## **Case Report**

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# Oesophageal pseudotumor: a case report

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### **ABSTRACT**

Inflammatory pseudo tumor (IPT) also known as inflammatory myofibroblastic tumor (IMT) is a tumor like mass of inflammatory origin. It is a pseudo sarcomatous lesion that has been reported most commonly in liver, followed by lung, mesentery and omentum but very rarely seen in esophagus. Proliferation of myofibroblastic cells is more in IMT. In IPT it is more of an inflammatory reactive or regenerative entity and has an overlapping with immunoglobulin G4-related disease. Lesion often mimics malignancy. A 20 year old male patient with history of dysphagia, more for liquids, underwent CT thorax, showing dilated oesophagus, with a moderately contrast enhancing eccentric soft tissue density lesion involving mid and lower esophagus extending for a length of 6cm. Patient underwent right thoracotomy, and a 5x3x3cm hard lesion involving lower esophagus was excised. Histopathology pointed towards inflammatory myofibroblastic tumor or inflammatory pseudotumor. Proliferation of myofibroblastic cells is more in IMT. In IPT it is more of an inflammatory reactive or regenerative entity and has an overlapping with immunoglobulin G4-related disease. Lesion often mimics malignancy.

**Keywords:** Esophagus, Esophageal tumor, Inflammatory pseudo tumor, Inflammatory myofibroblastic tumor

## INTRODUCTION

Inflammatory pseudo tumor (IPT) also known as inflammatory myofibroblastic tumor (IMT) is a tumor like mass of inflammatory origin. It is a pseudo sarcomatous lesion that has been reported most commonly in liver, followed by lung, mesentery and omentum but very rarely seen in esophagus. Proliferation of myofibroblastic cells is more in IMT. In IPT it is more of an inflammatory reactive or regenerative entity and has an overlapping with immunoglobulin G4-related disease. Lesion often mimics malignancy. A 20-year-old male patient with history of dysphagia, more for liquids, underwent CT thorax, showing dilated oesophagus, with a moderately contrast enhancing eccentric soft tissue density lesion involving mid and lower esophagus extending for a length of 6cm. Patient underwent right thoracotomy, and a 5x3x3cm hard lesion involving lower

esophagus was excised. Histopathology pointed towards inflammatory myofibroblastic tumor or inflammatory pseudotumor.<sup>1-4</sup>

#### **CASE REPORT**

A 20-year-old male patient with history of dysphagia, more for liquids and epigastric discomfort for two years came to our institution with no other significant symptoms or illnesses in the past. His general and systemic examination was non-contributory. Laboratory investigations were within normal limits. Chest radiograph PA view showed dilated esophagus more towards right side. Lung fields appeared normal. Barium swallow revealed a smooth narrowing of distal esophagus producing an obtuse angle with esophageal lumen with proximal hold up of barium (Figure 1a). Contrast CT thorax showed dilated oesophagus more towards right

side, with a moderately contrast enhancing eccentric soft tissue density lesion involving mid and lower esophagus extending for a length of 6cm (Figure 1b). The lower end of the lesion was 4 cm above gastro esophageal junction. Possibility of intramural esophageal lesion like leiomyoma was considered first, and a rare possibility of intramural neurofibroma as a differential diagnosis. Patient underwent right thoracotomy, and a 5x3x3cm hard lesion involving lower esophagus was excised (Figure 1c). Per operative diagnosis of neurogenic tumour was entertained. Histopathology revealed spindle shaped smooth muscle cells loosely arranged in a myxoid / hyaline stroma with scattered inflammatory cells pointing inflammatory myofibroblastic inflammatory pseudotumor (Figure 1d).



Figure 1a: Barium swallow showing smooth narrowing of distal oesophagus and proximal hold up of barium.

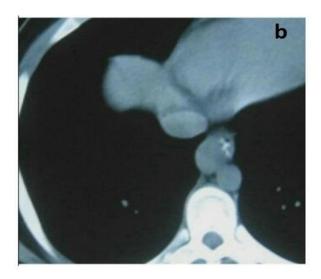


Figure 1b: CT sections shows a moderately contrast enhancing eccentric soft tissue density in mid and lower oesophagus.

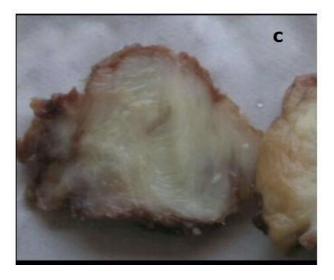


Figure 1c: Thoracotomy specimen- A 5x5x3cm soft tissue lesion hard in consistency involving mid and lower oesophagus.

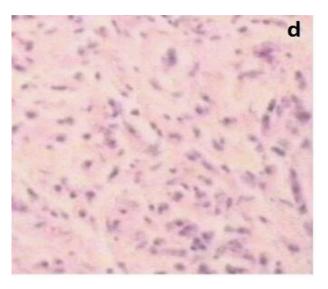


Figure 1d: Histopathology showed spindle shaped smooth muscle cells loosely arranged in a myxoid / hyaline stroma with scattered inflammatory cells.

## **DISCUSSION**

Inflammatory pseudotumor (IPT) or Inflammatory myofibroblastic tumor (IMT) is a pseudo sarcomatous lesion seen mainly in viscera and soft tissue of children and young adults. It has been reported in almost in every anatomical location like liver, biliary system, skin, soft tissue, breast, mediastinum, intestine, pancreas, mouth, sinuses, nerves, bone, CNS. Most common site is lung, followed by mesentery and omentum but very rarely seen in esophagus. Various nomenclatures are given for this rare entity including Plasma cell granuloma, Plasma cell pseudo tumour, Inflammatory myofibro histiocytic proliferation, Xanthomatous pseudotumour, Fibrous xanthoma, Omental / mesenteric myxoid hamartoma. Exact etiology and nosology of the lesion is uncertain.

Majority are idiopathic, with possible etiological agents like ebstein -barr virus (EBV) and mycobacterium avium intracellulare.<sup>6</sup> On CT, the lesions show low attenuation on unenhanced image and shows progressive opacification after intravenous contrast.<sup>7</sup> Calcification may be present. MRI shows a low signal on T2 weighted images and delayed enhancement on T1 weighted image.<sup>8</sup>

Disease has got a benign course, with site of involvement determining the mode of presentation. Patient may have anemia, raised ESR, thrombocytosis, polyclonal hyper gamma globulineamia. Histology shows inflamed fibrous and granulation tissue along with reactive blood vessels. Surgery is warranted because the clinical and radiological appearance often suggest malignancy. Role of radiotherapy and chemotherapy has not yet been proved. Steroids may be beneficial to a lesser extent. Factors influencing tumor recurrences are tumor size >8cm, positive margins, multinodular or ill defined tumor morphology and also site of the tumor, especially in retroperitoneum.

#### **CONCLUSION**

Proliferation of myofibroblastic cells is more in IMT. In IPT it is more of an inflammatory reactive or regenerative entity and has an overlapping with immunoglobulin G4-related disease. Lesion often mimics malignancy.

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