cessation of the suppuration. The author has invariably had good results in the treatment of open-joint tuberculosis. Novojodine is to a high degree deodorant in its action, a peculiarity due to the action of the formaldehyde. This deodorant action was very marked in a case of gangrenous appendicitis. The preparation seems to be altogether non-irritant and non-poisonous. Even used in large quantities for small children there were no unpleasant side-effects, and animal experiments also showed the harmlessness of the drug. Novojodine is stable in the dry state at ordinary temperatures, but is decomposed at high temperatures. It is considerably cheaper than iodoform.

379. Cutaneous Affections consecutive to Salvarsan Injections.

FISICHELLA (*Rif. Med.*, May 22nd, 1911) reports two cases of syphilis treated by gluteal injections of salvarsan (0.60 and 0.40 gram of a slightly alkaline solution respectively) followed at a short interval by skin eruptions. The first case was a man suffering from gummatous ulceration and syphilis of eighteen years' duration. The salvarsan acted very well on the syphilitic lesions, but thirteen days after a typical attack of herpes zoster occurred in the fifth and sixth right intercostal space; the only difference from an ordinary attack of shingles was the mildness and the short duration (about six days). In the second case, a woman suffering from secondary syphilis, ten days after the salvarsan injections an attack of erythema circinatum, preceded by intense pruritus, set in, lasting about five days. A little later the same patient was treated by another doctor with arsenic, and a similar but less marked eruption developed. Both these cases were in the author's opinion due to the injections of salvarsan.

PATHOLOGY.

380. Wassermann Reaction.

J. B. STEIN (*Med. Record*, November 18th, 1911) states that the Wassermann reaction is not positive in syphilis until the seventh week after the appearance of the chancre. A negative reaction does not prove the absence of syphilis, but the positive reaction does prove its presence. Untreated secondary syphilis gives a positive reaction generally; treated secondary cases give a positive reaction when symptoms are present. Untreated tertiary syphilis gives a positive reaction, but treated tertiary may not give it. Latent syphilis often gives a weak reaction; 10 per cent. of tabes and nervous syphilis cases are negative, 20 per cent. incompletely positive, the rest positive. In dementia paralytica the reaction is always positive. In congenital syphilis the reaction is strongly positive. Treatment makes a positive reaction negative; prognosis is bad when this is not the case. This reaction has shown that the mother of a syphilitic child is also syphilitic, and that the child of the syphilitic mother is not immune to it. The serum of nervous and anaemic children and of syphilitics about to marry should be tested by the Wassermann reaction. The great practical value of this test to the masses should be utilized by the establishment of large municipal clinics.