Medical Memoranda

Unusual Case of Rupture of Spleen

The following case of traumatic rupture of the spleen was treated recently at Cardiff Royal Infirmary.

CASE REPORT

The patient, a lusty young miner aged 28, was admitted on a Saturday evening complaining of upper abdominal pain and of dyspnoea. Twenty-four hours before admission he had been knocked down by a cyclist. When the accident happened he had just left a public-house where he had drunk "about ten pints" (5.7 litres) of beer. He had not been concussed but was unable to remember on which part of his body he had been hit. He had immediately got up, exchanged suitable imprecations with the cyclist, and had then walked four miles (6.4 km.) to his home. He had gone to bed and had been woken from sleep by upper abdominal pain which interfered with his breathing. This had persisted up to the time of his admission to hospital.

On examination the most striking finding was a respiration rate of 40 a minute with the alae nasi moving vigor-

ously. There was no cyanosis, pallor, or sweating. The pulse rate was 92 and the blood pressure 130/80. The skin was warm even on the extremities and the skin circulation was brisk. The abdominal wall did not move freely on respiration and there was muscle guarding and tenderness to deep palpation all over the abdomen. Marked tenderness, muscle rigidity, and persistent dullness to percussion were present in the left upper abdominal quadrant. Left shoulder pain was absent, nor was it produced by raising the foot of the bed for 10 minutes with the patient lying flat, after the manner suggested by O'Connell (1951). A diagnosis was made of incomplete rupture of the spleen.

An hour or so after admission the abdomen was opened by an upper left paramedian incision. The peritoneal cavity contained a quantity, estimated at 1 to 2 pints (570 to 1,140 ml.), of fluid blood and some clots. On retracting the left edge of the wound the lower pole of the completely ruptured spleen (see photograph) was seen lying quite free and unattached on the front of the greater omentum. It was simply picked out of the abdomen. The main mass of the spleen was lying in its normal position with the hilar vessels intact. The surface of rupture was covered by clot, and at the time of operation haemorrhage from this surface was certainly not brisk. Splenectomy was completed without difficulty and the patient made an uneventful recovery. Two pints (1,140 ml.) of blood was transfused during and immediately after operation. Histological examination of the spleen revealed no abnormality.

COMMENT

That rupture of the spleen not uncommonly presents in a clinically covert manner is, of course, well known. The pathological explanation is that haemorrhage is arrested or

retarded by blood clot. Conditions favourable to the formation of a localized clot, such as tearing of a small hilar vessel or partial or subcapsular rupture of the spleen, are generally present. The interest of the case reported lies in the fact that the same mechanism was effective in retarding haemorrhage in a patient whose spleen had suffered injury severe enough to amputate and to dislocate its lower pole.

I am indebted to Mr. J. B. Haycraft for permission to publish this case history.

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REFERENCE

O'Connell, T. J. C. (1951). *British Medical Journal*, 2, 1404.

Rupture of Spleen in Infectious Mononucleosis

Spontaneous rupture of the spleen is rare except in districts infested with malaria. Among recorded diseases associated with spontaneous rupture are arteriosclerosis, arterial degeneration, sarcoidosis, lymphatic leukaemia, and glandular fever or infectious mononucleosis.

In the records of the United States Army Institute of Pathology infectious mononucleosis accounts for 7 out of 44 cases of spontaneous rupture of the spleen, and is second in frequency to malaria, which was responsible for 22.

CASE REPORT

A man aged 23 was seen on February 6, 1952, as an acute abdominal emergency of 24 hours' duration. He complained of upper abdominal pain of a continuous nature since 5 a.m. on the previous day. The pain was felt in the left hypochondrium and the epigastrium, and there had been some distension in this region. Vomiting had not occurred, but he had had several attacks of nausea on the previous day. There was no history of trauma. He had not eaten a meal for over a week. His bowels were normal up till the previous day, when an attack of diarrhoea occurred. His urine was "strong," but otherwise normal. He had no cough and no backache. For the past two months he had been off-colour and claimed to have lost 28 lb. (12.7 kg.) in weight during this time. Seven days ago he had had a quinsy which had cleared up on sulphathiazole, 1 g. four-hourly for five days. Two days ago he had an attack of severe abdominal pain which doubled him up and lasted 15 minutes. Pain also occurred in the left supraclavicular region for a short period. There was no other significant past history.

On examination the patient was seen to be pale and a little wasted. His temperature was 100.6° F. (38.1° C.), pulse 100, respirations 28, blood pressure 145/90. The throat showed slight inflammation, but no peritonsillar abscess or membrane. The abdomen was distended, especially in the upper part; no visible peristalsis. On palpation there was slight tenderness and guarding all over. No masses were palpable. The spleen was not palpable. On percussion the abdomen was tympanitic, except that on percussing along a line from the left axilla to the umbilicus there was a band of dullness 2 in. (5 cm.) wide just above the costal margin. It was continuous with cardiac dullness medially, and faded away laterally. On auscultation there was complete silence in the abdomen. Per rectum definite tenderness was found in the rectovesical pouch. Routine palpation in the axilla, groin, and neck revealed a few lymph nodes that were hardly worthy of attention and were indistinguishable from old septic glands. The chest and heart were normal. On the physical signs a diagnosis of "blood in the peritoneal cavity? cause" was made.

Laparotomy was performed under gas, oxygen, and ether (Dr. Roberts). A right paramedian incision was made. As soon as the peritoneum was incised blood welled out. On exploring the abdomen the spleen was found to have two tears on its convex surface, surrounded by a large volume of blood clot. The incision was extended with a left transverse cut dividing the right rectus muscle, and splenectomy performed. All blood was removed from the abdomen. No other abnormality was detected. The abdomen was closed without drainage.