Gut, 1967, **8**, 313

Congenital duodenal stenosis in a patient aged 78 years

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EDITORIAL COMMENT Congenital diaphragms have to be kept in mind as possible causes of recurrent vomiting, and may escape detection until later in life.

Duodenal stenosis is one of the less common congenital malformations of the gastrointestinal tract and its presentation in adult life is rare. Hudson (1961) found reports of 10 adults in whom this diagnosis was made at operation or necropsy and one in whom it was made radiologically; he added a further case diagnosed pre-operatively. Threadgill and Hagelstein (1961) described two cases. We report here an example of this condition first diagnosed radiologically at the advanced age of 78 years, although symptoms referable to the stenosis had been present since childhood.

CASE REPORT

A 78-year-old woman was admitted to hospital in November 1965, complaining of vomiting, anorexia, and weight loss. Attacks of vomiting had occurred occasionally for as long as she could remember but had been very troublesome for the past year only. During this time they had increased in frequency up to twice weekly while her appetite had strikingly decreased and her weight had fallen by 2 stones. For about six months she had taken only semi-solid foods but even these had often been returned. Vomiting had been preceded by feelings of abdominal distension but there had been no frank pain. The vomitus had never contained obvious blood or bile. She had always been constipated.

Her general health was good and her past history free of serious illness apart from longstanding arthritis in both hips. She had seven siblings, all of whom had experienced vomiting attacks but none had required surgery. Her mother had suffered from indigestion.

On examination there were no significant abdominal findings but there was general body wasting and gross impairment of hip movements. The brachial blood pressure was 220/100 mm. Hg and there was some left ventricular enlargement and a soft aortic early-diastolic murmur.

Chest radiographs confirmed the cardiomegaly and a radiograph of the hips showed severe osteoarthritis. A barium meal radiograph showed slight hiatal incom-

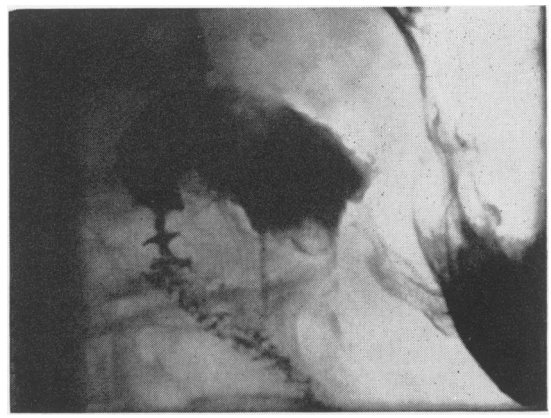

FIG. 1. *Barium meal radiograph (right anterior oblique view) showing megabulbus and stenosis of the second part of the duodenum.*

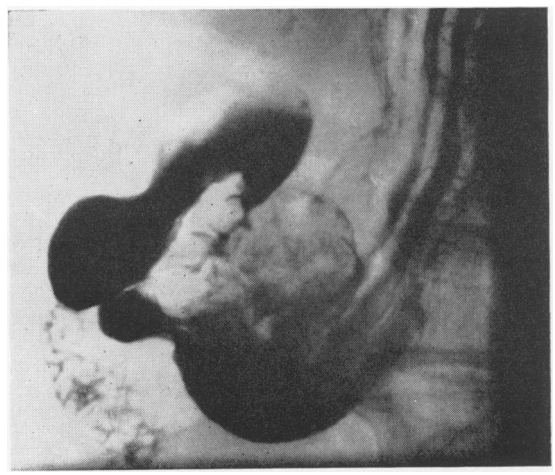

FIG. 2. *Left anterior oblique view showing diaphragmatic nature of the stenosis.*

petence, a megabulbus, and marked narrowing of the second part of the duodenum (Figs. 1 and 2). Appearances at this site suggested diaphragmatic obstruction. Other investigations, including blood count, serum biochemistry, and acid-base studies, yielded normal results.

Laparotomy was performed and the duodenum opened. Its second part was almost completely occluded by a diaphragm with a very small central aperture. There was no evidence of past or present peptic ulceration. The opening of the common bile duct was not seen. A large duodenoplasty was carried out.

Post-operatively she made good progress until the supervention of deep venous thrombosis in the left leg on the sixteenth day. Thereafter she developed a fulminating urinary tract infection and bronchopneumonia and succumbed five weeks after operation. Necropsy showed the duodenal suture line to be intact and healthy.

DISCUSSION

The radiological and operative appearances of the duodenal obstruction in this case were consistent with its being of congenital origin. The history of vomiting since childhood is also in accord with this interpretation but the worsening of symptoms in the last year of life suggests an increase in the degree of the stenosis, perhaps due to cicatrization. The basic embryological defect may be failure of vacuolation of the gut between the sixth and tenth weeks of intra-uterine life (Faegenburg and Bosniak, 1962) or to interference with the mesenteric blood supply at a later stage (Louw, 1959).

We are indebted to Dr. W. C. Smallwood and Mr. A. Gourevitch for permission to publish details of this case, to Dr. D. K. M. Toye for the radiological report, and to Mr. T. F. Dee for the *x*-ray reproductions.

REFERENCES

Faegenburg, D., and Bosniak, M. (1962). Duodenal anomalies in the adult. *Amer. J. Roentgenol.*, **88**, 642-657.

Hudson, C. N. (1961). Congenital diaphragm of the duodenum causing intestinal obstruction in an adult. *Brit. J. Surg.*, **49**, 234-236.

Louw, J. H. (1959). Congenital intestinal atresia and stenosis in the newborn. Observations on its pathogenesis and treatment. *Ann. roy. Coll. Surg.*, **25**, (4), 209-234.

Threadgill, F. D., and Hagelstein, A. (1961). Duodenal diaphragm in the adult. *Arch. Surg.*, **83**, 878-882.