A Case of Pyloric Diverticulum

by

H.A. TANGKILISAN and S.M. SALENDU-WAROUW

(From the Department of Child Health, Faculty of Medicine
Sam Ratulangi University Manado)

Abstract

EG, an 11-year-old Indonesian boy, 30 kg of body weight and 130 cm of body length was admitted to the Department of Child Health, Gunung Wenang General Hospital Manado with pyloric diverticulum.

The main complaint was sudden frequent hematemesis. The first attack of this symptom developed when he was 9 years old. Physical examination showed only tenderness in the epigastric region. The laboratory findings were normal. The diagnosis was based on the Barium meal X-ray, which showed an additional appearance in the pyloric region (prebulbar). He was treated with conservative treatment and after 10 days of hospitalization, he was discharged in good condition.

Introduction

Pyloric diverticulum is one of the gastric diverticulum that had been reported distinctly rare in the past. It might be due to no typical picture and characteristic symptomatology; indeed in many patients there are no symptoms at all [1,2]. But owing to worldwide improvements in diagnostic methods (especially in radiology), it has been proved that diverticulum occurs more frequently than is formerly estimated and must be considered in the differential diagnosis of upper abdominal disease [3].

This anomaly is found more frequently in males than in females and has been found at all ages, but it manifests mostly in cases of middle age between 20 and 60 years. This disorder can be diagnosed in the living case only by means of radiology, fiberoptic gastroscopy or during operation. Nowadays the reliance is placed on screening after ingesting of an opaque (Barium) meal.

Case report

EG, an 11-year-old Indonesian boy, from Minalasari region, residing in Manado city, was admitted to Gastroenterology subdivision, Department of Child Health, Gunung Wenang General Hospital on 13th November, 1990 with the main complaint of sudden frequent hematemesis; he had ever suffered from the same symptom when he was 9 years old. There was no previous history of ingesting any irritant food prior to hematemesis. His bowel habit and micturition were normal and so was the color of the stool. He was the youngest of eight siblings, born spontaneously, fullterm and was aided by a midwife. There was no history of similar symptoms in his family and they were apparently healthy.

On admission, the physical examination revealed that his general condition was good and he was alert; body weight was 30.1 kg; body height was 130 cm; pulse rate 92/minute; respiratory rate 28/minute; blood pressure 120/90 mmHg; and body temperature was 37.2°C. The skin was normal, the boy looked anemic, there were no enlarged lymphnodes, the lungs and heart were within normal limits. The abdomen was flat and soft; there was tenderness in epigastric region, the liver and spleen were not enlarged, the peristalsis was normal and there was no palpable mass. The extremities were normal.

Laboratory findings showed hemoglobin 10.6 g/dl; leucocytes 9.800/dl, trombocytes 200.000/dl with differential count of eosinophil 3%, band 1%, segment 72%, lymphocyte 22% and monocyte 2%. Urine was normal, benzidine test was negative. Hemostasis functions were normal. Barium meal X-ray showed that the passage of contrast was normal, so was the size and shape of esophagus also, and there was no filling defect; but there was an additional appearance in pyloric region (prebulbar) which was consistent with pyloric diverticulum. He was treated with conservative treatment and after 10 days of hospitalization, he was discharged in a good condition.
Discussion

Diverticulum is a lesion consisting of abnormal tissue, usually in intestine and has a close relation with part of the alimentary tract. This disorder may be due to abnormal formation of part of an organ or duct or failure of obliteration. This may occur in the duodenum, jejunum, ileum or colon. With the exception of the jejuno-ileal region, the stomach is the less common site of diverticulum in the entire alimentary tract. Rivers et al. (cited from Maingot) in reviewing their large series of cases, found that 43% of diverticulums were located in the pyloric region [3].

The exact incidence of gastric diverticulum is unknown [1,4,5,6]. The etiology of gastrointestinal diverticulum is not clearly understood, and this may be related to the confusion of nomenclature and classification that exist to describe the lesions [2,3,4].

The pyloric diverticulum has no characteristic symptomatology but some reported that the symptom may be epigastric or lower chest pain, various complex dyspepsia, vomiting, sudden hematemesis, so in some cases the diagnosis of diverticulum is usually unsuspected on clinical grounds, and the condition can be diagnosed only by means of radiology or fiberoptic gastroscopy or during operation. As seen in this case the main complaint was only sudden hematemesis and the diagnosis of pyloric diverticulum was established after ingesting an opaque Barium meal in a serial roentgenographic finding.

There are several important and as yet unanswered questions concerning the diagnosis and the management of upper gastro intestinal bleeding [7]. It is commonly held dictum that most upper gastrointestinal (UGI) bleeding will be self limited and able to stop with little or no specific therapeutic intervention [4]. Pyloric diverticulum itself with mild symptoms only needs medical treatment. This consists of giving the patients a residue, peptic ulcer diet, as well as alkalis and antispasmodics. The indication of operations are severe symptoms obviously due to the diverticulum [2,3]. This reported case was treated only with medical treatment and then discharged after a 10-day hospitalization.

REFERENCES