

Case Report

Tail in the duodenum

Sruthi Ranganathan*, T. Mohanapriya, K. Balaji Singh

Department of General Surgery, Sri Ramachandra Medical College, Chennai, Tamil Nadu, India

Received: 16 March 2018

Revised: 31 May 2018

Accepted: 02 June 2018

***Correspondence:**

Dr. Sruthi Ranganathan,

E-mail: rsruthi96@gmail.com

Copyright: © the author(s), publisher and licensee Medip Academy. This is an open-access article distributed under the terms of the Creative Commons Attribution Non-Commercial License, which permits unrestricted non-commercial use, distribution, and reproduction in any medium, provided the original work is properly cited.

ABSTRACT

Inflammatory myofibroblastic tumour, commonly called as pseudotumor is a soft tissue tumour, commonly occurring in children and young adults and very rarely in elderly. Lungs are the most commonly affected site but sometimes it can occur in retroperitoneum and abdominal cavity. It contains spindle cells, myofibroblasts, lymphocytes, plasma cells, and histiocytes. It is a non-encapsulated lesion. The pathogenesis of IMT remains unclear, although various allergic, immunogenic infectious mechanisms have been postulated. They are locally recurrent (15-37%) and rarely metastasize (<5%). IMT features mimics malignancy on UGIscopy and radiological imaging and hence surgical exploration and complete resection is required for diagnosis and treatment. The worldwide incidence of IMT is 0.04-0.7%. Here is a case of inflammatory myofibroblastic tumour in duodenum presented with complaints of vomiting and melena.

Keywords: Inflammatory myofibroblastic tumor, Melena, Pseudotumor

INTRODUCTION

Inflammatory myofibroblastic tumour is a soft tissue tumour mostly called as pseudotumor. It commonly occurs in children and young adults and very rarely in elderly. Lungs are the most common site of affection but sometimes it can occur in retroperitoneum and abdominal cavity.¹⁻³ It contains spindle cells, myofibroblasts, lymphocytes, plasma cells, and histiocytes. It is a non-encapsulated lesion.

The pathogenesis of IMT remains unclear, although various allergic, immunogenic infectious mechanisms have been postulated.⁴ They are locally recurrent (15-37%) and rarely metastasize (<5%).⁵ IMT features mimics malignancy on UGI scopy and radiological imaging and hence surgical exploration and complete resection is required for diagnosis and treatment. The worldwide incidence of IMT is 0.04– 0.7%.⁷ Here is a case of

inflammatory myofibroblastic tumour presented with complaints of vomiting and melena.

CASE REPORT

A 73-year-old male came with complaints of vomiting, hiccups, and melena for 15 days; vomiting intermittently for 15 days, non-bilious, non-projectile, aggravated on consuming food, no specific relieving factors and also complains of 3- 4 episodes of coffee ground vomitus. The complaint of melena was for 15 days, of which 10 episodes were associated with loss of appetite and hiccups. There was no history of abdominal pain, abdominal distension, fever, jaundice, loss of weight, constipation or loose stools. The patient had a history of smoking for 20 years with one pack cigarette per day and stopped five years ago. The patient also had no history of diabetes mellitus, hypertension, tuberculosis, epilepsy, alcohol consumption or drug abuse.

On examination, the patient was moderately built and nourished with pallor. The temperature was 98.7° F, respiratory rate 18/ min, and blood pressure 110/80mmHg. P/A was soft, bowel sounds were heard, and no palpable mass or organomegaly was found. P/R sphincter tone was normal, soft stools were present and finger glove was stool stained.

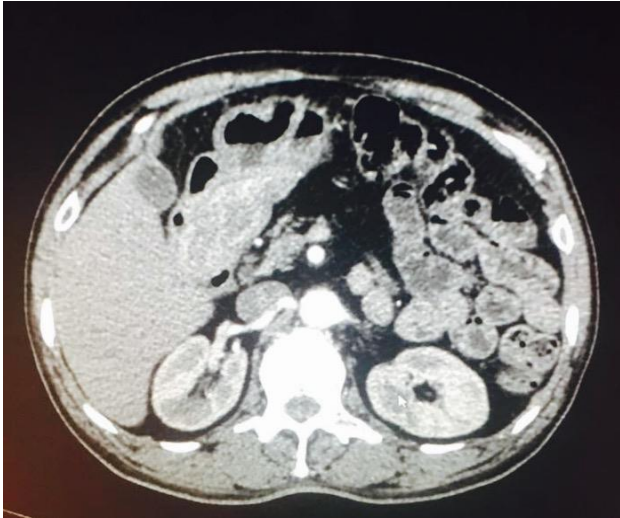


Figure 1: CECT showing the polypoidal mass.

Upon investigation, Hb 7.8gm%, UGI scopy showed polypoidal mass arising from the antrum extending up to D2. Colonoscopy was normal. CECT whole abdomen showed a large polypoidal mass arising from the mucosa of the posterior wall and the greater curvature of the antrum (intact muscularis propria layer), prolapsing into the lumen of the duodenum (up to junction of 2nd and 3rd part), two mildly prominent feeding arteries are seen in the centre of the lesion. No enlarged perigastric or para-aortic lymph nodes.



Figure 2: The inflammatory myofibroblastic tumour, intraoperative.

The patient was taken for surgery and wide local excision was done. Post-operative period was uneventful. The patient was discharged after 11 days on observation. On

histopathological examination, it showed myofibroblastic spindle cells favouring inflammatory myofibroblastic tumour.

DISCUSSION

Inflammatory myofibroblastic tumour is an uncommon, usually benign tumour, a soft tissue tumour commonly called as pseudotumour. A number of terms have been applied to the lesion, namely, inflammatory pseudotumor, fibrous xanthoma, plasma cell granuloma, pseudosarcoma, lymphoid hamartoma, myxoid hamartoma, inflammatory myofibrohistiocytic proliferation, benign myofibroblatoma, and most recently, inflammatory myofibroblastic tumor. The diverse nomenclature is mostly descriptive and reflects the uncertainty regarding true biologic nature of these lesions.⁶

IMT includes three histological subtypes: one is a richly vascularized and myxoid resembling fasciitis or granulation tissue; another is a more compact fascicular spindle cell proliferation with variable collagenized regions and lymphoid nodules, resembling fibromatosis, and finally a very sclero-hyaline, slightly cellular pattern, looking more like a desmoid tumor.⁷

It commonly occurs in children and young adults and very rarely in elderly. Lungs are the most commonly affected site but sometimes it can occur in retroperitoneum and abdominal cavity.¹⁻³ It contains spindle cells, myofibroblasts, lymphocytes, plasma cells, and histiocytes. It is a non-encapsulated lesion. The signs of the tumour vary according to the site of the tumour. Some people with an IMT are asymptomatic, while others may have nonspecific respiratory symptoms, fever, or pain.⁸

The pathogenesis of IMT remains unclear, although various allergic, immunogenic infectious mechanisms have been postulated. They are locally recurrent, 15-37%, and rarely metastasize, <5%. IMT features mimics malignancy on UGI scopy and radiological imaging and hence surgical exploration and complete resection is required for diagnosis and treatment.⁹

The confirmation for the diagnosis would be ALK antibodies, anaplastic lymphoma kinase. Surgical removal is the best choice. If the tumour pursue an aggressive clinical course, it can be treated with crizotinib, an ALK tyrosine kinase inhibitor.¹⁰

CONCLUSION

Inflammatory myofibroblastic tumour can not only occur in lungs but in other locations. It could be asymptomatic, or symptoms related to the location of the tumour. Since it is a rare tumour, surgical removal is the choice of treatment. ALK tyrosine kinase inhibitors or oral steroids could be given for treatment.

Funding: No funding sources

Conflict of interest: None declared

Ethical approval: Not required

REFERENCES

1. Bjelovic M, Micev M, Spica B, Babic T, Gunjic D, Djuric A, et al. Primary inflammatory myofibroblastic tumor of the stomach in an adult woman: a case report and review of the literature. *World J Surg Oncol.* 2013 Dec;11(1):35.
2. Albayrak F, Dursun H, Albayrak Y, Altas S, Uyanik A, Yildirim R. Inflammatory myofibroblastic tumor of the stomach in an adult woman: a rare intermittent cause of gastric outlet obstruction. *Tumori.* 2010 May 1;96(3):492-5.
3. Coffin CM, Hornick JL, Fletcher CD. Inflammatory myofibroblastic tumor: comparison of clinicopathologic, histologic, and immunohistochemical features including ALK expression in atypical and aggressive cases. *Am J Surg Pathol.* April 2007; 31(4):509-20.
4. Jindal A, Bal A, Agarwal R. Inflammatory myofibroblastic tumor of the trachea in the pediatric age group: case report and systematic review of the literature. *J Bronchol Intervent Pulmonol.* January, 2015; 22(1):58-65.
5. Karnak I, Şenocak ME, Ciftci AO, Çağlar M, Bingöl-Koloğlu M, Tanyel FC, et al. Inflammatory myofibroblastic tumor in children: diagnosis and treatment. *J Ped Surg.* 2001 Jun 1;36(6):908-12.
6. Palaskar S, Koshti S, Maralingannavar M, Bartake A. Inflammatory myofibroblastic tumor. *Contemp Clinical Dentistry.* 2011;2(4):274-77.
7. Inflammatory myofibroblastic tumor. GARD. Available at: <https://rarediseases.info.nih.gov/diseases/7146/inflammatory-myofibroblastic-tumor>
8. Lovly C, Brown V, Borinstein S, Friedman D, Coffin C. Molecular Profiling of Inflammatory Myofibroblastic Tumor. *My Cancer Genome.* 2012. Available at: <https://www.mycancergenome.org/content/disease/inflammatory-myofibroblastic-tumor/>
9. Ding D, Bu X, Tian F. Inflammatory myofibroblastic tumor in the head of the pancreas with anorexia and vomiting in a 69-year-old man: A case report. *Oncol Letters.* 2016 Aug 1;12(2):1546-50.
10. Hammas N, Chbani L, Rami M, Boubbou M, Benmiloud S, Bouabdellah Y, et al. A rare tumor of the lung: inflammatory myofibroblastic tumor. *Diagnostic Pathol.* 2012 Dec;7(1):83.

Cite this article as: Ranganathan S, Mohanapriya T, Singh KB. Tail in the duodenum. *Int Surg J* 2018;5: 2676-8.