

# UPPER GASTROINTESTINAL BLEEDING AND ACUTE PAINFUL EPIGASTRIC MASS DUE TO RUPTURE OF HYDATID CYST INTO THE DUODENUM

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## ABSTRACT

Various complications of hydatid cyst have been recognized to date. We have encountered one such complication—rupture of hydatid cyst to the duodenum—leading to upper gastrointestinal bleeding in a 40 year old male, who referred with severe right upper quadrant (RUQ) pain and gastrointestinal bleeding of a few hours' duration. Laparotomy revealed a cyst (7 × 15 cm) in the left lobe of the liver which was adherent to the duodenum and mesocolon. To the best of our knowledge, this is the first report of gastrointestinal bleeding resulting from hydatid cyst rupture into the duodenum.

**Keywords:** Echinococcosis, Complications, Gastrointestinal bleeding, Duodenal rupture

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## INTRODUCTION

Hydatid cyst has been recognized as a disease common to man and animals, and endemic in many parts of the world, including Iran. Various complications of this disease have been recognized, the most common being rupture into the biliary tract. We have encountered an unusual complication, rupture of hydatid cyst to the duodenum, leading to upper gastrointestinal bleeding. To the best of our knowledge, this is the first report of gastrointestinal bleeding resulting from hydatid cyst rupture into the duodenum.

### Case report

A 40 year old male referred to the emergency room with severe right upper quadrant (RUQ) pain and gastrointestinal bleeding of a few hours' duration. On physical examination, there was a painful palpable mass in the RUQ. Ultrasonography revealed a mass at the edge of the liver superimposed on the pancreas, thus bringing to mind the possibility of a pancreatic pseudocyst. The combination of a tender mass, along with upper and lower gastrointestinal bleeding prompted us to perform laparotomy. It was deemed that pre-operative endoscopy would delay urgent

laparotomy, particularly since perforation of peptic ulcer was a major diagnostic possibility. Upon laparotomy, a cyst (7 × 15 cm) was detected in the left lobe of the liver, which was adherent to the duodenum and mesocolon. The borders of the cyst were secluded from surrounding viscera and the cyst was opened. Numerous daughter cysts were seen, which were evacuated. An orifice was noticed connecting the cyst to the duodenum, causing many daughter cysts to enter the duodenum. There was bleeding from the edge of the duodenum. Following evacuation of the cysts, the duodenal perforation was repaired and a drain was placed. The patient's postoperative course was uneventful.

## DISCUSSION

Hydatid disease is endemic in many areas and can lead to various dangerous complications. The standard treatment is surgery, which is performed with various techniques. Recurrence has been reported to be approximately 10 percent.<sup>6,7</sup> These are due to failure to recognize smaller cysts, spillage, or reinfestation. Hydatid cyst recurs in 30% of cases in which spillage occurs.<sup>10</sup> There are other treatment

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options available, such as medical therapy,<sup>2,3,5,9</sup> percutaneous drainage,<sup>4,7</sup> and endoscopic evacuation.<sup>1</sup>

Ever since the recognition of hydatid disease, there have been many reports of various complications. In an extensive literature search, two cases of cysto-duodenal communication have been reported; in one of these, computerized tomography revealed communication of a hepatic hydatid cyst with the duodenum.<sup>8</sup> In another report, a 31 year old male presented with multiple intra-abdominal hydatid cysts and hydatid emesis.<sup>11</sup> Radiological evaluation showed the hydatid cysts to communicate with the stomach and the duodenum. Our patient presented with a painful and tender epigastric mass associated with acute upper gastrointestinal bleeding, and laparotomy was required for definite diagnosis. This case illustrates yet another of the many complications of hydatid disease.

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