difficult and dangerous to enucleate, we may restrict ourselves to treatment by *formolisation in situ*, with the aid of a "trocar formolateur."¹⁵ It is not necessary to be unreasonably worried by the small cysts which may escape operation. Very many of them will spontaneously proceed to involution.

Surgery may succeed in restoring these patients entirely. But, failing an absolute cure, it will often procure for them a long survival compatible with an active existence.

A CASE OF PERITONEAL ECHINOCOCCUS.¹

By CHARLES FLANDIN,

CHEF DE CLINIQUE MÉDICALE AT THE FACULTY OF MEDICINE IN PARIS.

On April 1st, 1919, Mme. B., a servant, 49 years old, came into Professor Chauffard's Clinic at St. Antoine's Hospital. She complained of pain in the right thigh and of tumours in the abdomen. She looks rather older than her actual age, but has a fresh, ruddy face. There are no feverish symptoms, her appetite is excellent, and the digestive organs work normally.

Attention is at once directed to the abdomen. It is large, but without excess of fat, and seems tumid in the two iliac fossæ, especially on the right side. A long median cicatrix runs nearly from the ensiform cartilage to the os pubis. It is a clean cicatrix, but in the neighbourhood of the navel there is a hernial protrusion for several centimetres, and below the cicatrix there are three regularly rounded tumours, smooth and mobile. One of them is as big as a walnut, the two others as big as cherries.

Palpation of the abdomen reveals a hard diffuse distension, giving a sensation analogous to that of a cæcum filled with solid matter. It is more fully developed on the right side, but it certainly seems to be an unbroken mass, going down into the pelvis and filling it completely. Vaginal palpation confirms this impression. A normal cervix is found, hard, regular, a little depressed and pushed back. It is impossible to identify the uterine body in the midst of a hard compact mass, giving the impression that the pelvis has been filled with cement. No sensation is transmitted from vaginal finger to abdominal hand, nor reciprocally. In fine, physical examination suggests a cancerous infiltration of the whole pelvis, starting near the abdomen. But there are not at present any uterine symptoms, and the excellent general state of health does not favour this hypothesis. Moreover, the other organs are healthy. The liver is rather large, 14 cm. along the mammillary line, somewhat hard, but not deformed. Radiological examination proves its regularity, besides verifying the appearance and normal functioning of the intestine.

The diagnosis would have been singularly difficult had not the small tumours discovered on the surface of the cicatrix suggested the idea of a hydatid cyst, which was turned into certainty by the history of the patient. The woman had, indeed, been already operated upon three times. We have only very scanty information about the first operation, which took place at 25 years of age and affected the pelvic organs. It is an important circumstance that she had a violent attack of generalised urticaria. It is well known how frequently this occurs after the opening of a hydatid cyst. After this operation menstruation ceased and the usual disturbances, such as premature menopause, attacks of heat, embonpoint, &c., made their appearance.

At 39 years of age there came an attack of icterus caused by retention, with severe pains in the region of the liver. About every six months since then there occur painful attacks of such violence that syncope and bilious vomiting often supervened. During the course of one of these abdominal attacks in 1913 M. Le Noir, a physician of St. Antoine, found a regularly rounded tumour, which caused no pain, on the median line in the subumbilical region. On his advice Professor Lejars carried out an operation, which was so successful that the patient was able to leave the hospital in a week. But the painful attacks, combined with syncope, soon reappeared and a fresh tumour formed in the neighbourhood of the navel.

Professor Lejars operated again on Feb. 24th, 1915. The report runs: "Hydatid cyst of the umbilicus—incision and ablation—reunion." After this third operation the relief

given was very marked; the painful attacks diminished both in intensity and frequency. But from 1917 onwards the small tumours, which we noticed in the cicatrix, began to grow and the stomach gradually increased in size. Finally, for some months painful irradiations in the right thigh in the domain of the sciatic and crural nerves became more frequent and led the patient to come again for advice.

The history of the patient therefore confirms our diagnosis, which may be formulated as follows: *Multiple recurring hydatid cysts of the abdomen and pelvis.*

If we had no operative proof of the correctness of our diagnosis, the laboratory could give us useful information. Firstly, the complement-fixation reaction. But this only indicates probability, for it is often negative in the case of closed cysts; and, on the other hand, it has been found positive in the absence of hydatid cysts, notably in the case of sarcoma. Secondly, the examination of the blood, which in our case gave the following results:—

Neutrophil multinuclears	...	...	40 per cent.
Eosinophil	"	...	30 "
Mononuclears	...	...	17 "
Lymphocytes	...	...	13 "

The huge number of eosinophils is a strong argument in favour of the theory of a hydatid cyst. It is, however, often observed to disappear in the hours subsequent to the operation.

What is the origin of these hydatid cysts of the abdomen, the first manifestation of which dates back for 24 years? In view of our knowledge of abdominal echinococcus in man it is hardly probable that the cysts of the pelvis operated upon 24 years previously were the original tumours. Dévé's patient researches have shown that hydatid cysts of the peritoneum are practically always consecutive on the rupture of a hydatid cyst of the liver. This original tumour was not found in our patient. But was it looked for? Is a hydatid cyst of the liver at present still in existence? Clinical knowledge cannot yet give a sure answer. In the meantime, we must stick to the long story which the patient has to relate of most painful abdominal attacks in the region of the liver. Are they connected with inflammatory attacks, with pericystic reactions? It is very possible. However that may be, clinical and radiological examinations are at present negative. Although we may suggest to the surgeon to take advantage of laparotomy, one cannot say that a hydatid cyst of the liver still exists.

From the therapeutic point of view we turn for the fourth time to surgery for help; indeed, if a hydatid cyst is diagnosed, operation is imperative. In the case of our patient everything points to the progressive growth of pelvic cysts. The indications of compression are already manifesting themselves—pains in the domain of the sciatic and crural nerves. The evolution of the tumour may cause an increase of these pains and, what would be more serious, the compression of the veins, arteries, ureters, and intestines, bringing with it grave functional disorders. One of the complications to be apprehended is the rupture of cysts and their fresh dissemination. For all these reasons an operation is necessary. But it is a long and difficult one, in which the surgeon must not leave a single cyst alive. It is as simple to remove a large hydatid cyst after formolisation as it is difficult to clear a peritoneum and, above all, a pelvis filled with secondary cysts like a bag of walnuts. Especially when they are sessile, all the small tumours cannot be removed. They must be punctured and sterilised one by one by the use of formalin, otherwise there is the risk of recurrent development, as in the case of our patient. Finally, as we have already said, the liver must be explored and we must seek for the primitive cyst, which is perhaps still active, in any case very old, dating back, in some patients, to early infancy, as Dévé has found. The prognosis is therefore serious, whether the patient is left to herself, with the risk of the compression and rupture of which we have spoken, or whether an operation is performed. We adopt the latter alternative without any hesitation, but the immediate danger must be faced, that the operation will be long and serious if the surgeon attempts a radical cure, which may possibly leave some living vesicles destined to evolve in the direction of increasing size or of rupture and secondary insemination. In other words, it is not at all certain that the operation to be attempted will be the last.

From this observation it will be seen how difficult is the diagnosis and treatment of secondary echinococcus of the peritoneum.

¹⁵ Arch. génér. de Chirurgie, June 25th, 1913.

¹ From Professor Chauffard's Clinic.

THE LANCET.

LONDON: SATURDAY, NOVEMBER 8, 1919.

General Medical Council Election.

THE following is the official list of those duly nominated as candidates for the election of Direct Representatives for England:—R. A. BOLAM, O.B.E., M.D., Newcastle-on-Tyne; J. BROWN, M.D., Blackpool; W. F. H. COKE, M.R.C.S., Ashford; J. A. MACDONALD, M.D., Taunton; G. A. MAIN, M.B., Stockport; A. BLACKHALL-MORISON, M.D., F.R.C.P., London; E. H. M. STANCOMB, M.B., Southampton; E. B. TURNER, F.R.C.S., London; Sir T. JENNER VERRALL, M.R.C.S., Bath; A. WELPLY, M.D., London. The voting papers are being issued to-day. The counting of the votes will be finished on Wednesday evening, Nov. 19th. The last election was held in 1911.

Of the candidates, Dr. BOLAM, Dr. MACDONALD, Mr. TURNER, and Sir T. JENNER VERRALL were chosen by the British Medical Association, at the last annual meeting of Representatives, to be supported by the Association at the coming election. Dr. MACDONALD and Sir T. JENNER VERRALL are seeking re-election, while Dr. BOLAM and Mr. TURNER are contesting the constituency for the vacant seats of Dr. LANGLEY BROWNE and Dr. H. A. LATIMER. The joint election address of these four candidates will be found in our issue of Oct. 18th. The chief points in their programme are that the developments under the Ministry of Health will call for serious consideration by the General Medical Council, and that the dangers of unqualified practice and the regulation of medical education require earnest attention by the same body. In a covering letter issued to the constituency by the four candidates it is pointed out that discussions of medical politics are frequent at the British Medical Association, so that members of the General Medical Council, in touch with the Association, would be familiar with medical opinion on the great problems of public health. Dr. COKE, Dr. MAIN, Dr. STANCOMB, and Dr. WELPLY are nominees of the Medico-Political Union. Their joint address is published in our columns this week, in which they suggest that the changes in the panel and other medical services raise new ethical questions which must be looked at essentially from the general practitioner's point of view; while they make the special and valuable point that in the reform of medical education the general practitioner should have a considerable voice in the necessary reconstruction. In the opinion of the nominees of the Medico-Political Union, itself a democratic body, the General Medical Council should be composed entirely of representatives directly elected by the whole profession. The candidates put forward by the British Medical Association and by the Medico-Political Union alike appeal to the constituency on the unassailable ground that the more information as to general practice which is placed at the disposal of the General Medical Council the more effective will that body be; but while the nominees of the Association hold that the experience afforded by official work in that large and powerful body affords

the necessary equipment, the nominees of the Medico-Political Union would have all the General Medical Council chosen by popular vote, leaving it to the constituency as a mass to select the men in whose work for the profession the greatest public confidence is felt. Dr. BLACKHALL-MORISON is standing by the nomination of the National Medical Union, a body whose policy is for the most part opposed to developments of panel practice, believing that they may eventuate in that medical trade-unionism which is the ideal of many members of the Medico-Political Union. His address is also published in our columns this week, and his candidature is supported by the Scottish Medical Guild. Dr. JOHN BROWN is standing as an independent candidate, going to the poll in protest against the nomination by the British Medical Association of four candidates for the four vacancies. He makes an interesting point in his election address when he suggests that, if the English constituency were divided into four for electoral purposes, the cost to intending candidates would be by so much lighter. The ten candidates have placed their views succinctly before our readers, and an interesting contest should ensue, turning upon the support which different groups of political thought will receive from the voters, all the candidates having the same object—namely, the advance in status and efficiency of that great bulk of the medical profession which has the care of the health of the people in its direct charge.

Three candidates are in the field for the seat of Direct Representative for Scotland—namely, Dr. NORMAN WALKER, the sitting representative, Dr. MICHAEL DEWAR, of Edinburgh, and Dr. EBENEZER DUNCAN, of Glasgow. The views of all three have been published in our columns, and notes of their public statements have appeared in our Scottish correspondence. Dr. EBENEZER DUNCAN in his address makes some detailed recommendations for the reform of the medical curriculum, and as a general practitioner has had first-hand experience in the problems of medical life. The same point is made by Dr. MICHAEL DEWAR, who comes forward as "a general practitioner in active practice strenuously engaged for the last 17 years or more in furthering the interests of the profession." Dr. NORMAN WALKER has been the Direct Representative for Scotland on the General Medical Council for the last 13 years, and in that position is able to address the voters upon the reorganisation of the medical curriculum in a way which has a valuable bearing on the previous work of the Council, and on the duties which certainly will devolve upon that body through the setting up of a Ministry of Health. Throughout his public pronouncements he shows his familiarity with all sides of professional life, and as there is nothing stale or reactionary in his proposals, but, on the contrary, as they are mainly young and progressive ones, the chief argument for replacing an old and tried servant is removed. No doubt the opposing candidates would, in his absence, be strong ones, but with Dr. WALKER in the field we do not expect to see any change in the representation in Scotland. In Ireland Dr. LEONARD KIDD, the sitting member, proposes to offer himself for re-election as Direct Representative, when he will be opposed by Dr. J. C. MCWALTER, coming forward as "a candidate representing the interests of the Irish doctors who have served in the R.A.M.C.," which may be a persuasive card to play in the election, but will probably not divert the necessary support from Dr. KIDD.