On some rarer factors in Graves's disease.

After the administration of iodo-theobromine, the pressure rises in the radial artery from 150 or 170 to 200 *grammetres* and from 250 to 300 *grammetres*. Should the pulse be so weak and soft that the blood pressure in the artery cannot be accurately determined, a dose of iodo-theobromine steadies the heart and the blood pressure rises sufficiently to permit of its being expressed in *grammetres*.

In a case of mitral stenosis and incompetence with some corresponding incompetence of the tricuspid valve, and venous pulsation over the liver and in the jugular veins, the force of the cardiac contractions considerably increased under the daily administration of two and a half grammes (thirty-eight grains) of iodo-theobromine in the twenty-four hours, while the venous pulsations disappeared and the pulmonary second sound which was very weak when the treatment was commenced became distinctly audible.

There can be no doubt about the diuretic action of iodo-theobromine and iodo-caffeine. It is manifested even in the absence of œdema or dropsy of any kind and in spite of the existence of polyuria as in the resolution stage of subacute nephritis.

In a case of pleurisy with a large accumulation of fluid in the pleura, the total quantity of urine excreted in the twenty-four hours rose from 20 oz. to 67 oz. under the influence of theobromine.

Iodo-theobromine was also tried in a case of hypertrophic venous cirrhosis of the liver complicated by ascites and anasarca, in which repeated doses of calomel and diuretine (salicylate of sodium and theobromine) had failed to give relief; under the administration of iodo-theobromine the quantity of urine excreted in the twenty-four hours increased from 10 or 15 to 42 or 50 oz., and the diuretic action of the remedy persisted for a few days after the cessation of the treatment.

In a case of diffuse subacute nephritis with anasarca, the total quantity of urine excreted in the twenty-four hours increased to 67 and even 80 oz., while the œdema disappeared.

The dose varied from fifty centigrammes to three grammes (eight to forty-five grains) in the twenty-four hours for an adult. In no case did we find it necessary to have recourse to larger doses. The remedy is best administered in the form of powders or in *cachets*.

From a comparative study of the therapeutical effects of iodo-caffeine and iodo-theobromine we have arrived at the conclusion that the latter is more active in increasing diuresis, the force of the cardiac systole and the blood pressure.

So far as we are able to judge from clinical experience, iodo-caffeine seems to be especially indicated when—as in cases of mitral stenosis—it is necessary to increase the amplitude of the diastole in order to facilitate the passage of the blood through the stenosed auriculo-ventricular orifice into the ventricle. Iodo-theobromine should be preferred to iodo-caffeine (which is not so stimulating to the inhibitory cardiac mechanism) in cases in which it is desired to increase diuresis and the strength of the ventricular contractions, and when — as in aortic incompetence — the action of caffeine on the diastole might prove injurious by favouring the regurgitation of blood into the left ventricle through the incompetent aortic valves.

Iodo-caffeine and iodo-theobromine exert no special action on the respiration or temperature. They are well borne by the stomach, and are rapidly eliminated by the kidneys, provided these organs are not too extensively diseased. There is only one drawback to the use of these substances: when administered in large doses they are apt to excite a spasmodic cough due to the free elimination of iodine by the respiratory mucous membrane.

From the foregoing facts we believe we are justified in concluding that the introduction into medical therapeutics of certain xanthine derivatives, combining the physiological properties of the iodides with those of caffeine and theobromine, is not devoid of interest from a practical point of view.

Clinical Lecture

ON

GALACTOPHORITIS.

Delivered at the Charité Hospital.

By Dr. BOISSARD,

Accoucheur to the Paris Hospitals.

The discovery of the existence of infective germs has thrown quite a new light on the pathogeny of numerous affections which until a few years ago were erroneously attributed to a host of different causes. These affections comprised the various inflammatory changes, whether accompanied by suppuration or not, observed in the mammæ *post-partum*. How far is our present conception of the pathogenesis of these phenomena from the old theories according to which the mammary inflammations of the puerperium were to be referred to metastatic influences, congestion or obstruction to the flow of milk!

The humoural theory, the old favourite, has now been superseded by the microbial theory or theory of infection, which enables us to appreciate the real significance of many facts that would otherwise remain obscure or would be only very imperfectly understood; moreover, we are now in a position to understand the hidden relationship between certain manifestations which are apparently perfectly distinct from one another.

That the nature of the "soil" plays an important part in the development of the affections already alluded to, there can be no doubt, although the influence of this factor has yet to be accurately determined; but it is now universally recognised that the mammary inflammations of the puerperium are due to infection by an infective or septic agent of some sort. Although such cases are becoming rarer and rarer at the present time owing to the strict application of the rules of antisepsis, they are still occasionally met with. This is not surprising, seeing that for several days after labour, the patient is in imminent danger of infection especially as it is extremely difficult to keep the wounded parts (uterus, vagina, vulva) perfectly aseptic on account of their anatomical arrangements.

Even such a physiological sequence of labour as suckling may be a cause of infection by favouring the introduction of septic germs into the ulcerations, excoriations, etc., which are of such frequent occurrence on, or around, the nipple.

It is even maintained by certain observers that the pre-existence of a crack or fissure is not essential for infection, that the infective agent, having been deposited on the surface of the nipple, is capable of passing along the milk ducts, in the opposite direction to the flow of milk, setting up *galactophoritis*, just as the gonococcus is capable of setting up urethritis or cystitis by passing up the urethra in the opposite direction to the flow of urine.

The mammary manifestations observed during the suckling period, and especially at the commencement of that period, are of two kinds, both of which are due to the same cause; they appear in the form of lymphangitis or galactophoritis, culminating sometimes in the formation of an abscess. In cases of lymphangitis, however, we are dealing with a periglandular inflammation invading the cellular tissue of the breast through the lymphatics; while in cases of galactophoritis, we are confronted with a glandular, parenchymatous suppuration invading the acini of one or more of the mammary lobules through the lactiferous ducts. It is the latter condition, and galactophoritis in particular, that I propose to discuss in the present lecture.

Mammary abscesses have been recognised and described by the most ancient writers and they have been very appropriately divided by J.-L. Petit and Velpeau into parenchymatous glandular abscesses and abscesses of the cellular tissue. It seems to me, however, that the part played in the ætiology of these cases by the *milky way* has not received due consideration; and those of you who have attended my ward visits have had ample opportunities of satisfying themselves of the importance of this channel of infection. This I shall endeavour to demonstrate, for I believe a knowledge of this fact may prove useful to you in the future.

I feel quite at home in discussing the subjet of galactophoritis in this hospital, for I am backed up by the authority of Dr. Budin, the accoucheur in charge of these wards, who in a clinical lecture delivered here in 1888, and in a communication to the Academy of Medicine in the following year, withdrew this old morbid entity from the oblivion into which it had fallen, devising at the same time a successful method of treatment based on the principle then enunciated.

Galactophoritis consists in an inflammation of the lactiferous ducts, due to the invasion of these ducts by septic micro-organisms (streptococcus, staphylococcus). It may be localised or *pure*, to use a more precise term, that is to say, it may occur as a primary infection, neither accompanied nor followed by any lymphangitis.

On the other hand, lymphangitis and galactophoritis are often found associated in the same patient and naturally the sypmtoms are different according as these affections exist simultaneously or separately. I may add that simple primary galactophoritis may, and often does, escape detection seeing that it is very insidious in its onset and does not give rise to a very pronounced reaction. This is the reason why this affection has remained for a long time unrecognised in spite of the description that was given of it by Chassaignac under the name of *canalicular intero-mammary abscess*. The terminal manifestation of the process, viz., the formation of a parenchymatous glandular abscess was alone taken into account while the initial change, viz., the presence of pus in the lactiferous ducts was ignored, as the pus escaped mixed with the milk.

Although galactophoritis may arise primarily without any antecedent lymphangitis, I am not quite sure that infection can

take place in the absence of a solution of continuity at the orifice of the lactiferous ducts on the surface of the nipple; in short, I believe that the inflammation very frequently, not to say invariably, starts from a small crack or fissure which offers a favourable soil for the growth and development of infective germs introduced from without. As a matter of fact the fissure may be so small as to escape detection. Fissures of the nipple should, therefore, be treated as soon as they appear, or still better, they should be avoided by appropriate treatment, for example, the application of boracic acid or naphthol compresses, the nipple being washed each time after suckling. The more carefully the nipple is attended to, the less is the risk of mammary complications.

In any event, whether the nipple be sound or excoriated, galactophoritis when once started, is apt to extend to the acini and, it may be, to the periglandular connective tissue resulting in the formation of extensive and recurring abscesses.

The inflammation being limited to the lactiferous ducts, to begin with, the affection may be overlooked in the early stage as it is attended by very few, if any, constitutional symptoms; the temperature seldom reaches 100°.4 F.; there is usually no rigor, except when galactophoritis is preceded by, or associated with, lymphangitis. In the latter case the breast is swollen and painful to the touch; the skin over the organ is tense, shining, with a dusky patch usually on the more dependent part; the superficial lymphatics may stand out as red lines and the glands in the corresponding axilla are sometimes enlarged and painful. This form of the affection is, in my opinion, the least dangerous, because as it gives rise to considerable inconvenience, the patient is at once put under treatment; it is a very different case with simple primary galactophoritis and this is a point to which I wish especially to call your attention.

The latter form of galactophoritis, on the other hand, is not so easily diagnosed and the pain the patient complains of is not unfrequently attributed to the presence of a fissure. Galactophoritis is characterised by the escape of pus, either pure or mixed with milk when pressure is applied to the periphery of the breast. Pus varying in quantity and appearance according to the stage and intensity of the inflammation, is then seen to exude from the orifices of the lactiferous ducts on the surface of the nipple. The quantity varies from a few drops to a liqueur glassful; when the suppurarion is sufficiently abundant the pus is at first mixed with milk, but the fluid soon assumes a suspiciously opaque appearance. In the more insidious cases in which the risk is greatest for the child, the presence of pus may only be detected on microscopical examination.

The following are, according to Dr. Budin, whose name is inseparable from all discussions on this subject, the principal points of differentiation between pus and human milk :

(1) Colour : pus is of a paler yellow, with a grey or green tint.

(2) Consistence : pus is denser and more homogeneous in appearance.

(3) Absorption by cotton-wool: cotton-wool is more rapidly saturated with milk than with pus which is not taken up so readily and only permeates the superficial layers of the wool.

(4) Exudation from the nipple: milk being more fluid runs down the nipple as it exudes; pus, on the contrary, accumulates at the orifice of the duct until the drop is large enough to be influenced by gravity.

There is another sign of great diagnostic importance, however, which should always direct your attention to the condition of the breast; I am referring to the effect produced on the child by the presence of galactophoritis in the mother. This is ascertained by weighing the child every day; and I may tell you that in mild cases of galactophoritis without constitutional symptoms, a fall in the weight of the child is frequently the first indication of the existence of the disease.

An infant who has swallowed even a small quantity of pus loses weight rapidly, to the extent it may be, of 100 grammes (4 oz.) or more in the twenty-four hours. More than this, in spite of treatment the loss of weight continues and becomes more and more marked, so that at the end of three or four days the difference in weight may reach 300, 400 grammes or more.

In this respect some of you may remember two cases under our observation in these wards. In the first the child's life was saved by its being given a wet nurse at once; it had lost 120 grammes in two days. In the second case the child was brought up on sterilised milk in the wards as soon as the real nature of the mother's affection was recognised. The child weighed 2,350 grammes at birth; on the second day the weight had come down to 2,250 grammes; from the sixth to the seventh day he lost 200 grammes and on the eighth day he only weighed 1,700 grammes, so that he had lost 650 grammes *in eight days*, and that in spite of all treatment (calomel, benzo-naphthol, enemata of boracic acid lotion, ass's milk, etc.).

Unless you are aware of these facts such cases would greatly puzzle you, seeing that there is nothing to be found on examination to account for this rapid loss of weight which soon threatens the child's life if not promptly checked. The most careful examination of the different systems reveals nothing abnormal and there may be no evidence of any diathesis such as tuberculosis or syphilis. It is extremely interesting to observe that in the last case just described, the child had lost 450 grammes while the temperature of the mother, who was suffering from suppurative inflammation of the lactiferous ducts, remained normal until the eighth day. Only once did it rise to 100°.7 F. but it returned to normal within twenty-four hours and remained so. It was not until the eighth day, when the child had already lost more than 500 grammes that the mother showed a slight rise of temperature. Was I right in telling you that the diminution observable in the child's weight is of the greatest importance from a diagnostic point of view? It is frequently the first indication that will enable you to diagnose the presence of pus in the lactiferous ducts of the mother.

The prognosis is extremely bad for the child if this rapid loss of weight is accompanied by profuse diarrhœa with green motions presenting a more or less granular appearance; the temperature rises, the skin assumes a slight icteric tinge, the diarrhœa persists, with profuse and offensive evacuations and the emaciation increases with amazing rapidity.

Let us now discuss the question of treatment. In reference to this I shall insist again on the importance of preventive treatment, and on the necessity for the most scrupulous cleanliness in connection with the breast which should be washed before and after suckling, especially if the nipple be fissured or the infant be suffering from ophthalmia or suppuration.

Immediately the presence of galactophoritis is recognised, the mother should be forbidden to nurse the child from the affected breast and nursing should be at once stopped altogether if both breasts are involved. Lastly, you should give vent to the pus as recommended by Dr. Budin. Incision being out of the question, the desired result is obtained as follows :

The pus contained in the lactiferous ducts is squeezed out by pressing from the periphery of the breast towards the nipple; the pus is then seen to exude from the surface of the nipple. The operation is continued until the exudation ceases, but it may be so painful as to necessitate the administration of chloroform. The pus having been evacuated by this means, the breast is kept moist with a spray of corrosive sublimate lotion or a solution of naphthol for about half an hour, followed by the application of a dressing which is kept on by means of a tight bandage.

The patient is at once relieved, the temperature falls, and it is only in exceptional cases that it is necessary to repeat the operation more than three or four times, so that, if treated early, galactophoritis is usually cured at the end of the fourth or fifth day. If, on the contrary, the affection is not recognised and treated at once the inflammation extends to the acini, resulting in the formation of one or more glandular abscesses.

Early and active intervention by Dr. Budin's method is, therefore, the key to success in these cases.

Before allowing the mother to resume nursing you must first ascertain by pressing the breast from the periphery inwards that suppuration has disappeared from the lactiferous ducts for at least forty-eight hours previously. It should be borne in mind, however, that in the majority of cases the mother ought to give up nursing altogether.

The prognosis is usually favourable for the mother provided the method of treatment above described be employed. The case is unfortunately very different for the child, although I am unable to give any definite figures in support of my assertion, for the termination of the case depends on various circumstances such as the degree of vitality of the infant, the quantity and virulence of the pus, etc. In any event, the child died in one of the two cases under our observation in these wards, despite the fact that not a minute was lost in the application of appropriate treatment.

These two cases appeared to me to be sufficiently instructive in so far as they demonstrate the importance of an early diagnosis of galactophoritis in puerperal women, and I have selected them as the subject of this lecture in order to teach you the best means of combatting this affection which is so apt to prove rapidly fatal to infants.

Reports of Societies.

LONDON.

MEDICAL SOCIETY.

Monday, October 16th, 1893.

On some rarer Factors in Graves's Disease.

Mr. Arthur Maude.—I am convinced that thyroid enlargement, possibly transient and slight in character, is always present in patients

suffering from this disease and I can confirm Trousseau's remark that enlarged thyroid is more frequent in females than in males. Though Graves's disease is supposed not to be common in goitrous patients I found that out of 55 cases of enlarged thyroid 12 presented symptoms of Graves's disease at the time or subsequently. In respect of the incidence of the disease I may point out that the number of deaths grouped by the Registrar General under the head of "bronchocele" has steadily increased between the years 1881 and 1891 and as all the increase has been in female deaths they were probably largely due to Graves's disease. The number of admissions under this head in St. Bartholomew's Hospital has also increased since 1870. I have collected seven instances of Graves's disease supervening in goitrous patients and one of the patients was the child of a myxœdematous mother. Last year I collected a number of cases of Graves's disease in which partial or complete thyroidectomy was performed and I refer to them now in order to point to the improvement that has ensued in nearly all. Among the psychoses we get incoherence of idea, a tendency to melancholia with vertigo, tinnitus and throbbing in the head, the latter being probably due to interference with the blood supply. Tremor is perhaps the most frequent symptom of the disease most marked in the flexors of the arms, the interossei escaping. This tremor resembles that produced in animals after removal of the thyroid and its character is much more uniform than that of hysterical tremor. Sometimes there are eclamptic convulsions possibly induced by the disturbed cardiac action. Clonic spasms of the face and chorea are also frequent concomitants. There is often slight difficulty in swallowing akin to that observed in myxœdema, with possibly some drawling of the speech. Many cases of facial paralysis are on record and most patients exhibit some enfeeblement of the facial nerve. The ocular symptoms I believe to be due to paresis of the temporal division of the temporo-facial nerve. There is often general muscular weakness possibly culminating in paraplegia. In addition to the foregoing there are a number of symptoms which in my opinion are attributable to peripheral neuritis such for example as cramps, general hyperæsthesia, symmetrical paresis of the legs, lessening or abolition of the patellar reflexes, etc. I conclude that the condition known as Graves's disease is a general nerve poisoning of which the stress falls most heavily on the medulla, the poisoning resembling clinically that caused by alcohol, lead and beri beri. All attempts to account for the symptoms by focal lesions in the sympathetic, medulla or elsewhere are quite unproven and unsatisfactory. We do not know what this poison may be, nor how it is produced but the constant presence of goitre, the connexion with myxœdema and the results of operation on the thyroid point to that gland as the origin of the mischief.

Dr. F. de Havilland Hall.—There are a number of cases on record in which the symptoms of Graves's disease have subsided on the treatment of concomitant intra-nasal conditions. In a case brought forward by Dr. Semon some time since, a woman from whose nostril some nasal polypi had been removed, developed unilateral enlargement of the thyroid with some proptosis. I should like to know if the author has observed any intra-nasal troubles in this association.

Dr. W. Pasteur.—I have ascertained that in Switzerland, where goitre is common enough, exophthalmic goitre is comparatively rare. Swiss practitioners, moreover, are generally of opinion that altitudes have no effect in determining the disease.

Dr. Bowles (Folkestone).—I know of two cases in which patients, after suffering for some years from Graves's disease, have developed symptoms of myxœdema. For some years past I have followed Professor Kocher's practice at Berne, and have witnessed a certain number of thyroidectomies and attempts to prevent the supervention of myxœdematous symptoms, as the consequence of the removal of the gland, by the transplantation of healthy portions of the gland and of portions of the thyroid of animals.

Dr. Burney Yeo.—I remember the case of a woman who, to begin with, presented exophthalmos on the right side in association with enlargement of the thyroid gland on the left. The eyelashes and eyebrows on the side corresponding to the thyroid enlargement were shed. Later on the gland underwent enlargement on the other side, and then exophthalmos occurred on the opposite side and the lashes and eyebrows fell in their turn. It seems to me that we direct too much attention to the striking local symptoms and lose sight of the general nervous affection.

Dr. Savage.—I hold with others that exophthalmic goitre does not often occur in association with ordinary goitre. I did not meet with a single instance of Graves's disease in a thousand cases of goitre collected by me in a district in Cumberland. I do not believe either that the malady is caused by peripheral neuritis, this being met with under so many different conditions. In fact the neurotic features are general rather than local. It is worthy of note, however, that there is a form of acute recurring mania associated with the symptoms of myxœdema and in these cases benefit is derived from the remedies for myxœdema. I have seen at least a dozen of such cases. In some of them the exophthalmos was more marked on one side than on the other.

Dr. Heron.—I have noticed that the thyroid is always enlarged more or less in Graves's disease. The temper is peculiarly affected in the subjects of the latter affection, in some cases so much so as to suggest a taint of insanity and this long before the symptoms of Graves's disease make their appearance. It is an interesting question whether such persons could properly be held legally responsible, if they gave way to crime under the influence of one of these attacks of anger.

Dr. G. Murray (Newcastle).—There is strong evidence in favour of the thyroid being a secreting gland and in view of the constant relationship of enlargement of the gland in Graves's disease, I cannot help thinking that the symptoms may, in part at least, be due to hypersecretion on the part of the gland. This idea is supported by the benefit often derived in cases of Graves's disease by measures having for their object either to diminish the size of the gland or to curtail its functional activity, such for instance as removal of the gland, counter-irritation by the inunction of the red iodide of mercury ointment and from the use of belladonna. It is also worthy of note that the administration of too large doses of thyroid extract to myxœdematous patients is followed by the acceleration of the pulse, the moist perspiring skin and the mental excitability and muscular weakness observed in Graves's disease. This fact has been observed by myself and by others. If we compare the clinical pictures of Graves's disease and myxœdema we cannot but be struck by the opposite nature of the symptoms.

Dr. Berry.—I am enabled to show you microscopical preparations from cases of ordinary goitre and of exophthalmic goitre. In the one you will see that there is an absence of colloid secretion, the alveoli being filled with small cell formation while in the other there is an abundance of colloid. Macroscopically one sees that the enlargement in cases of parenchymatous goitre is more homogeneous than in the ordinary form.

Dr. Ord.—The apparent increase in the proportion of cases of Graves's disease is probably due to our eyes having been opened on the subject. I certainly think there is a connection between myxœdema and Graves's disease. The latter probably commences as a hyper-vascularisation of the gland and this may be followed by atrophy or destruction of the essential glandular secreting substance and the supervention of symptoms of myxœdema. In some cases treatment directed to diminishing the size of the gland in Graves's disease has been followed by very rapid diminution of size and ultimately by symptoms of myxœdema. I have noticed the occurrence of these various affections in collateral members of the same family, one member having Graves's disease, another mere enlargement of the thyroid, while a third developed symptoms of myxœdema.

Dr. Guthrie.—I remember dining at the house of a newly married lady who was giving her first dinner, when I was struck by the fact that she presented a well-marked, throbbing, goitre. Later on in the evening this had entirely disappeared. In a well-marked case of Graves's disease with thyroid enlargement which I wished to have photographed, I found that the enlargement had quite subsided on the patient's arrival at the photographer's. I do not think that the theory of the sympathetic being involved can be dismissed as suggested by the author, for if there is increased vascularity this points to an affection of the sympathetic. Patients in the early stages of Graves's disease often present one or several abdominal phenomena, among others a pulsating abdominal aorta.

Dr. Hector Mackenzie.—It is only by observing these cases of Graves's disease over long periods of time that we can form a precise and reliable idea of their natural course and so judge the value of a medicinal or surgical treatment. In my own experience these cases exhibited a tendency to spontaneous amelioration with one or two exceptions and this evidently militates against the reports of operations. If the disease were due to hypersecretion I should have expected to witness disastrous results from the experimental administration of thyroid extract but this was not so in one or two cases under my own observation.

This point is important because if we adopt the idea of the disease being due to thyroidal changes we shall be too disposed to accede to the suggestion for surgical intervention.

Mr. Maude.—In my opinion the neurotic manifestations are central rather than peripheral and are secondary to intestinal intoxication. I do not think that we can safely draw firm conclusions from microscopical appearances in respect of a gland of which we know so little. I quite agree that we shall require long series of operations before any safe conclusion can be based thereon.

PATHOLOGICAL SOCIETY.

Tuesday, October 17th, 1893.

Double Ureter, one terminating in the Urethra.

Mr. Leopold Hudson.—The specimen which I am enabled to show you was taken from a female patient aged 58, who was admitted into the Middlesex Hospital on November 5th 1889, with a neglected strangulated hernia on the left side. Her condition was so precarious that no thorough examination of the abdomen was admissible. In spite of treatment directed to the relief of her condition she succumbed on the 12th. On dissecting the right renal region I found the following curious condition of things. The lower half of the right kidney formed a bag containing 32 fluid ounces of pus, and presenting all the characters of a pyonephrosis. The ureter from this sac passed down along the bladder and opened into the urethra just within the sphincter vesicæ.

A second ureter was found proceeding from the upper half of the right kidney which terminated in the bladder in the usual position. The kidney and ureter on the right side were perfectly normal. The bladder itself was healthy and no other abnormality was discovered in the abdomen or elsewhere. There was nothing in the history of the patient so far as it could be made out to throw any light upon the renal condition.

This abnormality is very difficult to account for from an embryological point of view. It is indeed always more difficult to account for redundancies than for other malformations. It occurs to one that the duplicate ureter may possibly be a persistent Wolffian duct. This duct, it will be remembered, is normally persistent in the male and opens, as the vas deferens, at a point corresponding to this. The fact, however, that this ureter springs from the lower part of the kidney is against that hypothesis because a persistent Wolffian duct ought to come from the mesonephron at the upper part of the kidney.

Mr. Bland Sutton.—Double ureters are by no means rare and there is no need to indulge in embryological speculations in order to explain their presence. The conversion of the lower part of the kidney into a pus sac is certainly an interesting feature and renders the specimen almost unique. The specimen would have been still more interesting had it

been taken from a male. Had Mr. Hudson dissected the broad ligaments, he would have been able to assert definitely whether the ovary was provided with a parovarium showing whether or not the ducts of Gärtner were in question.

CLINICAL SOCIETY.

Friday, October 13th, 1893.

Dilatation of the Stomach and severe Pain dependent on Pyloric Adhesions, treated by Abdominal Section and Separation of Abnormal Attachments; with general remarks on Visceral Adhesions as a cause of Obscure Abdominal Pain.

Mr. Mayo Robson (Leeds).—I am enabled to relate the history of two cases which were sent to me for operative treatment on account of extreme emaciation dependent on dilatation of the stomach and severe pain in the epigastrium and right hypochondrium. Medical treatment had been previously tried without relief. In both, I had recourse with success to the same treatment, separation of adhesions of the stomach and pylorus; the original cause of the adhesions being, in the one case, gallstones, and in the other, ulceration of the stomach. I have brought forward these cases because, although it is known that simple adhesions may produce serious symptoms, it is not generally recognised that dilatation of the stomach may be cured by their separation. Many instances of severe abdominal pain, often spoken of as neuroses are due to, or associated with, the vermiform appendix being distorted and tied in an abnormal position; the ovaries or Fallopian tubes, or both, displaced and fixed; and last, but not least, omental adhesions of great variety producing visceral distortion; all these conditions are curable or relievable by a carefully planned and skilfully performed laparotomy, and that without any mutilation of viscera. I may further remark that although it is difficult to lay down any hard and fast rules, yet, personally, I should feel it wise in cases of obscure abdominal pain producing invalidism or disability, after medical treatment has been fully tried and failed, to open the abdomen in order to clear up the diagnosis, and then to adopt that line of treatment which seemed to be indicated. I am of opinion that these cases are interesting, not only from a diagnostic and an etiological point of view, but also from that of the treatment, for if some of those cases of dilated stomach, depending on pyloric distortion can be cured by simply separating adhesions it will be manifestly a safer and more satisfactory method than that of dilating the pylorus or performing pyloroplasty or gastro-enterostomy, in all of which the stomach has to be opened. I am afraid it would appear as though I have included two distinct subjects in one paper, viz.: dilatation of the stomach and obscure abdominal pain dependent on adhesion; but a more careful study of the paper will show that what I wish is to lay special stress on adhesions producing visceral disability, and their capability of cure by operation, and if I have succeeded in demonstrating that adhesions are not as harmless as some observers would lead one to suppose, my purpose has been served.

Mr. Hulke.—There must be considerable risk in attempting to separate adhesions of the stomach when these are the sequel of ulceration because in such cases they may prove to be the only barrier to perforation and in separating them we may do mischief which may prove irreparable. The author is certainly to be congratulated upon the success of his intervention but it is not quite easy to see, after the adhesions have been broken down, how they can be prevented from reuniting. That may be possible when the adhesions are small in extent and thready but when two large raw surfaces are left in apposition there is no obvious reason why they should not unite afresh.

Dr. Frederick Roberts.—For many years past I have been drawing attention to, and have endeavoured to impress upon my students, the importance of these internal adhesions. They are, I believe, at the bottom of a great many of the sufferings of which our patients complain. The author will find some useful information on the subject in a paper which I contributed many years ago to a Liverpool medical journal. I quite agree with the remarks that have fallen from him in respect of the importance of these adhesions, both in the chest and in the abdomen, as the possible source of disturbance of function and pain as to the real nature of which little can be made out. I myself have met with cases of dilated stomach associated with adhesions in the neighbourhood though I have never seen a case in which relief was afforded by surgical measures. It is a curious fact that in some cases though nothing is found to account for the symptoms on opening the abdomen, yet the symptoms have been relieved as the result of the intervention. Only to-day a surgeon related to me the history of a case in which I had diagnosed the presence of a gallstone. He had operated without alighting upon anything of the kind yet the patient has since completely recovered and is now in perfect health.

Dr. Hale White.—Eight years ago I made a post-mortem examination of the body of a patient with a dilated stomach. During life something was vaguely made out in the region of the pylorus and the case was thought to be one of malignant tumour. At the post-mortem examination I found an extreme degree of the condition so well described by the author. The gall-bladder was adherent to the pylorus which was considerably thickened by chronic inflammatory growth. Though jaundice had never been complained of the source of the whole trouble was a gallstone which had presumably ulcerated through the pylorus. This seems to me just the sort of case which, if treated early in the way recommended by the author, would probably have yielded a complete and triumphant success. In another case, one of typhlitis, the patient, a woman, recovered under the ordinary treatment but some months later her menstrual periods became very painful and it was supposed that the vermiform appendix had become adherent to the ovary. This proved to be the case on performing an exploratory operation and on the appendix being removed together with the ovary to which it had contracted adhesions, all the symptoms disappeared.

Mr. Pearce Gould.—I should like to know how the author makes out the fact of there being no actual narrowing of the passage of the pylorus. In the case described by Dr. Hale White I do not think that mere breaking down of the adhesions would have been sufficient to prevent their reforming. I do not see how the patency of the pylorus can be made out even when it has been exposed. Inasmuch as relief of the painful symptoms sometimes ensues when no adhesions have been found to break down it is not safe to conclude that the relief obtained is always and entirely due to this severance of adhesions. In some cases of this kind, as in movable kidney for example, it is rather the creation than the demolition of adhesions that is indicated.

Mr. Mayo Robson.—Peritonitis occurred in both of my cases, in one with great severity. When I expose the pylorus I grasp it between my fingers in order to ascertain whether it is of normal size. Then I roll it between my fingers when I can feel the internal surfaces slide over each other. This gives a very fair idea of the integrity of the passage. In some cases the pylorus has been thickened and hard, rendering it difficult to distinguish from a malignant growth. It is not difficult to prevent the reformation of adhesions when, for instance, the adhesions are between organs normally as far apart as the appendix and the ovary, but in this particular case I believe that mere separation of the adhesions would have produced as good a result as removal did. When we have to separate the pylorus from the liver we must be careful to place them at some distance from each other, carefully stopping all bleeding and wiping them dry after the application of antiseptics. The risk of fresh adhesions is thus reduced to a minimum. In many of my operations for gallstones it has appeared to me that the breaking down of the adhesions had more to do with the ultimate success of the operation than even the removal of the stone. The impaction of a gallstone in one of the ducts almost always gives rise to some peritonitis and indeed unless I find traces of this peritonitis I hardly expect to find a stone but to this rule there are of course exceptions. I remember one case in which on exposing the pylorus there was a solid mass into which the omentum had grown just as in a malignant tumour. I therefore desisted from further interference and gave an unfavourable prognosis. Yet the patient subsequently made a good recovery and was not again troubled. I have seen the same thing when all I did was to let out a quantity of ascitic fluid. I cannot offer any explanation of these curious cases but they are worth putting on record in order to facilitate the explanation which will doubtless sooner or later be forthcoming.

Two Cases of Excision of Malignant Tumour from Large Intestine.

Dr. W. Edmunds related two cases of malignant disease of the large intestine. In the first case the patient, a man, æt. 50, was admitted suffering from a lump in the right hypogastric region. There was a history of hæmorrhage in considerable quantity from the bowel, but of no obstruction. Laparotomy was performed, a tumour involving the cæcum was found and brought out, and the portion of bowel involved was excised, and the two ends of bowel brought externally. The patient recovered, and is now, four years after the operation, in good health. No attempt to re-establish the continuity of the bowel has been made.

The second patient was a man, æt. 54, suffering from incomplete obstruction. By a median incision a malignant tumour of the sigmoid flexure was found and brought out, a glass tube being passed beneath it. On the fourth day the portion of bowel involved in the tumour was excised and the divided ends of the bowel sutured together. The bowels acted normally, but a fæcal fistula formed through which in time the greater portion of the fæces escaped. An anastomosis was formed by Halsted's method between the two portions of bowel. This operation is a lateral anastomosis, but it differs from Senn's operation in the fact that no plates are used and the sutures are not carried through the whole thickness of the bowels, but only through the peritoneal and muscular coats and into the submucous coat, which is very dense and can be recognised by the resistance it offers to the needle. Subsequently the communication thus made is laid open and the surface opening closed, the continuity of the intestine is thus re-established, the bowels acting normally. Now, fifteen months after the first operation, the patient is well, there only remaining a minute fistula leading to the bowel. I may remark that in similar cases, whenever possible, it is desirable to excise the growth and not to be content with a palliative operation. The reason why the growth was not at once excised and the bowel resutured in the second case was to avoid peritonitis from leakage, a danger which it was hoped would be avoided by having the line of sutures shut off from the peritoneum.

Mr. Hulke.—Thanks to the success which attends abdominal operations with an improved *technique* it is probable that this operation will soon become a recognised mode of treatment. What was the condition of the motions in the author's first case? In right colotomy there is often a great trouble in consequence of the liquid character of the motions giving rise to excoriations, etc.

Mr. Gould.—Did the author experience any practical inconvenience from the liquid character of the motions in these cases? This constitutes a standing objection against right colotomy. In one patient on whom I performed this operation the motions are liquid but they are regular every morning, after which the patient is in peace and there has not been any excoriation. Cases have been recorded by Messrs. Allingham, Treves, Bryant and others.

Mr. Mayo Robson.—We have had several cases of malignant tumour of the bowel in the Infirmary at Leeds and our rule is that when there have been symptoms of acute obstruction with distension to make an artificial anus, but in cases where there are no indications of actual obstruction or distension then we perform either immediate suture of the ends by lateral apposition, Senn's plates, or the bone bobbin, or else immediate suture of the open bowel end to end. It seems to me that in such cases it is much better at once to remove the tumour and to join the bowel ends than to make an artificial anus even though this be only intended as a temporary measure. I remember a case in

which I found a malignant tumour, which I could not remove, in the ascending colon, so I brought up the distended ileum and opened it at the end of twelve hours. The patient found the discharge of liquid fæces from the open end a great trial, so a month later I again opened the abdomen and fixed the ileum to the sigmoid flexure thus excluding the whole of the large intestine. The patient did remarkably well and is in such good health that he is unwilling to submit to any further intervention.

Dr. Edmunds.—The divided ends were brought outside. The fæces escaped from the ileum and were quite liquid. The function of the large intestine is probably to convert the liquid motions into solid ones. In the first case there was a good deal of excoriation but this got well spontaneously though the discharge continued. I agree that where there is no distension it is well to suture immediately.

NEW YORK.

ACADEMY OF MEDICINE.

Thursday, October 5th, 1893.

Therapeutic Reflections.

Dr. Simon Baruch read a paper in which he referred to the fact that enthusiasm in therapeutics was unwarranted, because the history of medicine abounds in the rise and fall of the most brilliant structures, in the explosion of the most plausible theories, and in the overthrow of remedies that seemed to be so firmly intrenched in the armamentarium of the foremost physicians that they seemed to be impregnable against attacks. Look where venesection stands to-day, look at the dethronement of opium as a remedy for peritonitis! Lawson Tait has urged that it is even dangerous for this condition, and to-day we give saline purgatives. Let us confess that the materia medica consists chiefly of medicinal agents whose action on the human body is uncertain and whose effect upon disease is either neutral or unreliable. How often can we say that we have accomplished by means of any medicinal agent, or combination of such agents, the cure or removal of any disease? With the exception of quinine, mercury and the iodides there is not a single medicinal agent that may be regarded as actually curative. Faith in drugs is almost as frequent among physicians as is faith in being drugged among patients. In a recent consultation in a case of infantile diarrhœa, the abolition of a milk diet and the substitution of intestinal irrigation for salol, bismuth and Dover's powder, secured prompt recovery; and this illustrates the difference between medicinal and non-medicinal remedies, or rather the neglect of those non-medicinal agents whose action in disease is so simple, rational and clinically effective.

The rock upon which therapeutics has always split is the treatment of symptoms. When a student, venesection was then in its last gasp, and veratrum viride was administered to control the rapid pulse of fever; in the speaker's first case of pneumonia in the hospital, veratrum was administered with perseverance, the pulse was reduced from 140 to 80, yet the pulmonary consolidation continued and the patient died. History repeats itself in the coal-tar products of to-day. In gastrectasia we have a condition that is the consequence of long continued functional insufficiency; the early recognition of the causes, the adaptation of diet, mode of life, manner of eating, *lavage*, etc., to each individual case will conduce far more to cure than all medicinal agents from ancient gentian to modern strychnine, from muriatic acid to pepsin. It must be obvious to the most enthusiastic polypharmacist that he accomplishes only an amelioration or removal of certain manifestations of disease, a result which may and probably does facilitate a restoration to health but is rarely, if ever, the direct means of such restoration.

There is too often a tendency to treat a case of appendicitis as localised peritonitis, and to meet the symptoms by prescribing morphine to subdue the pain, ice or poultices locally to relieve the inflammation, food to satisfy the bug-bear of coming failure of the vital powers, and antipyretics to reduce the temperature. It is better that the patient suffer some discomfort than that his life be jeopardized by remedies that obscure the real issue of the case, and lull the physician into a false sense of security. Preferably keep such a case under the influence of chloroform until a decision for or against operative measures can be reached.

Vis medicatrix naturæ is an old rallying cry of the profession, but one that did not gather many steadfast defenders. At one time a complete therapeutic nihilism, emanating from the Vienna school, threatened to become prevalent. But when the chemist evolved those potent therapeutic sledge hammers that could beat down symptoms, the gentle hand maiden—Nature—was thrust aside and the patient was beaten down as well as the symptoms. Happily to-day a reaction is setting in; once more are heard warning voices that bid us follow nature's promptings. To join these and to re-echo them in this hall was the author's purpose. Rest is the first prompting of nature in diseased conditions; as the surgeon puts an inflamed joint in a splint, why may not the physician treat an acutely inflamed kidney in a similar way? Unlike the joint, the kidney's function must go on; but the intelligent physician so arranges diet that urea excretion is reduced to a minimum, and the skin and the bowels are made to act vicariously for the kidney.

Far more actual curative results may be obtained from watching and cautiously following the tendencies of a disease and applying those agents that are potent in maintaining the system in health, viz., rest, exercise, diet, baths, changes of environment, etc., than from the most intelligent application of medicinal agents. The judicious application of ventilation and diet are pretty well known by the profession, the judicious application of water is unfortunately still a *terra incognita* to the large majority.

The speaker then reviewed the pathology of typhoid fever, and the futility of drug treatment was compared with the results obtained by the Brand method. He also referred to the conditions causing, and existing in, anæmia and the failure of iron and other drugs to cure the disease, while removing the patient to the country, or the use of hydrotherapy and diet, would speedily cause improvement. He urged that increased attention should be given to the employment of hydrotherapy.

Dr. A. L. Loomis said that the paper was a very sensible one because it inculcated common sense in the practice of medicine. In a study that had been made of the treatment of pneumonia at the Massachusetts General Hospital for seventy-five years, the time was divided into decennial periods, and after eliminating everything that might vitiate the figures, after taking into consideration the age and surroundings of the patients, the results of treatment during that period were formulated into a graphic curve. This period, it will be remembered, includes the venesection treatment, the antimony treatment, the calomel treatment, the stimulating treatment, the do-nothing treatment, the antipyretic treatment, and lastly the antiseptic treatment. This graphic curve instead of being a zig-zag line was straight, a strong proof that a certain number of cases die and a certain number recover, despite any method of treatment. The older we become the less we are attached to drugs. The essentials in treatment are air, water, food, relief from disturbing influence, and little medication. The speaker was often surprised at the small number of medicines he used in his private and hospital work.

Dr. A. Jacobi said no sane person would say that medical practice consisted in prescription writing, any more than medical science consisted in making a diagnosis.

Yet both are necessary. A large number of the diseases we meet have a tendency to get well; let the disease alone, keep the patient in bed, give fresh air, regulate the diet, and refrain from the temptation of disturbing recovery by drugging the patient. No hard and fast rule of practice should be made; necessities may arise in any case that will take away the odium from all proscribed drugs. Venesection has been condemned, yet engorgement may occur in some cases that demands immediate venesection, and it alone will save life. While fully agreeing that antipyretics should not be generally employed, yet in some cases the temperature should be reduced and an antipyretic ought to be employed; it would not do to forbid it or to say that water will exercise the same action. The number of remedies in the pharmacopœia are gradually dwindling down, and so do we drop them in practice. He would not undertake to treat diphtheria, endocarditis, and numerous other diseases without the assistance of many drugs besides quinine, mercury and the iodides, or water, rest and diet. In a self limited disease such as whooping-cough he would give chloral, or atropine, or bromoform, even if he only succeeded in reducing the duration of the disease by two weeks.

NEUROLOGICAL SOCIETY.

Tuesday, October 3rd, 1893.

A case of generalised Paresis ending in complete Recovery.

Dr. E. C. Seguin related the case of a boy aged 13, who was brought to him in October, 1886, for an opinion as to the nature and prognosis of a singular condition of increasing muscular weakness, which had come on during the preceding 17 months. The boy's family history was fairly good. His mother was of a nervous temperament and for a few months had been addicted to the chloral habit. Out of six children only one, a sister, had had a nervous disease, namely, a mild chorea extending over several years. There was no trace of muscular disease, atrophic or dystrophic, in the family. The patient's history, previous to the onset of this disease, was negative. At the age of six years he had a severe attack of albuminuria, which left no traces. In April, 1886, he had what seemed to be a mild attack of articular rheumatism. He was a very active and daring boy, and had numerous falls, none of which, however, were followed by serious symptoms. There was a history of masturbation, carried on for several years. There was no history or evidence of metallic intoxication, nor at any time was there any indication of hysteria. The only positive causative element in the case was the self-abuse. This practice, the boy stated, he had given up in the Spring of 1885, when he himself noticed that he had slight difficulty in articulating his words. Five months subsequent to this, the boy's symptoms were first brought to his father's attention by the fact that he twice fell out of the saddle and by his suddenly dropping the oars in a boat and acting as if paralyzed for a few minutes. Even before that, it was recalled, he had become rather awkward in buttoning his clothes and in using his knife and fork, and that after reading aloud for a few minutes his articulation became thick. Very gradually he lost his energetic ways and became awkward in everything; his attitude had changed so that he stooped, the head hanging down and the abdomen protruding. His facial muscles lost much of their expression and his laugh was constrained and unnatural. All these symptoms developed and progressed very slowly during the years 1885 and 1886. The boy was subject to "sudden collapses", as his father called them, characterized by the sudden loss of control over certain muscles, resulting in falls or in dropping objects from the hand. These last-named symptoms suggested *petit mal*, but this affection was excluded after careful observation. The symptoms were entirely of a motor order; no numbness, no anæsthesia, no neuralgia, no psychical or trophic symptoms. All his organic functions were normally performed; nutrition was good and the eyes were normal. The legs were apparently strong, and the boy could rise from the dorsal recumbent posture on a flat couch and also from a squatting posture, but these acts were performed feebly, slowly and with great effort. The spine was not tender and presented no deviation, excepting an antero-posterior one. Local paresis of the muscles was demonstrable only in the extensor group of

the right forearm. No muscles showed atrophy or hypertrophy. The knee-jerk was normal. No sensory symptoms, excepting a sense of fatigue on exertion in the muscles of the lips and tongue as well as those of the forearm. On electrical examination the reaction of the nerves and of the muscles to both currents was normal. The sexual organs showed no visible signs of masturbation. Grasp on dynamometer, right hand 11; left hand 16.

The above were the main facts elicited at the first examination made by Dr. Seguin in October, 1886. The boy remained under his care from that time for about two years, during which period he decidedly improved in motor power and skill, and his height increased by six inches. The treatment from the first, in the absence of any possible pathological diagnosis, consisted in the systematic, long-continued administration of tonics, such as the bichloride of mercury, phosphorus, arsenic and strychnia. At the same time, a mild faradic current was applied systematically every day. Also, from the first, a cold sponge bath was ordered on rising or at bed-time, followed by thorough dry rubbing and manipulation of all the muscles. Another part of the treatment consisted in gentle gymnastic movements of the hands, arms, trunk and legs.

The case was lost sight of by the author from the close of the year 1888 until September of the present year (1893) when on inquiry, he received a letter from the boy's father stating that his son is now in the junior class at college, that he stands well in his class, and excels in wrestling and other athletic sports. The treatment advised by Dr. Seguin had been faithfully carried out for nearly 3 years longer by the father, resulting in a gradual but continued improvement in the boy's condition. His weight at the present time is 166 pounds. His endurance is good, and he is able to raise from the ground an iron rail weighing 600 pounds. His grasp on the dynamometer at present is, right hand 72: left hand, 53. This, Dr. Seguin said, is the strongest grasp he has ever met with.

Dr. B. Sachs said that in listening to the first part of Dr. Seguin's paper—before it told of the boy's remarkable recovery—the case reminded him of a primary muscular dystrophy, of the facial-scapular-humeral type, with perhaps some extension into the lower extremities. Such a case had recently come under his observation, with many symptoms very similar to those narrated by Dr. Seguin. In cases of progressive primary dystrophy, particularly in pseudo-hypertrophic conditions, he had seen marked temporary improvement follow appropriate treatment, although he had never observed a complete cure. Again, in Dr. Seguin's case there might possibly have been some nuclear trouble, with a mingling of symptoms pointing to the spinal cord or medulla. If the case was one of primary muscular dystrophy, the question arises whether the cure will be a lasting one. He had seen a number of cases presenting a peculiar condition of pseudo-hypertrophy, in which the muscular tissue first enlarges, and then rapidly atrophies.

Dr. George W. Jacoby suggested that Dr. Seguin's case might have been one of poly-myositis ending in complete recovery, and followed by secondary hypertrophy of the muscles.

Dr. J. F. Terriberry pointed out that it was against the laws of pathology to assume that an inflammatory process in the muscular tissue is followed by hypertrophy of the muscle, with increased force.

Dr. E. D. Fisher said that taking into consideration the fact that the boy grew six inches taller while he was under Dr. Seguin's care, the lesion was probably not a spinal one.

Dr. Seguin, in closing the discussion, stated that the suggestion made by Dr. Sachs with reference to the possibility of curing a case of muscular dystrophy in its early stage was an interesting one; he was not prepared, however, to assert that the case he had related was an instance of that disease. Neither did it resemble a case of myositis. There was no pain: there was a general weakness, which was sometimes so pronounced that the boy was unable to hold objects in his hands, or he would lose all control over his muscles and fall to the ground.

PARIS.

ACADEMY OF MEDICINE.

Tuesday, October 17th, 1893.

The epidemic Diseases which call for Compulsory Notification.

Dr. Le Roy de Méricourt.—I fail to see how the diagnosis of the choleriform affections is to be arrived at, as it is a generic term and does not represent a definite morbid entity. As a matter of fact cholera appears either in a sporadic or epidemic form but it is always the same disease, and it would be highly dangerous if other affections which possess more or less remote resemblances with it should be submitted to the same energetic treatment.

Prof. Brouardel.—The question of the compulsory notification of certain epidemic diseases has long been under discussion among the medical profession and the Academy itself has already had occasion to call the attention of the public authorities to this important question. Moreover, to judge from the results obtained in Paris, public opinion is becoming rapidly reconciled to the intervention of the sanitary authorities whenever it is necessary to adopt certain measures of disinfection, etc., with a view to prevent the propagation of infectious diseases.

It is, therefore, only in respect of very few diseases that there will be any difference of opinion on this point. For my own part I have no objection to measles being struck off the list of diseases which call for compulsory notification but I cannot agree with Dr. Le Roy de Méricourt with reference to the choleriform affections. At the commencement of an epidemic of cholera, the existence of the disease is either not recognised or only suspected. One hesitates to enunciate the diagnosis of cholera and yet it is of the greatest importance that the first cases should be notified to the authorities without delay. The difficulty is got rid of by permitting of these cases being notified under the designation of choleriform affections.

Lastly, I believe that the list of epidemic diseases for compulsory notification should include not only small-pox but varioloid, seeing that it is often impossible to distinguish between these two affections in the early stage when prophylactic measures are likely to be most successful.

Dr. Lereboullet.—Compulsory notification being only justifiable in respect of such diseases as are obviously dangerous and preventible by the adoption of sanitary measures by the public authorities in the interest of the public health, I should suggest that measles be struck off the list drawn up by Dr. Vallin, as measles are an affection which does not belong, at any rate for the time being, to the class of diseases the propagation of which can be easily prevented. What will the sanitary authorities do on being notified of the occurrence of a case of measles? Will all the children who have come into contact with the patient be quarantined for from twenty to twenty-five days? And unless this is done, I fail to see how infection can be avoided.

When more efficient means of preventing contagion than those at present at our disposal are discovered, the time will come for measles to be added to the list of epidemic diseases for compulsory notification.

I may also suggest that the words cholera and choleriform diseases be substituted for cholera and choleriform affections in the list. The term "diseases" seems to me to be preferable to "affections." For example, antimony cholera, arsenic cholera, etc., *i.e.*, the various forms of metallic poisoning are choleriform affections, not diseases.

Prof. Grancher.—Like Dr. Lereboullet I consider that measles should not be included among the infectious diseases the notification of which should be made compulsory. Measles are most contagious during the incubation period, that is to say, before the disease can be diagnosed. Under such circumstances, the principal object of notification would not be attained seeing that the patient could not be isolated sufficiently early in the case to prevent infection. In respect of disinfection it is universally admitted by medical men in charge of hospitals for children that it is absolutely inefficient in preventing the propagation of measles.

Dr. Vallin.—I am prepared to admit that measles is especially contagious during the pre-eruption stage, but I consider that it should be maintained on the list because cases of late infection are not unfrequently met with. Moreover, it seems to me that, as only in July last the Academy insisted on the necessity of a fortnight's isolation in the case of school children suffering from measles, it would be somewhat inconsistent to score this disease off the list of those which should be notified to the authorities.

Dr. Cadet de Gassicourt.—I agree with Prof. Grancher on the inefficacy of isolation and disinfection in preventing the spread of measles; but disinfection is useful as a prophylactic measure against the complications of measles especially broncho-pneumonia.

Dr. Hallopeau.—There is a contagious disease which is not included in Dr. Vallin's list in which it ought to occupy a foremost place should it prove dangerous to the public health; I am referring to leprosy. But as leprosy has never been shown to be directly transmissible in France, I quite admit that its inclusion in the list is not indicated for the present.

Dr. Chauvel.—I move that the term ophthalmia neonatorum pure and simple be substituted for that of purulent ophthalmia, for the following reasons: purulent ophthalmia does not develop in the space of a few hours; as a matter of fact it usually appears from the third to the fifth day after birth and the first symptoms are so slight that they usually escape detection. It is only when the secretion has become purulent and the conjunctiva is extensively infiltrated, that is to say, when the case is already far advanced, that the midwife becomes aware of the danger. To secure the desired result, *i.e.*, to save the child's life and at the same time to protect those around it from infection, the duty of the midwife should be so clearly laid down as not to allow of any hesitation on her part.

Dr. Kelsch.—I suggest that the term "epidemic" as applied to dysentery in the report of the Commission should be deleted from the list.

Dysentery, whether sporadic or epidemic, is but one and the same affection. All epidemics of dysentery are preceded by a few sporadic cases. There is, therefore, in my opinion, no reason why the word dysentery should not be used without any epithet whatever in the list of diseases which call for compulsory notification.

Prof. Brouardel.—I wish to point out that professional secrecy is not abolished by the law regulating the practice of medicine in France, so that it seems to me that there is no need for restricting the compulsory notification of puerperal infections by the words "unless the physician be requested by the parties concerned to keep the diagnosis a secret," as suggested by Dr. Vallin. I move, therefore, that these words be deleted.

Each of the diseases mentioned in Dr. Vallin's report was then put to the vote with the amendments introduced in the course of the discussion.

The following is the list of diseases proposed by the Academy for compulsory notification:

Cholera and choleriform affections, yellow fever, plague, small-pox and varioloid, scarlatina, sweating sickness, diphtheria, typhoid fever, typhus fever, dysentery, puerperal infections, ophthalmia neonatorum.

CHIRURGICAL SOCIETY.

Wednesday, October 11th, 1893.

Anuria consequent on Compression of the Ureters by a Uterine Fibroid; Abdominal Hysterectomy; Recovery.

Dr. Tuffier.—The observation I am about to relate is that of a woman on whom I operated two years ago and who has since completely recovered from the grave manifestations which she presented at the time

of the operation. It was a case of anuria or rather of retention of urine in the kidneys from compression of both ureters by a uterine fibroid. Cases of this kind being comparatively rare, precise rules have apparently not yet been laid down as to the method of treatment to be employed in such emergencies.

The patient was 48 years of age. Two years previously she had been operated on by Prof. Tillaux for a subperitoneal fibro-myoma of the uterus. She was admitted to the Beaujon Hospital complaining of retention of urine of three days' duration. A catheter having been introduced it was found that the bladder was absolutely empty.

She was in reality suffering from renal retention due to the pressure exerted on both ureters by a fibroid tumour of the uterus which filled up the true pelvis to such extent that a finger could only be introduced with difficulty into the vagina. The abdomen was distended and tympanitic, and there was absolute constipation. Lastly, she had an extremely feeble pulse with cold extremities and, in fact, she presented such grave constitutional symptoms that I hesitated to intervene.

What was I to do? Nephrotomy and ureterostomy were out of the question, seeing that the operation would have had to be performed on both sides, and further, as there were signs of intestinal obstruction, the formation of an artificial anus was indicated. The best thing that could be done under the circumstances was to remove the cause of these urgent manifestations. I decided, therefore, in favour of abdominal hysterectomy, the operation being performed on the very morning of the patient's admission. An elastic ligature having been passed round the pedicle, the tumour was excised and the pedicle secured externally.

On the following day micturition was reestablished and by the fifth day the quantity of urine excreted in the twenty-four hours had returned to normal. As a matter of fact the patient made an uninterrupted recovery, although a small fistula corresponding to the pedicle persisted for some time. She is now in excellent h alth and has apparently completely recovered from the grave kidney lesions from which she was undoubtedly suffering at the time of the operation.

Tuberculosis of the Peritoneum and Mesenteric Glands; Laparotomy; Improvement.

Dr. Picqué.—The treatment of peritoneal tuberculosis by laparotomy has given rise to considerable discussion and although a tolerably large number of observations have been published on this subject, one has had but little opportunity of verifying the beneficial effects of the operation by a post-mortem examination performed some time after the intervention. The following brief account of an autopsy performed under these conditions may not, therefore, be devoid of interest.

The patient was a woman, aged 30; she had enjoyed tolerably good health, though with a tendency to frequent colds, until 1891 when she was admitted to the hospital for a painless tumour, situated in the left flank and suggesting the existence of a floating kidney. She only remained a short time at the hospital but soon after leaving she began to complain of pain in the abdomen. In January 1893 the pain had become worse and the tumour had increased in size. It now extended across the middle line to the right side of the abdomen. She was admitted into Dr. Périer's wards at the Lariboisière Hospital where the diagnosis of tubercular peritonitis with enlarged mesenteric glands was arrived at by exclusion. I may add that suspicious signs were found on examining the lungs, notably some dulness on percussion in the left clavicular region with harsh breathing.

On my advice the patient consented to an exploratory laparotomy which was performed on April 13th. The parietal and visceral layers of the peritoneum were both studded with a large number of tubercular granulations, the tumour itself being composed of a mass of tubercular glands to which the coils of intestine were extensively adherent.

The operation was perfectly successful and the patient recovered without accident of any sort. She left the hospital very much the better for the intervention, but a few weeks later she returned with a gangrenous abscess of the neck accompanied by very grave symptoms of infection to which she succumbed at the end of a week.

At the autopsy it was found—a fact which had been recognised before death—that the abdominal tumour had considerably diminished in size being only about a third of what it was at the time of the operation. Moreover, the tubercular granulations had almost entirely disappeared from both the visceral and parietal peritoneum.

Dr. Berger.—It is generally admitted by those surgeons who have investigated the question of the influence of an exploratory laparotomy on tubercular peritonitis, that the operation is especially indicated in cases in which the affection is associated with ascites or circumscribed serous or purulent effusion. Cases are also met with in which laparotomy may be necessary to relieve urgent symptoms of intestinal obstruction due to constriction of the bowel by peritoneal adhesions. In a certain proportion of cases, however, no benefit is to be derived from the intervention.

In respect of the manner in which the improvement is brought about, two theories have been suggested: According to one, the amelioration observed in the condition of some of the patients is to be referred to the evacuation of the effusion and the formation of adhesions by which the granulations are strangled, as it were. The supporters of the other theory maintain that the peritoneal effusion is not only a favourable medium of culture for tubercle bacilli but that it also contains certain toxic products, which cause the fever and intoxication, these symptoms subsiding as soon as the products in question are evacuated especially if the fluid is not allowed to reaccumulate.

My own personal observations fully confirm what I have just said as to the indications for laparotomy in cases of tubercular peritonitis.

I remember four cases of this kind in two of which the patients were lads about 14 or 15 years of age, both of whom were suffering from peritonitis with effusion. The improvement which followed the operation was so marked and sustained as to amount practically to a radical cure.

In a third case, the patient was a young woman, the subject of very chronic peritonitis associated with symptoms of intestinal obstruction. Exploratory laparotomy was performed but, although the operation seemed to give temporary relief the patient died on the tenth day.

Lastly, I once performed laparotomy on an adult male for tubercular peritonitis with a considerable amount of effusion, the peritoneum being touched in this as in the previous cases, with camphorated naphthol. The patient seemed to improve a little after the operation but the amelioration was not maintained and he died at the end of a month.

Dr. Picqué.—The indications for laparotomy are not limited to cases in which the tubercular process is accompanied by effusion into the peritoneal cavity. In the case I have related there was a small amount of effusion but it was in reality a case of dry tubercular peritonitis.

I may mention that there was nothing in the post-mortem appearances found in the case in question which could be construed in favour of the theory that the curative effect of laparotomy is due to the formation of adhesions.

MEDICAL SOCIETY OF THE HOSPITALS.

Friday, October 13th, 1893.

On Mumps.

Dr. Catrin.—I wish briefly to relate my experience of 159 cases of mumps under my observation during an epidemic of this affection which broke out among the Paris garrison last winter.

Mumps begin with equal frequency on the right and on the left side, the swelling of the parotids reaching its maximum in from a few hours to five days.

The prodromal symptoms of this affection are rigor, pains all over the body, headache, sleeplessness, night sweats, epistaxis, noises in the ears, rheumatoid pains, etc.

In about two-thirds of the cases, these prodromata were associated with inflammation of the pharynx and tonsils, extending sometimes to the buccal orifice of Stenon's duct. It would appear, therefore, that the infection is propagated through the buccal secretions.

In four out of every five cases fever is present, but it is usually slight and of short duration, though the temperature sometimes rises as high as 104° F.

The gravity of the attack bears no relationship to the degree of enlargement of the parotids; the enlargement is due to swelling in some cases of the glandular tissue proper, in others of the periglandular connective tissue.

The submaxillary glands are involved in half of the cases.

The treatment should be continued for at least a fortnight or twenty days, in order to avoid secondary involvement of the testicle or a relapse and to prevent the patient from communicating the disease to those around him.

Of the contagiousness of mumps there can be no doubt, but the disease is only communicated by direct and prolonged contact, so that infection is easily prevented.

The incubation period of mumps is tolerably long, the average being from a fortnight to twenty days.

Relapses are more frequent than is generally supposed. They occur in about 6 % of the cases.

In respect of the testicular manifestations, the true orchitis of mumps must be distinguished from simple congestion of the testicle which is apparently never followed by permanent changes in the gland. Out of 159 patients 41 had orchitis and 15 others had congestion of the testicle. Of the 41 cases of orchitis in 13 both testicles were involved.

In diagnosing primary orchitis of mumps the possibility of a previous attack of slight parotitis or inflammation of the submaxillary gland must always be taken into account.

Other complications of mumps are rheumatism, otitis, localised œdema, endocarditis, albuminuria, suppurative arthritis, etc.

In none of my cases were there any meningeal complications, disturbances of sight or mental trouble.

Dr. Antony.—I agree with Dr. Catrin that attacks of mumps are frequently heralded by swelling of the tonsils and submaxillary glands.

I do not think there is a single well-authenticated case on record o meningitis as a sequel of mumps. The only case of meningitis under my observation in which the affection was apparently to be traced to such a cause was shown at the autopsy to be simply a case of tubercular meningitis.

On the other hand, I cannot agree with Dr. Catrin as to the mode of propagation of the disease. I believe that it is not always communicated by direct contact with the patient but that simple contact with the patient's clothes may be sufficient for that purpose. It seems to me therefore, that the necessary prophylactic measures should be taken to prevent infection by this means.

THERAPEUTICAL SOCIETY.

Wednesday, October 11th, 1893.

On "Moyrapuama" from a Pharmacological Point of View.

Dr. Rebourgeon.—The forests of the Amazon contain a large variety of plants which are employed for medicinal purposes by the aborigenes. Among these plants is a shrub belonging to the natural order acanthaceæ, and known under the name of *moyrapuama*, the root of which is said to possess tonic and aphrodisiac properties. I propose to communicate to the Society the results of the chemical analysis of this root and of the experiments performed therewith, in Prof. Fournier's laboratory.

I have succeeded in isolating, by the ordinary methods, a number of

peptic and organic substances and a glucoside which is the active principle of the extract.

Five grammes (seventy-five grains) of the finely powdered root contain: water, 26 centigrammes; salts (the glucoside inclusive), 2 grms. 01 centigrammes; organic substances, 2 grms. 73 centigrammes.

I have investigated the action of the extract of moyrapuama on dogs, rabbits and frogs; the most prominent change found in animals, which had died after the administration of variable doses, consisted in profuse hæmorrhages especially into the alimentary canal. In frogs, the cardiac and respiratory movements persisted much longer than normal after death under the influence of this substance.

The Advantages of the Yellow Oxide of Mercury over the Red Oxide in Medicinal Preparations.

Dr. Patein. — The substitution of the yellow oxide of mercury for the red oxide of the same metal in medicinal preparations presents certain advantages. Both oxides possess identical properties but the yellow oxide is more easily obtained, besides being much more definite in its composition. Its molecular condition permits of its being easily reduced to powder. The red oxide, on the other hand, is obtained in a conglomerated state by heating and is less stable in its composition than the yellow salt. The red oxide of mercury frequently becomes black from the decomposition of a suboxide of mercury. Hence medicinal preparations of this substance are the more likely to be defective the more carefully they are compounded.

BRUSSELS.

ACADEMY OF MEDICINE OF BELGIUM.

Saturday, September 30th, 1893.

On Cholera.

Prof. Crocq.—Prof. Koch maintains that among other pathological appearances signs of enteritis are constantly to be found after death from cholera. It was formerly denied by Broussais that inflammation of the intestines was a constant phenomenon of cholera and for my own part I consider that this lesion is absent in the majority of cases.

In respect of the changes which take place in the other organs in the various stages of the disease, I invariably found that the heart stopped in diastole; in a large proportion of cases the lungs were œdematous with hypostatic congestion at the bases. Tubercles are rarely met with and the presence of granulations in the last case related by Prof. Rommelaere is to be accounted for by the fact that the patient was already suffering from phthisis when he was seized with cholera. This in itself is an exceptional occurrence, for cholera seldom attacks the subjects of tuberculosis.

During the reaction stage pneumonia is not unfrequently present, large areas of lung substance being the seat of hypostatic congestion. The spleen usually presents one or more infarcts.

Contrarily to the opinion of certain observers I believe that the leucocytes ultimately disappear from the mucous membrane leaving only some cellular *débris* behind, and that pus may be found in the intestine in cases of Asiatic cholera as in those of cholera nostras.

The cerebral meninges are thickened, while the cortex of the brain is markedly œdematous. The ventricles and sulci also contain a large quantity of serous effusion. The heart is dilated and the blood has undergone certain changes in its composition, resulting in arrest of the heart's action.

Prof. Rommelaere has succeeded in detecting the presence of the characteristic bacilli in the motions of a number of patients as late as forty days after recovery from an attack of cholera; these bacilli are also alleged to have been found in cases of simple intestinal catarrh a long time before the appearance of an epidemic and in one case of typhoid fever without choleriform symptoms.

Several observations of a similar kind have been reported by Dr. P. Guttmann in Germany, and during the epidemic of 1892 a Hamburg physician diagnosed a typical case of Asiatic cholera as one of cholera nostras because he was unable to discover any comma bacilli in the dejections.

In view of such facts I maintain that it is impossible to admit that Koch's comma bacillus is the only cause of cholera and I firmly believe that this organism is only one of the numerous microphytes which inhabit the intestine and that it does not possess any of the specific pathogenic properties which have been attributed to it.

I consider that to diagnose a case as Asiatic cholera on the strength of the presence of comma bacilli in the dejections, and as cholera nostras because these bacilli are absent, is a fanciful and very unscientific practice.

Dr. Gallez.—I have observed several interesting cases of cholera in which the disease could not be traced to any of the ordinary sources of infection.

For example, I have met with fatal cases of cholera among miners who were suddenly seized with the symptoms of the disease while at work in the mine and died within a few hours, though the locality was perfectly free from cholera at the time. The disease once suddenly appeared in a village of Hainaut where no other cause could be traced for the outbreak than a fall in the level of the water in a neighbouring marsh, as a result of mining operations.

In another case under my observation the occupiers of a house situated far away in the country and without any communication with the external world, were all attacked with cholera.

The comma bacillus was found after death in all these cases and it is difficult to understand how it originated under these circumstances, seeing that cholera was unknown in the district at the time, and the presence of the bacilli could not be accounted for by the insanitary condition or the topography of the locality, nor were they imported from without.

Practical Medicine.

Injections of Grey Oil in Cerebral Syphilis.

It is a recognised fact that intra-muscular (intra-gluteal) injections of grey oil according to the method of Prof. Lang (Vienna) possess a very rapid and powerful antisyphilitic action. If this method is not more frequently employed by specialists and general practitioners it is because it exposes the patient to the risk of acute mercurial intoxication and of pulmonary embolism, should the injection be made directly into a vein.

These dangers can, however, be avoided, or at any rate reduced to a minimum, by means of certain precautions, so that Prof. Lang's method may nevertheless be indicated as a last resource in certain very grave cases of cerebral syphilis which have resisted all other forms of treatment.

It is precisely under such circumstances that this treatment was resorted to in three cases of cerebral syphilis reported by Dr. J. Sacaze, *chef de clinique* to Dr. Grasset, Professor of Clinical Medicine at the Medical Faculty of Montpellier, and Mr. E. Magnol, House-physician. These cases seem to us to merit a brief description because of the great practical interest which attaches thereto.

In the first case the patient was a woman, aged 35; she had since the age of 15 suffered from epilepsy, and for the last five months she had complained of intolerable headache with nocturnal exacerbations. All the ordinary analgesic remedies had been tried without success. The presence of certain suspicious signs of recent syphilis (coppery-coloured eruption, symmetrically distributed on the inner surfaces of the knees, alopecia, enlargement of the inguinal glands), led to the headache being attributed to a specific cause. Accordingly mercurial frictions with thirty grains of iodide of potassium in the twenty-four hours were prescribed, but as no improvement took place in the patient's condition, at the end of five days the frictions were abandoned and instead *hypodermic* —not intra-muscular—injections of grey oil were administered. The oil was prepared according to the following formula:

R.	Metallic Mercury.....	℥ss. (by weight).
	Lanoline.....	gr. 70.
	Liquid Vaseline.....	ad ℥iss. (by weight).

Mix.

Each drachm of this mixture contains thirty grains of mercury. A dose equal to two or three divisions of a hypodermic syringe, *i.e.*, from ½ to 1 ½ of a grain of mercury, was injected on each occasion.

The headache subsided soon after the first injection, and at the end of five days it had entirely disappeared. The treatment was commenced on March 10th; the injection was repeated on March 24th and 31st, and on April 7th. The headache reappeared on April 27th; the patient received a fifth injection and on the following day she was perfectly free from pain. Since that time she has received several injections at irregular intervals and the headache has not returned.

The second patient under Dr. Sacaze and Mr. Magnol's observation was a robust young woman of 23, a domestic servant, who was suffering from epileptiform attacks accompanied by grave mental disturbance (apathy, hebetude). Bromide and borate of sodium were administered without success, but the discovery of patches of alopecia and a cutaneous eruption suggested the existence of syphilis, and an injection of grey oil was made although the patient denied having ever had the disease. On the evening of the same day a remarkable change was observed in the patient's mental condition: the apathy and hebetude disappeared and she did some work. The improvement was maintained on the following days, while the epileptiform attacks ceased. The injections of grey oil were repeated at intervals of a fortnight and the patient left the hospital cured about two months and a half after the first injection.

The third case was that of a woman, aged 38, the subject of alcoholism, who for about a year had complained of mild epileptiform attacks associated with symptoms of dementia. Syphilis was suspected from the presence of alopecia although the patient presented no other specific manifestations. The epileptiform attacks ceased immediately after the first injection, while the cerebral symptoms entirely disappeared after two other injections, repeated twenty-two and thirty-one days after the first.

In view of the results obtained in these three cases Dr. Sacaze and Mr. Magnol suggest that injections of grey oil may prove a valuable means of diagnosis in patients presenting grave manifestations such as epileptiform attacks, coma, etc., the cause of which is obscure.

Treatment of Prurigo by Massage.

It is generally recognised that the intolerable itching of prurigo is not usually amenable to any of the remedies at our disposal. As a result of a series of experiments recently performed by Dr. R. Hatschek in 11 cases of prurigo at the clinique of Dr. Kaposi, Professor Extraordinary of Dermatology at the Medical Faculty of Vienna, it would appear that massage is an excellent means of soothing the itching of prurigo, a fact to which attention was called for the first time in 1889 by Dr. Murray (Stockholm).

In Dr. Hatschek's cases the treatment consisted in the application of energetic friction in a centripetal direction. The treatment was limited to the extremities, commencing at the root of the limb and extending gradually to the fingers and toes. Each extremity was massaged every day for from ten to fifteen minutes at a time. The time was subsequently reduced to five and even three minutes, according to the degree of improvement obtained.

The parts may be rubbed with the dry hand or, preferably, with vaseline, which adds to the soothing effect of the treatment.

In all the cases in which this treatment was tried, the itching subsided after the first sitting, while in some of them it completely disap-