■ ***Case Report***

Submucosal lipoma of the stomach – a rare benign gastric tumour

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Introduction

Lipomas of the stomach are rare tumors. Gastrointestinal lipomas are uncommon, slowly growing benign tumors composed of mature adipose tissue and can occur anywhere along the gut. Most are located in the colon, ileum and jejunum.[1] Lipomas found in the stomach are even more unusual, accounting for 2%-3% of all benign gastric tumors.[2,3] They are of submucosal or extremely rare subserosal origin, and most frequently localized to the antrum.[4-7] Although most gastric lipomas are usually detected incidentally some can cause abdominal pain, dyspeptic symptoms, obstruction, and hemorrhage.

We present this rare case of submucosal lipoma of the stomach who presented to us with upper gastrointestinal bleed and renal dysfunction .

Case description

Thirty year old lady reported to the emergency with complaints of burning sensation and pain in the upper abdomen for five days and passage of black tarry stools for five days and dizziness for two days. Pain was relieved on taking food and there was no radiation of pain. She had a history of intake of NSAIDs for relief of this pain and head ache. Haemodynamically she was stable and did not have a history of any significant medical illness in the past.

Investigations showed that she was anaemic (haemoglobin 6.2gm%), had a deranged renal function, blood urea nitrogen - 81.2mg% and serum creatinine – 3.4mg%. Her blood group was O positive. Urine routine examination showed Albumin 2+. Liver function was within normal limits.

An esophago-gastroduodenoscopy showed her to have a gastric polyp arising from the distal third of the stomach with necrosed mucosa and an ulcer at the tip. It was firm and did not bleed on touch.

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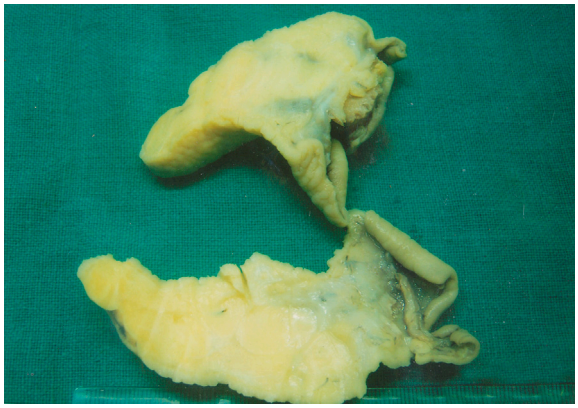
She was resuscitated and planned for surgery. She underwent a midline supra umbilical laparotomy. Intra operatively a firm poly was palpated in the antrum of the stomach. An anterior gastrotomy was made and the polyp was identified. A 5 x 3.5cm polyp with a smooth surface and an ulcer at the tip was identified in the posterior wall of the antrum. A wide local excision of the polyp was done comfortably and the posterior wall and the anterior gastrotomy was closed with 3/0 vicryl and 3/0 silk sutures.

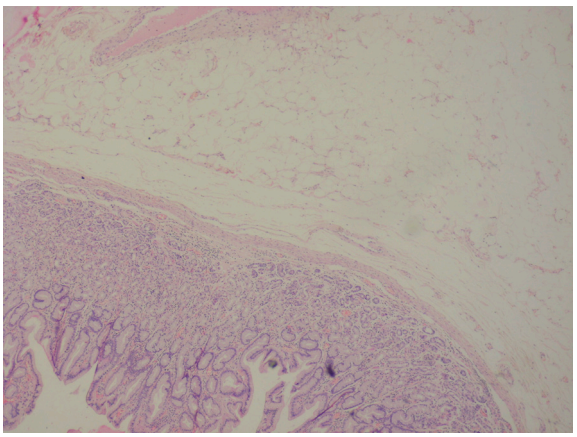
Histopathology showed grossly a polyp 5 x 3 x 1.8 cm on the mucosal surface of the stomach with an ulcerated tip. Microscopy revealed features of a lipoma arising from the submucosa, and the ulcer showed inflammatory changes only.

The post operative period was uneventful surgically but her renal function further deteriorated in the immediate post operative period and the serum creatinine reached 5.0mg% and remained high for the next two weeks.

She was managed conservatively and did not require hemodialysis post operatively. The creatinine came down to 2.5mg% by the third week postoperatively and further to 0.6mg% by the fourth week. She has been coming for regular follow up for the last eighteen months and is doing well so far.



Gross photograph of the submucosal lipoma



Microscopic photograph of the submucosal lipoma H&E 40X

Discussion

Lipomas of the stomach are very rare, accounting for less than 3% of all benign tumors of stomach[8,9]. Although generally single, they can be multiple as well[10] . Diagnosis of gastric lipoma, in the past, before the era of modern diagnostic technology, was generally made after surgery[9,15]. Usually, on barium studies, extra mucosal tumors including lipomas reveal a smooth filling defect with a "bull's eye" appearance that is indistinguishable from other mesenchymal tumors[3].

The aetiology of gastric lipoma is unknown. The common view favours that it could be embryologically sequestered adipose tissue.

Although endoscopic sonography (EUS) provides more accurate findings of submucosal tumors regarding their shape, size and location inside gastric walls, because of limited resources in our hospital, this technique is not available.

In our case only esophago-gastroduodenoscopy was done because the deranged renal function did not permit us to do a CT scan and we opted for the early surgical intervention since she was bleeding and loosing blood.

After the surgery she recovered well. Although the renal function further deteriorated transiently, with conservative management she improved and after four weeks following surgery the renal parameters became normal and remained within the normal range. Her haemoglobin levels also improved gradually.

Conclusion

Submucosal lipoma of the stomach is a rare benign tumour of the stomach and it presented to us with upper gastrointestinal bleed and pain upper central abdomen. This patient was treated with wide local excision and is doing well .

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