Case Report

DOI: 10.7860/JCDR/2021/48686.15196

Pathology Section

Jejunojejunal Intussusception in an Adult- Secondary to Lipoma

ANNIE NITISHA[1], SHOBANA[2], MARY LILLY[3]

ABSTRACT

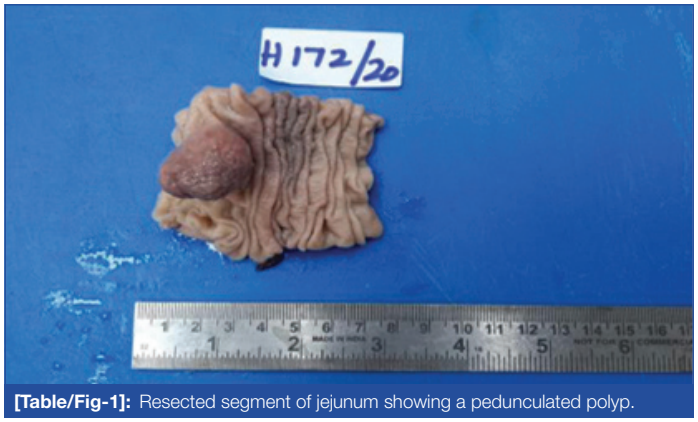
Gastric lipomas are very rare Tumours of Gastrointestinal Tract (GIT) accounting for about 2-3% of all benign gastric tumours. They are asymptomatic and discovered incidentally, most lipomas being submucosal. Authors hereby discuss a case of 50-year-old female patient who presented with abdominal pain and vomiting since four days. Transabdominal Ultrasound (TAUS) revealed long segment jejunojejunal intussusception and a hypoechoic lesion in the distal end of intussusception which was successfully treated by removing the lipoma along with the intussuscepted loop. Histopathological features revealed normal jejunal mucosa with a segment of intussusception and edematous submucosa which was thought to be submucosal lipoma or subserosal lipoma. As these lesions present at later dates, proper follow-up and early intervention is needed.

Keywords: Benign tumour, Gastric lipoma, Subserosal type

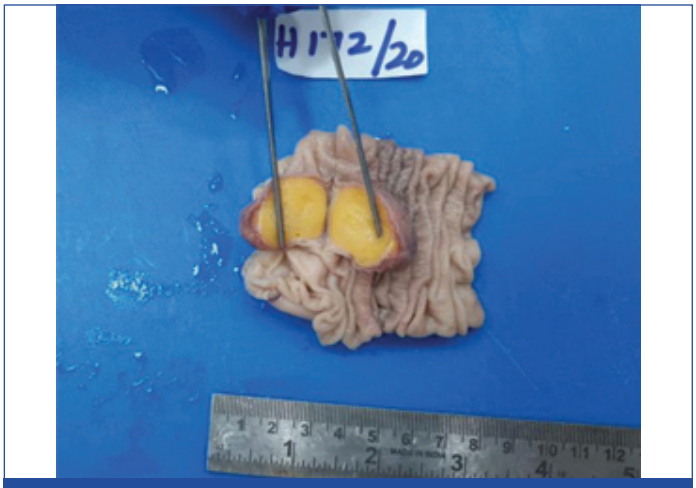
CASE REPORT

A 50-year-old female was admitted to the hospital with on and off abdominal pain and multiple episodes of vomiting (non-projectile and non bilious) since four days. She was diagnosed with intussusception for past 8 months. On physical examination, abdomen was soft while there was tenderness in left hypochondrium and left iliac fossa. TAUS revealed long segment jejunojejunal intussusception and a hypoechoic lesion in the distal end of intussusception, possibly lipoma. Results of blood counts, biochemical tests were within normal limits. After all the necessary investigations possible diagnosis was benign submucosal lipoma/polyp. Laparotomy with resection of jejunojejunal intussusception with jejunojejunal anastomosis was done and the intussusepted portion of jejunum with lead point was sent for histopathological examination.

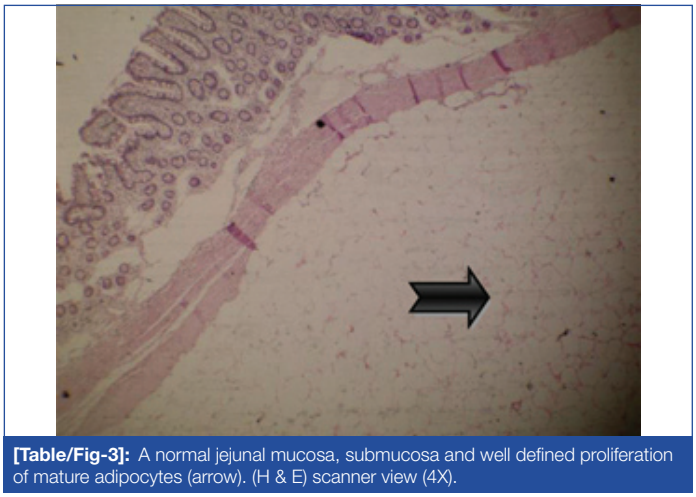
On gross examination, a segment of jejunum with pedunculated polyp measuring 7.5 cm in length; polyp was approximately 1.5 cm and 4.5 cm from two resected margin [Table/Fig-1]. The polyp measured 2.5×2×2 cm, cut-section of polyp revealed an encapsulated yellowish homogenous glistening area [Table/Fig-2]. Rest of jejunal mucosa was normal. Tissue samples were fixed in 10% buffered neutral formalin and embedded in paraffin. Sections were stained with haematoxylin and eosin. Histologically, normal jejunal mucosa with a segment of intussusception and edematous submucosa was observed. It was thought to be submucosal lipoma or subserosal lipoma [Table/Fig-3]. So, to confirm the diagnosis, a simple special staining was done with van gieson (differential staining for collagen and connective tissue). It showed jejunal mucosa with normal submucosa and muscular layer, well-defined proliferation of mature adipocytes in the submucosa extending into subserosa [Table/Fig-4,5]. The final histological diagnosis was subserosal lipoma with normal variable mucosa. Postoperative period was uneventful and patient was discharged after 10 days.



[Table/Fig-1]: Resected segment of jejunum showing a pedunculated polyp.



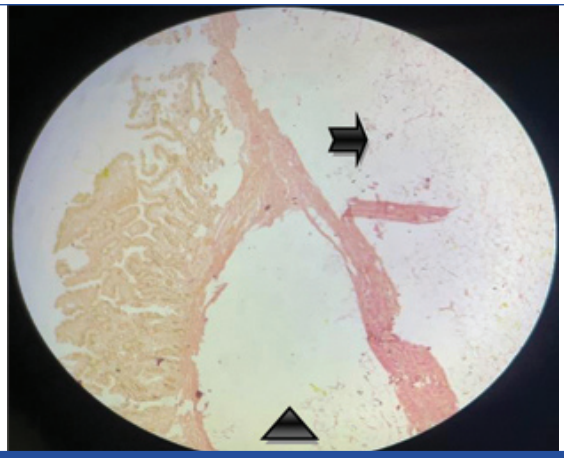
[Table/Fig-2]: Cut section reveals encapsulated yellowish homogenous glistening area.



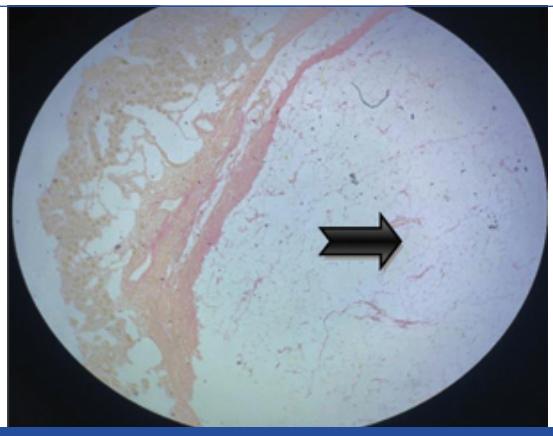
[Table/Fig-3]: A normal jejunal mucosa, submucosa and well defined proliferation of mature adipocytes (arrow). (H & E) scanner view (4X).

DISCUSSION

Gastric lipoma accounts for less than 3% of all benign tumours of stomach. These usually occur single or can be multiple [1-3]. These are extremely rare tumours and submucosal, being the most common type which can occasionally extend into subserosa [4].



[Table/Fig-4]: A normal jejunal mucosa, submucosa and well defined proliferation of mature adipose tissue submucosa (arrow head) and subserosa (arrow). (van gieson) scanner view (4X)



[Table/Fig-5]: Normal jejunal mucosa along with proliferation of adipocytes (arrow) in subserosa. (van gieson) low magnification (10X)

Gastric lipomas are mostly asymptomatic, if diagnosed early can be simply treated with follow-up. Probably this is the reason why there are no proper reports on treatment modalities [5-7]. But in the index case, the tumour was symptomatic. The most common sites of gastric lipomas are colon, ileum, jejunum and more unusual in stomach [1,3]. Gastric lipoms are even more rare and can present with dyspeptic and obstructive symptomatology [8,9]. In recent years with the development of advanced medical techniques and sophisticated technology these type of lesion are treated with minimal intervention [10,11]. A TAUS or barium study or CT scan can be done before surgery to rule out the diagnosis, computerised tomography being the investigation of choice. Endoscopic biopsy can also be done but only drawback is that the tumour cannot be differentiated further as we cannot penetrate into deeper layers of mucosa [12,13]. In the described case, only TAUS was performed as patient was not willing for further investigations and made a differential diagnosis of submucosal lipoma or polyp. Although CT is considered as gold standard, there are reports suggesting non-radiation based imaging techniques like TAUS are more sensitive and specific for diagnosis [8,10].

There is no specific treatment for gastric lipomas as they are rare and the treatment of choice is still controversial [8]. It was reported that endoscopic procedures and preoperative workup have improved the treatment modatities of gastric lipoma to minimally invasive surgical procedures. Though benign, this lesions can erode the mucosa and can result in malignant transformation when left untreated. Reports show that they are coincidentally occurred along with other malignant tumours [1,6,8]. Therefore, a detailed evaluation of the tumour preoperatively should be done to look for malignant transformation and also to perform minimally invasive surgeries. In index case a TAUS was done which made a diagnosis of lipoma, suspecting that to be a submucosal lipoma; laparotomy with resection along with jejunojejunal anastomosis was performed.

CONCLUSION(S)

Gastric lipomas are very rare benign mesenchymal tumours which are asymptomatic and can occasionally present with pain in abdomen. Differentiating them from benign and malignant depends only on morphological features. Although radiological advanced techniques are the choice of investigation, a simple TAUS can rule out the diagnosis. Here, a case of symptomatic subserosal gastric lipoma successfully treated with laproscopic resection has been described. Accurate diagnosis can be made by combining image diagnostic techniques and endoscopy. This inturn gives a clear idea in choosing the appropriate minimally invasive surgery without a need of open surgery using laparoscopic procedure.

REFERENCES

[1] Farfour AN, AbuOmar NA, Alsohaibani FI. Large lipoma of the ascending colon: A case report and review of literature. Journal of Surgical Case Reports. 2020;2020(9):rjaa354.
[2] Sapalidis K, Laskou S, Kosmidis C, Passos I, Mantalobas S, Michalopoulos N, et al. Symptomatic colonic lipomas: Report of two cases and a review of the literature. SAGE Open Med Case Rep. 2019;7:2050313X19830477.
[3] Chagarlamudi K, Devita R, Barr RG. Gastric lipoma: A review of the literature. Ultrasound Q. 2018;34(3):119-21. 10.1097/RUQ.0000000000000338.
[4] Vertse G, Vagács T, Iványi A, Szeleczky M. A gastrointestinalis lipomákról három operált esetünk kapcsán Gastrointestinal lipomas- report of three cases and a short review of the literature. Magy Seb. 2017;70(2):131-35.
[5] Presti ME, Flynn MF, Schuval DM, Vollmar TM, Zotos VD. Colonic lipoma with gastrointestinal bleeding and intussusception. ACG Case Rep J. 2015;2(3):135-36.
[6] Lee CS, Lee MJ, Kim KL, Kim YS, Baik GH, Kim JB, et al. A case of giant lipoma causing chronic recurrent intussusception of the colon. Clin Endosc. 2012;45(2):165-68.
[7] Mnif L, Amouri A, Masmoudi MA, Mezghanni A, Gouiaa N, Boudawara T, et al. Giant lipoma of the transverse colon: A case report and review of the literature. Tunis Med. 2009;87(6):398-402.
[8] Krasniqi AS, Hoxha FT, Bicaj BX, Hashani SI, Hasimja SM, Kelmendi SM, et al. Symptomatic subserosal gastric lipoma successfully treated with enucleation. World J Gastroeneterology. 2008;14(38):5930-32.
[9] Singh R, Bawa AS. Lipoma of the stomach. Indian J Surg. 2004;66:177-79.
[10] Yamamoto T, Imakiire K, Hashiguchi S, Matsumoto J, Kadono J, Hamada N, et al. A rare case of gastric lipoma with early gastric cancer. Intern Med. 2004;43:1039-41.
[11] Thompson WM, Kende AI, Levy AD. Imaging characteristics of gastric lipomas in 16 adult and pediatric patients. AJR Am J Roentgenol. 2003;181:981-85.
[12] Fukuda S, Yamagata R, Mikami T, Shimoyama T, Sawaya M, Uno Y, et al. Gastric lipoma successfully treated by endoscopic unfroofing. Dig Endosc. 2003;15:228-31.
[13] Tsai TL, Changchien CS, Hu TH, Hsiaw CM. Demonstration of gastric submucosal lesions by high-resolution transabdominal sonography. J Clin Ultrasound. 2000;28:125-32.

PARTICULARS OF CONTRIBUTORS:
1. Postgraduate Student, Department of Pathology, Sree Balaji Medical College and Hospital, Chennai, Tamil Nadu, India.
2. Assistant Professor, Department of Pathology, Sree Balaji Medical College and Hospital, Chennai, Tamil Nadu, India.
3. Professor and Head, Department of Pathology, Sree Balaji Medical College and Hospital, Chennai, Tamil Nadu, India.

NAME, ADDRESS, E-MAIL ID OF THE CORRESPONDING AUTHOR:
Dr. Annie Nitisha,
E-102, Mantri Navaratna Apartment, MGR Street, Chrompet,
Chennai-600044, Tamil Nadu, India.
E-mail: annie.nithi@gmail.com

PLAGIARISM CHECKING METHODS: [Jain H et al.]
- Plagiarism X-checker: Jan 27, 2021
- Manual Googling: Jun 23, 2021
- iThenticate Software: Jul 14, 2021 (5%)

ETYMOLOGY: Author Origin

AUTHOR DECLARATION:
- Financial or Other Competing Interests: None
- Was informed consent obtained from the subjects involved in the study? No (Specimen only)
- For any images presented appropriate consent has been obtained from the subjects. No (Biopsy sample)

Date of Submission: **Jan 25, 2021**
Date of Peer Review: **Mar 16, 2021**
Date of Acceptance: **Jun 24, 2021**
Date of Publishing: **Aug 01, 2021**