

## Case Report

### Unusual cause of upper gastrointestinal tract bleeding in a child

Nadeem Akhter, Mansoor Mahmood, Saqib Ismail, Yazeed Owiiwii, Syed Zakir Hussain

Pakistan Institute of Medical Sciences, Islamabad, Pakistan

#### ABSTRACT

We report a case of gastric teratoma in six years old female child who presented with abdominal pain, vomiting and hematemesis. Child underwent exploratory laparotomy and

the mass was excised completely. On histopathology it came out mature gastric teratoma. (Rawal Med J 2013;38: 195-196).  
**Keywords:** Hematemesis, gastric teratoma, abdominal mass.

#### INTRODUCTION

Teratomas are relatively common embryonal tumors that arise from totipotent cells and usually contain elements from all three germ layers, ectoderm, endoderm, and mesoderm. Gastric teratoma is an extremely rare tumor in pediatric age group, accounting for less than 1% of all teratomas occurring in infancy and childhood.<sup>1</sup> The first case of gastric teratoma was reported in 1922 by Eustermann and Sentry and since then only 102 cases have been reported in the literature.<sup>2</sup> They usually present as a palpable mass in the epigastrium and left side of abdomen with abdominal distension. Mature gastric teratomas are even rare.<sup>3</sup> We report this case presenting with bleeding.

#### CASE PRESENTATION

A six years old female child presented with complaints of on and off fever, abdominal pain for last 3 months. She had vomiting and hematemesis from last 3 days. There was no history of exposure to any drug or radiation to the mother in the antenatal period and she was born full term by normal vaginal delivery. On abdominal examination, there was a non tender 6x4 cm swelling in epigastrium, with hemispherical shape and well defined smooth edges. It was firm, dull in percussion, and was not pulsatile, compressible or reducible.

**Figure 1:**  
Ultrasonography showing a solid intraluminal mass in proximal part of duodenum and another mass in stomach bed.



Hematological profile revealed hemoglobin of 8.5 g/dl, and leukocyte count of 13.3. Liver function tests were within normal limits. X-ray abdomen showed a mass effect in the left hypochondrium with diffuse calcifications. Ultrasound showed a solid intra luminal mass in proximal part of duodenum and another mass in stomach bed, with upper abdominal lymphadenopathy (Fig 1). Computed tomography demonstrated thickening in the proximal small bowel and retroperitoneal lymphadenopathy. Barium meal showed filling defects representing polypoidal growth in pylorus and proximal duodenum.

**Figure 2: Removed gastric teratoma in toto.**



An exploratory laparotomy revealed a large multicystic mass arising from posterior inferior wall of the stomach along its greater curvature. The mass was excised in toto (Fig 2). Postoperative course was uneventful. Histopathology report revealed mature gastric teratoma.

#### DISCUSSION

The most common sites of teratoma in infancy and

childhood are sacrococcygeal (60-65 %), gonadal (10-20%), mediastinal (5-10%) and rarely intracranial, retroperitoneal and cervical.<sup>1</sup>

After the first report in 1922, Margret et al reported a case of gastric teratoma in a one day old newborn and Gamanagatti et al published a case in a 2 year old boy.<sup>4-6</sup> The site of origin of gastric teratoma is variable though most of the cases have been reported to arise from the greater curvature and posterior wall of the stomach as found in the index case. However, other sites such as lesser curvature have also been documented.<sup>7</sup> Some of these tumors are pedunculated. These large tumors presenting in the newborn may cause premature labor or dystocia. Respiratory difficulty is common and is caused by upward displacement of the diaphragm by the tumor. Some infants have hematemesis, as in our case.<sup>8</sup>

In most of the cases the preoperative diagnosis of gastric teratomas is difficult. Abdominal radiograph, ultrasonography, computed tomography and endoscopy are important diagnostic tools. Abdominal X-ray usually delineates mass effect with calcifications. US demonstrates a heterogeneous mass with mixed echogenicity. CT scan demonstrates a mass with solid and cystic components and internal calcifications. Other modalities like barium meal and gastroscopy have a limited role in the diagnosis.<sup>9</sup>

Both the mature and immature types of gastric teratoma have an excellent prognosis after complete excision of the tumor, even when the immature type infiltrates surrounding structures, complete

excision offers recurrence free survival without requiring chemo- or radiotherapy. In summary, gastric teratoma is an extremely rare tumor of childhood and in almost all cases is benign. Radiological evaluation can demonstrate the gastric origin and helps to exclude other palpable masses encountered in childhood.

#### Author Contribution:

Conception and design, analysis and interpretation of data:

Mansoor Mahmood, Nadeem Akhter, Saqib Smail

Collection of data: Yazeed Owilwi, Zakir Hussain

Final approval of article: Nadeem Akhter

**Conflicts of Interest:** None declared

**Corresponding author email:** inzi144@hotmail.com

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