CLINICAL RECORDS.

SPONTANEOUS RECOVERY AFTER PERFORATION OF DUODENAL ULCER.

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In the course of operations performed for chronic duodenal ulcer it is a not an uncommon experience to find evidence of former peritoneal inflammation round the duodenum in the form of adhesions uniting the various organs more or less firmly together. In some cases these adhesions are so dense and widespread as to justify the view that they may have originated in a definite local peritonitis due to perforation of the ulcer in the duodenum and followed by spontaneous recovery. In such cases a well-marked puckered scar is usually found on the peritoneal aspect of the ulcer.

On the other hand, in operating for perforated duodenal ulcer one occasionally finds that the peritoneum round the perforation has become glued to the liver or gall-bladder in such a way that had the adhesion not been disturbed, spontaneous recovery, with permanent closure of the perforation, might have taken place, provided that the exudate already present in the peritoneal cavity could have been absorbed. In 2 out of 33 cases of perforated duodenal ulcer on which I have operated, this condition was present. In both cases the symptoms had abated in a striking manner after a typical onset, and the diagnosis was largely made on the history given by the patients of chronic dyspepsia, with the sudden onset of violent abdominal pain some hours before they were seen. Examination of the abdomen in these cases revealed a certain amount of local tenderness and resistance in the right upper quadrant, but of relatively mild degree, and in the absence of a history suggesting ulcer and perforation one would have hesitated to recommend immediate operation to patients showing such mild symptoms, and who were as a matter of fact loth to submit to it.

The facts of the following case seem to prove, as nearly as the matter can be proved, that this spontaneous recovery may take place:— A. B., æt. 33 years, was recently admitted to Leith Hospital with the history that 5 days previously, at 11 P.M., he had been suddenly seized with violent pain in the upper part of the abdomen, compelling him to stop work. He was taken home to bed, and hot cloths, etc., were applied to his abdomen. About 5 hours later he felt better, got up, and visited his doctor, who gave him a sedative mixture. He returned to bed, and although the violent pain did not return, a feeling of great discomfort and fulness in the upper abdomen remained. During the next few days he attempted to get up several times, but the effort always aggravated his discomfort and made him vomit, so that he was compelled to return to bed. During this time the upper part of his

abdomen, on the right side, was tender to touch, and he was slightly feverish. While in bed he was able to take liquid food without being sick. His previous history revealed nothing characteristic, and he stated that his digestion had always been good and his general health satisfactory.

On the 5th day of his illness he was admitted to Leith Hospital. He looked pale and moderately ill. His tongue was furred, his temperature 102° F., and his pulse 100. His abdomen was a little distended, and there was marked tenderness and resistance in the right upper quadrant, especially in the area of the rectus muscle. The rest of the abdomen was free from tenderness and resistance. A provisional diagnosis of localised peritonitis, possibly due to leakage from a perforated ulcer, was made. The patient maintained emphatically that he was better than he had been on the preceding day and was not willing to be operated on, so, with some misgiving, it was decided to watch his progress, in the expectation that a localised abscess would likely develop. Next day his temperature dropped to normal, his pulse to 80, and his general appearance improved distinctly. The condition of the abdomen remained much as before. During the next four days he remained in the same state. The temperature did not rise, he was able to retain light food, and the bowels moved readily. The abdominal tenderness and resistance diminished, but, owing to the uncertainty attending the diagnosis, with the possibility of serious complications arising, it was thought wiser to operate. Accordingly, 10 days after the onset of the illness, the abdomen was opened.

The pyloric end of the stomach and the transverse colon were found glued to the liver, with some flakes of lymph along the line of adhesion. There was no fluid exudate present. The liver was easily separated from the stomach by gentle manipulation, and nothing of note was found till the first part of the duodenum was reached. As soon as this was separated, a gush of slightly bile-stained fluid escaped through a round hole, 3 to 4 millimetres in diameter, towards the superior aspect of the duodenum, just beyond the pylorus. The fluid was mopped up, and the perforation at once closed and inverted with catgut stitches. There was no collection of fluid present elsewhere in the abdomen as far as could be determined. A posterior gastro-jejunostomy was then made and the abdomen closed. The patient made an uneventful recovery.

The facts of this case seem to show clearly that a perforation may occur and be closed by adhesion to the liver shortly afterwards, and that the adhesion may persist, in spite of the peristalsis associated with digestion, of vomiting, of the patient's getting up, etc.; that fluid exudate, which must almost certainly have been present, may be absorbed, and any infective element present may be effectively dealt with by the peritoneum.

While one has inferred that such a course of events must occasionally take place, the case was of interest as affording a very convincing demonstration of spontaneous recovery actually in process after perforation. The remarkable increase in the number of cases of perforated duodenal ulcer coming to operation during recent years was well shown in the collective report on that condition published in a recent number of the *Journal* and the question is often asked as to what became of such cases in the days when they were not so frequently recognised. While it would be rash to suggest that many of them recovered, it seems fair to infer that some at any rate got well spontaneously, just as the patient referred to above would have recovered, at least from his acute illness, without operation.

A CASE OF OSTEOCHONDRITIS DEFORMANS JUVENILIS.

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THE following case appears to be an example of a peculiar affection of the hip, first described by Perthes, and termed by him osteochondritis deformans juvenilis. This condition is met with in children between the ages of three and twelve years, and is liable to be mistaken for tuberculous disease of the hip-joint. It has, however, certain characteristic clinical signs and typical radiographic features, which when recognised should lead to a positive diagnosis. These are briefly:—(1) A very pronounced limp suggestive of congenital dislocation of the hip; (2) a very slight atrophy of the affected limb, confined mainly to the gluteal muscles; (3) abnormal prominence of the great trochanter; (4) the limb is held in position of adduction; (5) flexion and extension of the hip are perfectly free; (6) rotation is slightly, and abduction markedly, restricted; and (7) jarring of the hip causes no pain.

Radiographic Appearances.—There is (1) flattening of the head of the femur in its upper part; (2) rarefaction in the upper epiphysis and in the upper and outer part of the neck of the femur; and (3) irregularity of the epiphyseal line.

These appearances are due, as Perthes has shown, to a cartilaginous degeneration of the bone in the head and upper part of the neck of the femur, probably the result of some interference with its blood-supply. The disease tends to run a course of from 1 to 3 years and to end in spontaneous cure, usually leaving, however, a more or less marked degree of coxa vara capitis.

CASE.—Boy, æt. 8 years, one of a family of ten children who are all alive and healthy. There is no history of tuberculous disease in any member of the family. Apart from measles four years ago the boy has never had a day's illness. Four months ago, while climbing a railing, he slipped and fell, sustaining slight bruises on his head and in the