the headache had improved greatly and was only occasionally present. However, on September 6 he vomited once and said that his headache was worse. He was quite bright and spent most of the day reading. For the first time it was noticed that there was slight papilloedema on the right side.

A provisional diagnosis was made of subdural haematoma on the right side, and it was decided that an exploratory operation was necessary. This was carried out on September 7, a general anaesthetic being used in preference to local analgesia because of the patient's youth and the absence of any evidence of depressed conscious level. An anterior temporal burr-hole was made on the right side. This revealed an extradural clot, and so a temporal bone flap was raised in order to provide adequate access. A dark jelly-like clot 8 cm. in diameter and 2 cm. thick was found, extending down on to the base of the skull. When the clot had been removed there was haemorrhage from the anterior division of the middle meningeal artery, and this was stopped by diathermy. The bone flap was replaced and the scalp was sutured in two layers.

After the operation the patient made an excellent recovery and was discharged to his home on September 23.

COMMENT

It is possible that the bleeding from the ear provided decompression in the early stages. This may be the reason why no tentorial pressure cone was formed and no distortion of the perforating arteries occurred. If removal of the clot had been delayed it is probable that a blood cyst would have formed, as in the case reported by Rowbotham and Whalley (1952). Mental deterioration and more severe headache would then have resulted.

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Case of Carcinoma of Third Part of Duodenum

Carcinoma of the duodenum is a rare condition which may be recognized radiologically. Its incidence is given as 0.3% of all gastro-intestinal carcinomata and 45% of small-gut tumours. The frequency of occurrence of the tumour at different sites of the duodenum is: 20% suprapapillary; 60% peripapillary; 20% infrapapillary.

Our case is thought to be of interest because it records a duodenal carcinoma occurring at its rarest site, a correct pre-operative diagnosis of the condition, and a tumour found to be resectable at laparotomy.

Dunhill (1952) and Rogers *et al.* (1952) reviewed the condition and described cases that had been under their care, as well as cases known to them. Freeman (1954) reviewed the literature on the subject, but could find only 24 cases of primary carcinoma of the infrapapillary portion of the duodenum diagnosed pre-operatively by radiology. In only 4 out of the 24 cases mentioned was the radiological diagnosis made with confidence; however, a post-operative scrutiny of the skiagrams of many proved cases indicated that a correct radiological diagnosis might have been made more often. In only 7 out of 24 cases seen at the Mayo Clinic was the diagnosis considered pre-operatively. Most cases are revealed at either laparotomy or necropsy. The age of the patients in whom the disease occurs is reported as varying from 44 to 64 years. Successful excision of the growth is uncommon; Eger (1933) states that only two cases known to him have lived longer than five years after operation. An increasing awareness of the existence of this tumour should stimulate a more careful radiological exam-

ination of the duodenum of patients with upper abdominal symptoms for which no lesion is found to provide a satisfactory explanation.

Most of the cases reported appear to have presented with palpable lumps, severe dehydration from prolonged vomiting, or, as in Dunhill's case, with symptoms arising from unsuccessful gastro-enterostomy. In cases suitable for operation the most desirable surgical treatment is resection of the growth and anastomosis of the divided gut. Either side-to-side or end-to-end anastomosis may be employed; and, judging by the results of operations performed in this manner, observers think that the dangers of denuding the posterior surface of the duodenum may have been exaggerated.

CASE REPORT

A man aged 49 had had episodes of vomiting over a period of three months, but no previous indigestion. He frequently vomited bile-stained material. He had anorexia and had lost weight. Clinical features were indistinguishable from those of pyloric obstruction.

A barium meal showed stricture, with malignant features, of the third portion of the duodenum (see Fig.). No lesion of the oesophagus and stomach was revealed. Pathological report: R.B.C., 5,000,000; Hb, 76%; normal blood chemistry.

Radiograph showing stricture of the third portion of the duodenum.

At laparotomy the radiological diagnosis was confirmed. A tumour of the third portion of the duodenum, not fixed to the pancreas, was found, with moderate dilatation of the duodenum proximal to the tumour. There were no obvious secondary deposits in either the lymph nodes or the liver. The tumour, with a segment of gut extending from the second portion of the duodenum to include 6 cm. of the jejunum, was excised from beneath the mesenteric vessels. The jejunum was brought through the mesocolon to avoid the dissected area, and the ends of the divided gut were anastomosed. Catgut and linen thread were used for the through-and-through and sero-muscular sutures respectively. Histological report: adenocarcinoma.

Recovery was uninterrupted, and the patient was known to be alive and well six months after operation.

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