Clinical and other Notes.

TWO MISLEADING CASES.

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Case 1.—Acute cholecystitis with cholelithiasis and partial perforation of the gall-bladder.

Pte. T., the Buffs, served 6 years. Aged 25.

Past History.—Since the age of 12, this patient declared that he had been troubled with indigestion. He enlisted at the age of 18, when it was recorded that he was 3 lb. under weight. During 4 years' service in India, he states that he frequently reported sick with pain in the epigastrium which was thought to be due to "gastritis."

His Medical History Sheet for that period showed two entries. August 3 to 9, 1928—seven days. Diagnosis "haematemesis." "Patient states he brought up half a pint of blood after something had stuck in his throat while eating his tea. History of indigestion up to age of 18. No recent indigestion. No further haematemesis or melena while under observation. No evidence of gastric ulcer."

October 5 to 16. "Gastritis acute"—twelve days. "Epigastric pain and vomiting of bile-stained fluid. Tenderness in epigastrium near mid-line suggesting duodenal source. No haematemesis or melana. According to the patient the pain was severe, used to recur a few minutes after food, and was relieved by taking preparations of bismuth. No history of enteric fever or other tropical disease could be elicited."

History of Present Illness.—Fourteen days before the patient was admitted to the Royal Herbert Hospital, he states that he was seized with very severe pain in the upper abdomen, lasting about ten minutes.

On February 3, 1932, the day of admission to hospital, Pte. T. stated that he woke up with a severe pain in the usual place. He ate nothing but two ounces of dry bread for breakfast, but by midday the pain had become worse. He arrived in hospital at 8.30 p.m. on transfer from the nearest reception station with a provisional diagnosis of "perforated duodenal ulcer."

On admission, the patient complained of very severe pain in the subcostal angle. Temperature 100.2°F. Pulse 100 per minute, but slowed to 80 within half an hour of admission. He was reported to have vomited previously.

When first seen by the writer about 9 p.m., the patient was lying on his left side with knees drawn up and obviously in great pain, which, he stated, was constant and continuous. The upper abdomen was very tender.
and very rigid, but not absolutely "board-like.” It was scarcely moving with respiration and the abdominal reflexes were absent. Liver dullness did not appear to be diminished and the point of maximum tenderness complained of appeared to be in the subcostal angle, in the mid-line. The history and the mid-line pain seemed to favor a diagnosis of a gastric lesion, while the position of the patient and the absence of true boarding and of diminished liver dullness seemed to negative the possibility of an acute perforation of a chronic ulcer into the general peritoneal cavity. Furthermore, the amount of shock present seemed inadequate for such a lesion subjected to a journey by ambulance.

A provisional diagnosis of an ulcer of the lesser curvature leaking into the lesser sac seemed to meet the case as well as any.

Operation was performed at 10.30 on the night of admission under open ether and warmed ether (Shipway) anesthesia. The abdomen was opened through a right paramedian incision corresponding to the upper two-thirds of the right rectus muscle. On opening the peritoneum, no gas or fluid escaped. The appendix was sought for and removed though not obviously diseased. The pancreas appeared to be hard and the seat of some chronic inflammation. No ulcer could be seen or felt either on the stomach or duodenum.

On inspection, the gall-bladder appeared reddish in colour and there was an ovoid swelling projecting beneath the peritoneal surface of the fundus. The proximal half of the organ was partially obscured by old adhesions joining up to surrounding structures. On palpation, the projection on the surface of the fundus was found to be a stone and the whole gall-bladder was merely an inflamed sac surrounding a solid mass of calculi.

Cholecystectomy appeared to be the operation of choice as the condition of the organ was hopeless, while the general condition of the patient was good. Owing to the adhesions present the removal of the gall-bladder was effected from the fundus proximally, instead of in the reverse way more generally favoured in uncomplicated cases. The operation proved difficult as, owing to the friable condition of the gall-bladder wall, it ruptured during the manipulation necessary for its separation, and four or five stones with some bile were extravasated into the surrounding packs. Every possible care was taken to avoid injury to the hepatic and common bile-ducts by dividing the cystic duct at its point of junction with the neck of the gall-bladder, on the duct side of the last palpable calculus. The cystic duct and artery having been tied, a quarter-inch calibre split rubber drainage tube, containing gauze drain, was inserted down to the cut end of the cystic duct, the remainder of the abdominal incision being closed in layers. The operation lasted one and a quarter hours; the pulse-rate on return of the patient to bed was 100. Morph. ½ grain was ordered, together with glucose saline per rectum four-hourly.

February 5, 1932: Forty-eight hours after the operation, the patient
appeared to have a post-operative collapse of the right lung. Breath sounds were hardly detected and a copious sputum was expectorated before relief ensued. Bile-stained discharge, via the drainage tube, was slight for the first twenty-four hours after operation, after which it ceased. February 7: The patient was noticeably jaundiced, bile being present in the urine and absent from the stools. February 8: Calomel 3 grains, followed by salts in the morning, produced a profuse discharge of bile via the wound, soaking the dressings and necessitating change of bed-clothes three or four times. February 9: Little discharge from wound this morning, chest clearing, jaundice fading, normal pulse-rate and temperature. The urine shows little or no bile. A stool passed last night was still very pale. Urotropin, 10 grains, prescribed in a mixture t.d.s. Taking fish, eggs and fluid well. February 10: The patient is much better. The flow of bile from the drainage tube has ceased. Normal motions and urine passed. February 12: Progress continues, stitches removed, wound healed except for drainage opening. February 16: Drainage tube removed yesterday. No discharge, wound nearly healed; taking chicken diet. Temperature and pulse-rate remain normal. February 18: Wound soundly healed. Patient allowed up. March 2: The patient has been getting up for an increasing period each day, and states that he has not felt so well for years. March 4: Discharged hospital on twenty-eight days leave.

Summary.

The interesting points in this case are:

(1) The well-marked "gastric" history in a young man of 25 years of age dating back some years.

(2) The absence of positive findings on his two previous admissions to hospital. According to the man's own statement, he was frequently compelled to report sick and felt that he was regarded with suspicion of being a malingerer.

(3) The absence of any history of biliary colic, although the forty calculi in the gall-bladder varied in size from a pin's head to a hazel-nut.

(4) The confusion in diagnosis caused by the apparent mid-line pain and tenderness in the subcostal angle. Absence of diminished liver dullness, though usually detectable in cases of a perforated viscus, is not considered to be pathognomonic of such a condition. The position of the patient, when first seen by the writer, lying on his side rather than his back, was interesting, but not conclusive, since a patient after admission for a perforated duodenal ulcer will rarely adopt the lateral posture.

(5) The appearance, on opening the peritoneum, of a tumour situated on the fundus of the gall-bladder, eventually proved to be a stone in process of ulcerating through the wall of the viscus, which had arrived at and was only separated from the general peritoneal cavity by the thickness of the peritoneal coat. It is computed that only about ten cases of perforated
gall-bladder come to operation in every 1,000 cases of gall-bladder disease that undergo surgical treatment, so that operation on a patient in process of perforation must be a fairly rare occurrence.

(6) The dramatic crisis which complicated the immediate post-operative period and which would appear to have a simple mechanical explanation. In the first forty-eight hours after operation, the common bile-duct became blocked either by an overlooked calculus or by swelling of an inflamed mucosa aggravated by operative manipulations. Absence of biliary colic or of any great pain in this period points to the latter as the most likely explanation. A rising pressure in the cystic and hepatic ducts associated with marked jaundice evidently "blew" the ligature off the cut end of the cystic duct with immediate outpouring of bile and gradual disappearance of jaundice. Forty-eight hours later bile ceased flowing from the drainage tube and colour returned to the stools, evidently as the result of the patency of the common bile-duct becoming re-established. Since the cut end of the cystic duct was at this time patent, there can have been but a very small pressure in the common bile-duct. This supports the theory that the flow of bile along its normal course was more likely due to subsidence of inflammation in the common bile-duct mucosa, than to the onward passage of a calculus into the duodenum.

(7) The advantages of cholecystectomy over cholecystostomy in the presence of an inflamed gall-bladder where the general condition of the patient warrants the performance of the longer and more difficult operation.

(8) The dramatic and very temporary nature of the post-operative complications which so rapidly succeeded each other and which permitted of primary union in the wound except for the small hole made by the drainage tube, and allowed the patient to be discharged from hospital completely healed twenty-eight days after operation.

**Report on Gall-bladder Removed by Operation on February 3, 1932. By Major F. J. Hallinan, R.A.M.C.**

The gall-bladder is 2½ inches long by approximately 1 inch in diameter, flesh-coloured in appearance, irregular in shape, its cavity being distended by a closely packed mass of stones.

At the lower extremity a stone is bulging through the wall, being covered only by peritoneum and a thin layer of tissue.

The wall of the gall-bladder is very thin and friable, and the mucosa is thin and scarred.

The cavity is distended by thirty-five faceted gall-stones, the largest being a half-inch pyramid and the smallest only one-eighth inch in size.

The stones are a pale-yellow colour, on section they are composed of a soft brown centre surrounded by yellow, brown and white lamellae.

**Chemical Composition of Gall-stones.**—Mixed cholesterol and calcium bilirubin.
Instructions to Regimental Surgeons

_Bacteriological Examination._—A culture from the centre of the gallstone was sterile.

_Histological Examination._—A section was made through the wall at the lower end of gall-bladder; the wall is composed of loosely arranged connective tissue with a few strands of muscle fibres. The normal columnar epithelium lining the gall-bladder is only present in small patches, most of the epithelium having been replaced by organized granulation tissue in which are embedded clumps of alveolar glands lined by low columnar epithelium.

_(To be continued.)_

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Echoes of the Past.

INSTRUCTIONS

TO

REGIMENTAL SURGEONS,

FOR REGULATING THE

CONCERNS OF THE SICK,

AND OF

The Hospital.

WITH AN APPENDIX.

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REGULATIONS—continued.

Washing.

The washing of bedding in Regimental Hospitals (out of Barracks) is part of the duty of the Nurse, unless her time be otherwise occupied by a heavy sick list. The personal washing of the sick is to be committed to the charge of some woman out of the Hospital; and to be paid for at a regular price, but the ordinary washing must in no case exceed 4d. per man per week, in the infantry, and 6d. in the cavalry. All extra washing must be specifically stated in the extra table.

Medicines.

When a Regiment has been furnished with one or more Medicine Chests (according to its strength) the subsequent