LIMITS OF ABDOMINAL OPERATIONS.

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My aim in this communication is to bring before you some debatable matter in abdominal surgery. During the past ten years certain major operations on the viscera of the abdomen have become almost safe and easy in their performance, and as a natural result there has been a strong tendency towards increase in their sphere of use. In some instances this increase is justified, in others I think it is not. In any case there is much room for difference of opinion, and seeing that I shall only deal with those operations of which we have all now ample experience I think I may fairly hope that members will fully state their views.

Concerning Movable Kidney.—There are certain indications which the large majority amongst us recognise for fixing a movable kidney. To avoid unnecessary details I may say that this operation may be performed in all those cases in which the symptoms are obviously and directly referable to the kidney itself. But apart from these there are a host of symptoms which are often associated with movable kidney. Such symptoms are:—
1. Vomiting and other signs of gastric derangement;
2. Constipation; 3. Biliary colic; 4. Vague general symptoms—*e.g.*, dragging sensations, incapacity for work, loss of flesh, and neurasthenia.

These associated symptoms have been explained in

various ways. Pressure of the displaced kidney on the duodenum has been thought an explanation of the biliary colic and of the gastric disturbance. This is a foolish theory, and not worth serious discussion. Of more interest is the suggestion that these various symptoms may have a *reflex nervous origin*. We know that vomiting is common as a reflex effect of a renal calculus, but in that case the vomiting usually accompanies an attack of pain in the renal region, and very seldom occurs alone. Still I think experience has proved that vomiting may sometimes be regarded as a reflex effect of movable kidney, for sometimes it appears to have been cured by a nephropexy. I am, however, more certain that this operation has frequently failed to cure the vomiting, and, speaking generally, I think that the less we look to reflex action for an explanation of abdominal symptoms the less likely we are to make serious mistakes in diagnosis.

In the particular case of *vomiting* as an association of movable kidney it will, I believe, be found that the former is often only an association, and due not to movement of the kidney but to gastropptosis, which, like the movable kidney, is the result of a hypotonus of the abdominal muscles. I am convinced that gastropptosis is more common than we formerly thought. I think it is very common.

Now I hold that vomiting alone is generally the result of something more definite than reflex action. Much more do I hold that *dilatation of the stomach* is never due to any effect, direct or indirect, of the movable kidney.

I take a similar view regarding *biliary colic and constipation*. These are not, in my opinion, due to hypothetical draggings of the loose kidney. The colic is generally due to a downward movement, probably rotation, of the liver, and the constipation to displacement of

the transverse colon. If you agree with me in all this you will also agree that the indications for kidney fixation should be limited; that the operation should be reserved for those cases in which the movement of the kidney is obviously the cause of symptoms, and these constitute a small minority.

Concerning the Vermiform Appendix.—I shall now ask you to consider the question of operation in cases of appendicitis. I venture to think that *one attack of appendicitis is sufficient to justify operation*. I do not think operation advisable *during* a first attack, nor, indeed, *during* any attack, unless there is present some special indication. If you operate during an attack you do not by any means remove all infected tissue in removing the appendix. There is, therefore, a considerable risk of continuance of inflammation and the formation of an abscess after such an operation. Thus the risk of operation is about equal to that of the attack itself if left to nature. No doubt the danger may be removed, or at least lessened, by the use of a drain, but a drain means a weakened scar and probably a hernia subsequently. I think one should allow about three weeks to elapse before operating after an acute attack. Put thus, the indications for operation in appendicitis appear sufficiently simple, but unfortunately in practice the decision for or against operation is often difficult, because the diagnosis is uncertain.

Concerning difficulties in diagnosis of Appendicitis.—Last summer I saw, with Dr. Boyd and Dr. Beatty, a boy, about twelve years old, who was suffering from pain in the right iliac region. His illness had begun quite suddenly the previous evening, and the symptoms were those common to almost any acute illness. The pain in the abdomen set in some hours after the other symptoms. When we saw him his temperature was 103°, his pulse a little over 100, and we found an extreme hyper-

æsthesia in the appendix area. He had a short cough, but he had had whooping-cough some time previously, and since then had been coughing occasionally. I felt certain that the case was one of acute and severe appendicitis. Dr. Wallace Beatty thought that we might safely delay operation until the following morning (our consultation was late in the evening), and he said there was something about the boy's cough and the mode of onset which suggested the possibility of pneumonia, and he had seen a case some time before in which pneumonia was associated with pain in the appendix region. We met again next day, and now his pulse had increased to 120, and the appendix pain had not diminished. As there were no physical signs of pneumonia we all thought it wise to open the abdomen. The appendix, when exposed, looked almost normal, but when removed and opened we found in it two recent ulcers, a small blood-clot, numbers of small bodies which looked like fig seeds, and a colony of thread worms at the apex. Either that day or the next the boy began to expectorate, and the sputum was typically pneumonic. We had it examined bacteriologically, and it was found to contain numerous diplococci. I was disappointed to learn that a similar examination of the appendix was negative.

I have given this case as an example of the difficulty in diagnosis of appendicitis, for although we were correct in thinking that there was appendicitis, we were quite wrong in our estimate of the degree of inflammation and in our decision to operate immediately. The occurrence of this area of hyperæsthesia is, I believe, recognised as an occasional accompaniment of pneumonia, and ascribed to reflex nervous action. In view of what I have said about obscure abdominal reflexes, it is of interest to remember the decided inflammatory lesions found in the appendix in this particular case. But the common difficulties in diagnosis arise from the strange *variability of the disease*.

Thus (1) *The degree of fever* varies, and rarely there may be no fever, and sometimes an abscess may form,

though the temperature scarcely exceeds 99°. (2) *The character of the tumour* varies. I have known the swelling which followed an atypical appendicitis so well defined and so hard as to lead to the mistaken diagnosis of malignant growth. Again, I remember a case in which for long the diagnosis inclined to typhoid fever, although a tumour or thickening could easily be felt in the iliac region, because the tumour was free—quite free—from tenderness. I operated in this case and found much disease of the appendix, and, in addition, cheesy matter, the relic of an acute abscess. [I may note parenthetically that there can be no question that an abscess forming in the course of appendicitis may undergo absorption, and I think that one would find some suppuration in almost all cases of appendicitis where a palpable tumour is produced in the iliac fossa.]

There is another variation which interests me much, but I have not sufficient experience to speak definitely about it. This concerns the *position of the appendix tumour*. I saw a man once who had what seemed to be an attack of appendicitis, but the tumour was situated in the right hypochondrium. In another case, in which a movable right kidney was supposed to be the cause of certain symptoms, I first made an exploratory incision in the hypochondrium, and I there found an undescended cæcum and a vermiform appendix coiled up near the gall-bladder and pylorus. This appendix appeared to be fully eight inches in length. It looked quite healthy, so, of course, I did not remove it.

These examples are sufficient to establish the fact of the difficulties often attending the diagnosis of appendicitis—difficulties, as I have said, due to the variability of this disease. In view of this I would modify my statement relative to operative indications and read it as

follows:—An operation ought to be performed in all cases of appendicitis after a single *unequivocal* attack. If there is doubt about the diagnosis one ought not to operate, for it is a serious matter to operate and find a normal appendix. Apart from other things, such a contingency is apt to lead one into plausible divergence from truth.

Concerning Operation for Gastropotosis.—I had intended to express some views regarding the limits of gastric surgery, but I have already occupied more time than I had intended. I will, therefore, only ask your attention to one aspect of this large subject.

In the case of the stomach, as in other viscera of the abdomen, there are certain definite indications to operate. Such are perforation and dilatation due to pyloric stenosis. In addition to such clear cases there are a number of others in which the indications are very doubtful. Gastric ulcer occupies, as it were, an intermediate position, and gastropotosis the position of least certainty. Ptosis of the stomach, though often not causing symptoms, at times produces both pains and vomiting. Since the pylorus is in such cases obstructed, it would seem rational to perform gastro-enterostomy to relieve the symptoms. I think anyone would be quite justified in giving this operation a trial. However, as a matter of fact, the cases of gastropotosis with vomiting are usually neurotic people. With regard to these and all other similar cases I am convinced that it is a mistake to submit them to operation. The large majority of these neurotics are, I believe, incurable, and their treatment lies near the border-line of quackery, whether it assumes the garb of surgery or takes to itself any other name.

MR. W. TAYLOR said it was not always easy to be certain that symptoms were distinctly referable to movable kidney. In his experience a larger proportion of cases of stomach trouble than Mr. Gordon appeared to concede were due to movable kidney. The speaker instanced several cases bearing on the point, as also on the difficulty, of diagnosis in appendicitis.

MR. JAMESON JOHNSTON agreed that only cases in which the symptoms were directly traceable to misplaced kidney should be subjected to operation. He had never seen two cases of appendicitis exactly alike, and he would be glad to have information as to the exact indications for operation.

MR. GUNN thought that in almost every case where they got a tumour in the appendix region pus was present. He referred to kinking of the ureter as a test.

MR. BLAYNEY said that Mr. Gordon's statement that it was inadvisable to operate in acute appendicitis while inflammation was present should not be allowed to pass without some qualification. It was, of course, advisable not to operate if it could be ascertained certainly that the patient would recover. But there was no definite way of doing so, and he believed that if patients were all operated on in the first twenty-four hours in acute appendicitis there would be less harm done than by adopting the waiting policy.

MESSRS. BALL, STOKES and KENNEDY also spoke.