branch from the fourth, exists, either produced by traction on the head or shoulders with the forceps or hands, or by pressure from behind when the shoulder has met some obstruction.

If our conclusion is correct, under ordinary conditions we expect to find the right shoulder affected in cases where the position was O. L. A., and in other cases where the right shoulder met the obstruction; and it is interesting to note in this connection, that in the few cases when the position has been ascertained this rule follows. In the two cases where the position was O. L. A., also in the one case of O. R. P., we find the right shoulder affected; on the other hand, when the position was O. R. A. the left shoulder is the affected one. In the case (X) where the labor was short and delivery spontaneous, the right shoulder was affected. Is it not fair to assume that this was an O. L. A.?

In the breech and other presentations involving the birth of the head last, we might expect to find either or both sides affected, as was found to be the fact above.

While I am well aware that the statistics here presented are too meagre to establish any rules in the matter, may we not formulate the following provisional conclusions?

(1) The upper-arm type of obstetric paralysis is due to a stretching of the upper trunk of the brachial plexus, during process of delivery.

(2) This is brought about by traction on the head or pressure on the breech when the shoulder is retarded, or by traction on the shoulder when the head is retarded.

(3) The prognosis, as a rule, is good, although recovery may be delayed months or years, permanent disability being rare.

LAPAROTOMY IN TUBERCULAR PERITONITIS.¹

BY A. J. MIXTER, M.D.

IN choosing the above subject for a paper, I have two distinct points in mind: first, to call out opinions as to the relative frequency of cases of true tubercular peritonitis or those of so-called granular peritonitis, and the curability of either or both by operation; and second, to report a single case selected from a number in my practice, but one which seems to illustrate better than any that I found reported, a perfect example of true tubercular peritonitis cured by operation.

On talking with some of the students in my clinics, I have found that there is an impression prevailing among some of them at least, that cases of chronic peritonitis cured by laparotomy are not cases of a true tubercular process; that they are so-called granular peritonitis and the bacillus of tuberculosis is not present. This idea they gathered, and whether or not it has been intended to be conveyed by the lecturer, it is certainly a prevalent one among these men. On looking up reported cases I find no reason to think this a correct view of the matter, and I should rather incline to the belief that most of these cases were true tuberculosis, and that the exceptions were the granular cases, whether recovery followed operation or not. Osler, in his very thorough article on this subject speaks of cases resembling in general appearance and in certain ways, tubercular peritonitis, where the

nodules found scattered over the peritoneal surface are not tuberculous, but are either fibrous, syphilitic, lymphomatous, or even carcinomatous in character. Cases are also mentioned where, following operation (the patient having died of some acute disease some time after), the nodules have been found to be undergoing a degenerative process; and it is possible that cases of so-called granular peritonitis may be the results of a previous tubercular process. On this point I have no opinion to offer, but simply make the suggestion that the line of distinction between the two is not at all a sharp one.

In looking up the literature of the subject I am impressed by the fact that a large number of cases is reported where careful microscopical examination of small portions of the peritoneum, removed for that purpose, has been made, and that in almost all such cases, true tuberculosis was found. I say "true tuberculosis" advisedly; and my statement may be questioned by those that only accept the demonstration of the presence of Koch's bacillus as a sure proof of tuberculosis, but to those I say that, though I find many reports of the presence of the bacillus, I find very few indeed where it is stated that it was sought for and not found. This may be negative evidence, but I wish to state after a study of the subject from its surgical and historical side (by the latter, meaning reported cases), that the evidence, negative and positive, points to the presence of a tubercular process even in the majority of the chronic peritoneal inflammation cured by opening the peritoneal cavity. I am told by one good authority in pathological matters, that it is absolutely necessary to prove the presence of bacilli in these cases to show that the process is a tubercular one, and by another authority, also a good one, that any one should be able to distinguish between the tubercular and the non-tubercular process on inspection of the interior of the affected abdomen.

It is to clear up some of these doubtful points that the reader reports a case to-night which may be used as a central point around which to group various theories and conjectures as to the pathological nature of these processes; and also to call attention to certain differences in the surgical treatment, and to the results following laparotomy which have certainly been as brilliant as those following any operation devised by modern surgery, for the relief or cure of a disease formerly considered fatal in most cases. Osler has written so clearly and so well upon the whole subject of peritoneal tuberculosis that there is little need of further work in that direction at present.

It is not intended to refer here to the subject of encysted tubercular peritonitis or to the question of tuberculosis of the tubes in the female as causing a general peritoneal infection. There are, perhaps, cases of this kind where a cure, or disappearance of symptoms, may take place without surgical interference of any kind, but they are certainly far from common. It is also true that a cure may follow one or more aspirations or tapplings of the abdomen; but the best treatment is without doubt the opening of the abdominal cavity, separation of adhesions as far as possible, perhaps followed by washing out the belly with warm water, salt solution, or even some antiseptic.

The following is an abstract from the Carney Hospital reports:

Sylvina Q., age thirteen, born in Portugal, entered the Carney Hospital July 10, 1892. Previous history

¹ Read before the Boston Society for Medical Observation, February 6, 1893.

could not be fully obtained as the child's English was limited, and the mother could speak only Portuguese. The father died of unknown cause. Patient always well till the year before, when she had measles; and since then she had not been robust. About a week previous to her entrance to the hospital she began to have pain in the abdomen, paroxysmal in character, and, soon after, swelling of abdomen, vomiting, diarrhoea and headache. On entrance, the diarrhoea had ceased, and there was constipation instead. Temperature 104.4° , pulse 135. Physical examination by Dr. J. J. Minot and myself showed that the patient was a thin, poorly-nourished girl, features pale and pinched. Tongue slightly coated and dry. Heart and lungs negative. Abdomen markedly distended and containing fluid — very sensitive to pressure. An ill-defined mass could be felt in the umbilical region, extending to the right flank. Patient weighed on entrance sixty-five pounds.

July 13th. Condition much the same as on entrance. Operation performed under ether. An incision was made in the median line about six inches in length. Upon opening peritoneal cavity, it was found filled with serous fluid slightly reddened by blood. Both the parietal and visceral peritoneum were found studded with small, millet-seed nodules; and a little to the right of the umbilicus was found a hard, irregular-shaped mass covered with similar nodules, and which on examination proved to be omentum closely matted together and thickened. The intestines, which were held together by soft adhesions, were separated by the hand, and a small piece was snipped off the parietal peritoneum for microscopical examination. The abdominal cavity was then thoroughly flushed out with warm salt-solution, and the wound closed with sterilized Chinese-silk suture, iodoform and baked-gauze dressing. Patient made a good recovery from ether; but towards evening there was considerable shock — the temperature rising to 104.4° , pulse 150 and weak. Stimulants were freely given by rectum, and about midnight the temperature began to fall a little.

Her condition improved rapidly in the next few days; and in about two weeks she was sitting up and having full diet. Some days later a little pus appeared at one of the stitch-holes; and in a short time every one broke down, making a series of connecting tubercular sinuses. These were thoroughly curetted, under ether, by Dr. Munro, and the cavities packed with iodoform. In two weeks the wound had entirely healed. After this there was a steady gain in strength and weight. Her weight, July 10th, was 65 pounds; September 12th, was 68 pounds; October 18th, was 71 pounds; November 23th, was 86 pounds.

Microscopical examination by Dr. B. F. Mallory of the piece of parietal peritoneum removed at the time of the operation, showed miliary tuberculosis with bacilli. The granulations from the stitch sinuses were examined by Dr. Coggeshall, who also found the tubercle bacilli.

This case seems to be as complete a one of apparent recovery, as can be reported. At every stage we have careful microscopical and bacillary examinations by competent men; we have the weights of the patient and her temperature; and the patient is present tonight to show what the operation of laparotomy can accomplish in a severe case. The great relief following the opening and washing out of the abdomen, the healing of the wound followed by the appearance of a

tubercular process creeping up along the tract of the stitches through the abdominal wall, its disappearance after thorough scraping and plenty of iodoform, and the presence now of the patient in perfect health, make it complete.

One point very strongly emphasized here is that drainage should never be used unless it is of absolute necessity on account of the pressure of pus or a very large amount of cheesy detritus, neither of these conditions being found, as a rule, in cases of general tubercular peritonitis. The benefit or harm done by drainage in this class of tubercular disease is determined by the same, or nearly the same, rules and conditions as in other parts of the body. Personally, I most thoroughly believe in closing without drainage every cavity resulting from an operation on tubercular processes not already suppurating. This rule applies not only to serous cavities but also to other sites of the disease. If through faulty asepsis or other reasons pus forms, it is then time enough to drain by gauze or tube. I am not prepared to say whether the introduction of iodoform into a wound to be closed by suture is of benefit or not. My results with and without it are about equal.

König states that the cases in his list show that those washed out with antiseptics show the best percentage of results. I am not ready to introduce into the abdominal cavity any known antiseptic in sufficient quantity or of sufficient strength to produce any action on the micro-organisms present, especially as so many cases have been cured without their use.

In conclusion, I quote the words of Osler whose article must, in the main, stand as the most useful one that we have on the subject:

"The important practical point, however, is the relief and cure of these cases by laparotomy; and the surgeons may well leave to the pathologist the minor question of determining the nature — whether fibroid, lymphomatous, or tubercular — of the chronic peritonitis."

Clinical Department.

A CASE OF PLACENTA PRÆVIA LATERALIS.

BY HUBERT G. WILBUR, M.D., FALL RIVER, MASS.

MRS. V., age thirty-five, of good personal and family history, the mother of four children, when about three months pregnant began flowing at irregular intervals. The hæmorrhage was slight at first and painless. Later on it was more abundant, so that she felt weak, and became alarmed. On March 13th, just a few days before I saw her, the flowing was unusually profuse. She was then apparently about six months along. The fetal heart was heard. Vaginal examination was negative.

A consultation was held with Dr. Gifford; and in view of the recent severe hæmorrhage, operation was decided upon. The expectant method did not seem wise, since the parents did not care especially to save the child.

Ether was given, and the vagina cleansed by a douche, 1-5000 bichloride; then with aseptic precautions the os was dilated manually. Version was performed, and the fetus extracted rapidly. The placenta was felt in the left side just about at the margin of the inner cervical ring.