Letters to the Editor

Gastroduodenal Bezoar with Duodenal Web: A Rare Association

Sir,

Stomach is the most common site for bezoar formation, although it has been reported from other locations, including esophagus, small intestine, and large intestine.[1,2] Duodenal bezoars, however, are rare, usually reported in adults post gastric surgery.[3]

A 2-year-old female child presented to us, with complaints of an abdominal mass of 6 months’ duration and vomiting off and on for 1 month. On examination, the patient had a palpable lump in the right hypochondrium below the liver. The lump was firm in consistency and appeared to contain sand-like contents which slipped on palpation. The patient had presented to us with a magnetic resonance imaging (MRI), which was suggestive of a grossly distended stomach and the 1st part of the duodenum filled with multiple foci of signal void. There was a suggestion of gastroduodenal bezoar. A history of swallowing “Ber” (jujube) seeds, was then elicited. On palpation also, some round, seed-like foreign bodies were palpated, which we could correlate with the intake of “Ber” seeds. Duodenal bezoars are rarely reported; therefore, the diagnosis alerted us. We suspected a secondary pathology, which was not clear on MRI; a barium meal follow-through was thus ordered, which revealed a distended stomach and the 1st part of the duodenum with filling defects. The duodenum was grossly dilated, almost as big if not more than the stomach. Streaky passage of contrast was seen beyond suggestive of duodenal stenosis/stricture/web [Figure 1].

The patient was taken for surgery. The stomach and duodenum were grossly enlarged [Figure 2a]. A duodenotomy was done in the proximal dilated part (D1) of the duodenum [Figure 2b]. The “Ber” seeds had formed a hard mass, required breaking, and were removed piecemeal; once the duodenum was evacuated, the seeds were milked from the stomach into the duodenum and were removed. Approximately 500 seeds were removed [Figure 2d]. A duodenal web was identified at the junction of D1–2, the difference in diameter of the two parts was evident, and the web had a hole laterally [Figure 2c], which was probably the reason why the patient could feed without being obstructed and remained asymptomatic till 2 years of age. In the normal course of events, the swallowed seeds would have probably found their way through the colon and out, but the presence of web did not allow it, resulting in a bezoar. The web was excised, and the duodenotomy was closed. On purpose, the duodenotomy was closed longitudinally to reduce the diameter of the distended 1st part of the duodenum.

The patient had an uneventful recovery and was discharged on day 7. On 2-year follow-up, the patient is doing well.

The duodenal location of bezoar in our patient was due to the presence of a duodenal web. Prepared with the knowledge of a co-existing duodenal web with the bezoar, our surgical approach changed from a usually done gastrostomy and evacuation of bezoar to a duodenotomy and evacuation of bezoar. The duodenotomy was placed in a way that besides the evacuation of the bezoar, excision of the web located at the junction of D1 and D2 could be done simultaneously.

Figure 1: Barium meal, dilated duodenum, with filling defects in stomach and duodenum. Streaking of contrast beyond D1

Figure 2: (a) Narrowing at the junction of D1 and D2 with dilated D1. (b) “Ber” seeds in the duodenum forming bezoar. (c) Duodenal web with catheter in the lateral hole of the web. (d) Approximately 300 seeds removed
To the best of our knowledge, this is the first-ever reported case in world literature of the simultaneous occurrence of a duodenal bezoar with a duodenal web in a child. However, there were two reported cases of duodenal bezoars due to an underlying anatomical malformation in adults.[4,5]

To conclude, the presence of bezoar in rare locations should alert a pediatric surgeon to the possibility of a secondary pathology.

Declaration of patient consent
The authors certify that they have obtained all appropriate patient consent forms. In the form, the patient’s guardian has given his consent for his child’s images and other clinical information to be reported in the journal. The patient’s guardian understands that the child’s name and initial will not be published, and due efforts will be made to conceal the child’s identity, but anonymity cannot be guaranteed.

Financial support and sponsorship
Nil.

Conflicts of interest
There are no conflicts of interest.

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Accepted: 28 September, 2019. Published: 11 April, 2020.

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