Medical Memoranda

Traumatic Perforation of the Bladder

An unusual case of traumatic rupture of the bladder in a man suffering from schistosomiasis in South Central Africa is described below.

CASE HISTORY

A male African, judged to be about 65-70 years of age, was brought in dead to the Gwelo Native Hospital on July 2, 1948. The relatives stated that the man had died at his kraal the previous afternoon. Four days before his death, while coming out of a native hut, he had collided with another native who was entering, and the latter's head had struck the old man in the abdomen. During the four days before his death he had complained of abdominal pain and had vomited once or twice. The other natives had not brought him to hospital.

Post-mortem Examination.—At 10 a.m. on July 3 a post-mortem examination was carried out. As it was the cold season and rigor mortis was beginning to pass off, it was estimated that he had died 36 to 48 hours previously. There was no bruising of the abdomen or any other sign of injury. The presence of some vomitus in the mouth was noted. On opening the abdomen the peritoneal sac was seen to be full of a dark-brown fluid which smelt like urine. There were flakes of pus covering the coils of the small intestine, and several loops of these were adherent. The stomach, spleen, liver, gall-bladder, and small and large intestines were removed, and apart from distension and inflammation of the bowel no abnormality was detected. Examination of the bladder *in situ* revealed a hole in the fundus about the size of a sixpence. The bladder was empty. The edges of the hole were ulcerated and sloughing. The bladder was carefully removed and opened. The prostate (median lobe) was seen to be much enlarged, and the mucosa of the bladder had the granular appearance and ulcerated areas seen in extensive schistosomiasis. The kidneys and ureters were removed, but they showed no naked-eye pathology.

Histology.—A snipping of mucosa close to the hole in the bladder was examined microscopically by teasing out the preparation in water on a slide. The mucosa was seen to be packed with terminal-spined ova (*Schistosoma haematobium*). Section of a portion of the ulcerated edge of the vesical perforation showed the presence of *S. haematobium* ova in large numbers in the mucosal layer and some leucocytic infiltration of the deeper muscular layers.

COMMENT

From the above findings it was concluded that in the presence of a distended bladder, presumably in part due to the enlarged prostate gland, the blow on the abdomen had caused rupture to take place through the most advanced area of schistosomal destruction. The resulting extravasation of urine caused a generalized peritonitis, ending in death from the toxæmia.

This case is described for two reasons. First, enlargement of the prostate gland is not a common condition in the Africans of Southern Rhodesia, presumably because of their death at a somewhat early age. Secondly, although the presence of schistosomal infection is extremely common in the South Central African native (Gelfand and Ross), I can find no evidence in the literature of a previous traumatic rupture of the bladder through such an area.

Although this native must have been suffering considerable pain during the four days previous to his death, he was not admitted to hospital, which was in the near vicinity of the accident. This may have been due to a disinclination of the other natives to reveal the accident, but may be an example of the remarkable stoicism of the native in the

presence of severe pain. The relatives definitely stated that in the first two days of his illness the old man was working in the fields.

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REFERENCE

Gelfand, M., and Ross, W. F. *Trans. R. Soc. trop. Med. Hyg.* In the press.

A Case of Femoral Appendicitis

A rare complication of femoral hernia occurs when its sole content is the vermiform appendix. An example of this is considered worth recording.

CASE REPORT

The patient, a woman aged 55, was seen at a gynaecological out-patient clinic on Oct. 8, 1947. Three weeks previously she had developed a feeling of heaviness at the "bottom of the stomach." Five days later she noticed a lump in the right groin, and shortly afterwards she began before micturition to feel slight pain, which persisted. Her history was otherwise negative.

On examination the internal group of superficial inguinal glands in the right groin were found to be tender and inflamed. There was slight inflammation of the urethra, and a few sub-epithelial haemorrhages were present in the vestibule. The glands were treated by local applications for a week, and on re-examination on Oct. 15 the acute infection had settled. The hard irregular lump had persisted, and the glands were slightly movable, discrete, and hard. No femoral hernia was palpable, and arrangements were made to remove a gland for biopsy.

On Oct. 17 the patient was operated on under local analgesia. Dissection revealed a lobulated fatty mass with two normal lymphatic glands perched on its surface: the mass extended towards the femoral ring. The sac was opened and was found to contain turbid fluid surrounding a purple pre-gangrenous vermiform appendix. The appendix was removed and the stump allowed to retract into the abdomen. The inguinal canal was then opened, and the femoral sac was transposed above the inguinal ligament, where it was excised. One stitch between inguinal ligament and pectineus fascia was adequate for the repair of the small femoral ring. Closure of the aponeurosis and skin was then effected without drainage.

No pathological examination was considered necessary either for the glands, which were macroscopically normal, or for the appendix. Convalescence was uneventful.

DISCUSSION

In 1731 De Garengot recorded the first operation for hernial appendicitis, and in 1785 Hevin gave the first detailed description of operation for femoral appendicitis. Ryan (1937) published three cases of femoral appendicitis, Watson (1938) collected 217 cases, two cases were recorded by Seley (1941) and one by Knapp and Claps (1944), bringing the total number of published cases of this condition to 223.

The most unusual case recorded is that of Johnstone (1934). In his case auto-appendicectomy occurred, and was followed by survival of the separated appendix owing to the acquisition of a new blood supply from the wall of the hernial sac.

Battle (1899) has recorded a case of appendicitis in a femoral hernia associated with inflammation of the overlying glands, and this is the only case found in the literature similar to the present one.

The sustaining interest of femoral appendicitis would seem to be, first, that it is so rarely diagnosed pre-operatively, and, secondly, the difficulty in making a precise