higher urinary pH and mucosal adhesions to form pockets in which the organisms could grow unharmed, is postulated.

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B. A. SAYED, M.D.,
S. P. AMIN, M.D.,

Department of Pathology and Bacteriology,
Medical College, Baroda, India.

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Hodgkin's Disease Arising Primarily in the Jejunum

The following case is presented because of its rarity and clinical interest.

CASE HISTORY

The patient, a man aged 40, had previously been healthy. For about five months he had complained of epigastric pain and vomiting. The pain was related to food and often awakened him in the early morning. It was relieved by vomiting but not by alkalis or food. He had no other symptoms. On physical examination the only abnormal signs were tenderness in the epigastrium and right hypochondrium. On the history and physical findings the most likely diagnosis was thought to be duodenal ulcer, and it was with this in mind that the patient was investigated.

Chest x-ray examination, tests for occult blood in the faeces, barium enema, and the blood count showed no abnormality. The barium-meal examination showed no lesion in the oesophagus, stomach, or duodenum. One loop of the jejunum was dilated. The fractional test meal showed a high free and total level, both of which rose markedly in the later specimens. Starch was present throughout but not mucus or bile.

These investigations failed to show any peptic ulceration, but in the fractional test meal there was evidence of obstruction developing. His condition, however, continued to deteriorate during the next few weeks. The pain became more severe and occurred daily for about four or five days, when he would vomit a large quantity of green bile. After this the pain was relieved for a short period but would gradually build up again in intensity. It became clear that a lesion was present which was causing an increasing degree of obstruction, and he was admitted to hospital for laparotomy.

At operation no disease was found in the stomach, duodenum, or gall-bladder. However, an annular lesion was found 18 in. (46 cm.) below the duodeno-jejunal flexure in the upper jejunum. It was in fact causing an obstruction, and resection was carried out with end-to-end anastomosis. The patient made a successful recovery.

The laboratory report was as follows: "The specimen was 25 cm. of jejunum with an ulcer stenosing the lumen. Sections show abnormal tissue infiltrating all coats and ulcerating into the lumen. The abnormal tissue consists chiefly of large polygonal cells, some of which are multinucleate and typical Sternberg-Reed giant cells. These polygonal cells and giant cells are mitosing. Also present are lymphocytes, eosinophils, and scanty polymorphs. Adjacent lymph nodes are enlarged, but show only inflammatory reaction."

The pathologist was of the opinion that this was a malignant tumour arising in lymphoid tissue, probably in a Peyer's patch, the most likely diagnosis being Hodgkin's disease. Further studies of the lesion confirmed this. The patient was subsequently given an intensive course of radiotherapy and at the time of writing was alive and symptom-free.

COMMENT

The clinical findings initially pointed to a diagnosis of duodenal ulcer, but investigation failed to confirm this, and in fact there was evidence of intestinal obstruction developing. This was confirmed by laparotomy, and the obstructing lesion was found to be an isolated patch of Hodgkin's disease in the jejunum. There were none of the usual characteristic findings of the illness such as enlarged lymph nodes, pyrexia, pruritus, or eosinophilia.

Two similar cases are described in the literature. Van der Hoff (1953) reported the case of a girl of 14 years who presented with intestinal obstruction and in whom a jejuno-jejunal intussusception was found at operation. When this was straightened out several nodules were found in the jejunum which microscopically showed Hodgkin's disease. In the other case, described by Vaz-Serra (1959), the patient was a youth of 16 who presented clinically with duodenal ulcer, but later the diagnosis was changed to intestinal obstruction. He also noted the absence of general manifestations of the disease.

It is difficult to say what the eventual course of the disease will be in these patients, but it is likely to develop at other points subsequently. In Van der Hoff's case there was a complete transition to microcellular sarcoma.

To sum up, the English literature is very scanty in cases of Hodgkin's disease arising in the alimentary tract and particularly so in the jejunum. In the cases described the clinical picture was of duodenal ulcer progressing to that of obstruction due either to stenosis of the lumen or to intussusception, and there were no accompanying general manifestations of the disease.

Finally, it may be concluded that, although rare, the condition enters into the differential diagnosis of cases which present as duodenal ulcer or intestinal obstruction, particularly if the barium-meal x-ray picture is normal.

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E. IDRIS WILLIAMS, M.B., Ch.B., D.Obst.R.C.O.G.,
General Practitioner, Walkden, near Manchester;
Clinical Assistant in Obstetrics, Hope Hospital, Salford.

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