



LEIOMYOMA OF ESOPHAGUS-A RARE CASE REPORT

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ABSTRACT

Benign tumours of the oesophagus are rare lesions that constitute less than 1% of oesophageal neoplasms. Nearly 2/3rds of benign oesophageal tumours are Leiomyomas, the others are mostly polyps and cysts. Leiomyomas are the commonest benign mesenchymal tumours of the oesophagus. The significance of knowing about Leiomyomas is due to the fact that it can mimic oesophageal cancer and lead to diagnostic confusion.¹.Not many cases have been reported in literature. To the best of our knowledge, less than 100 cases have been reported in world literature and ours is the 12th case report from India. Hence, we are reporting it for its rarity.

CASE REPORT

A 64-year-old male patient presented with complaints of dysphagia since 3 months.No history of nausea, vomiting, weight loss were present. Physical examination and laboratory tests did not reveal any abnormality. Endoscopic examination revealed a tiny submucosal nodule in the upper third of the oesophagus which was excised and sent for histopathological examination. Gross examination revealed 4 tiny bits of grey-white and grey-brown tissue each measuring 0.2x0.2cm.Tissue was all embedded.Microscopy revealed bits of tissue lined by stratified squamous epithelium beneath which was seen a well circumscribed nodule composed of interlacing benign spindle cells arranged in whorls,fascicles and bundles.At places,palisading of the nuclei was seen.Nuclei were spindle shaped in some and blunt ended in some and

wavy in some cells.No atypia was seen.No areas of haemorrhage or necrosis were seen.The diagnosis of benign spindle shaped tumour,probably Leiomyoma was made with a differential diagnosis of Schwannoma. Blocks were sent for IHC which revealed SMA and Desmin positivity and was negative for CD117 and S-100 protein confirming the diagnosis of Leiomyoma.The patient is on regular follow up and is asymptomatic.

DISCUSSION

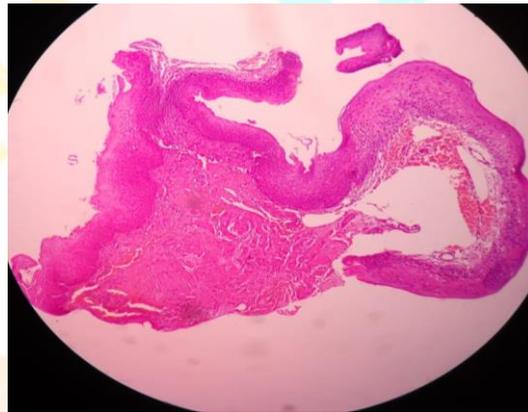
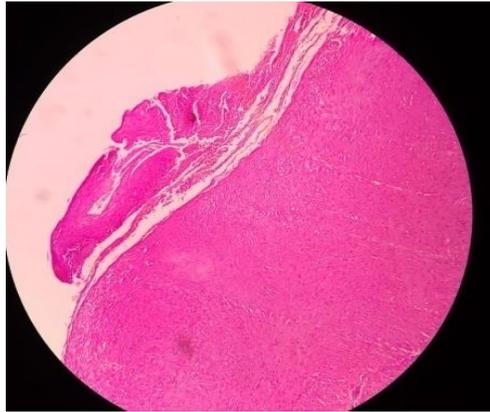
Leiomyomas are the commonest benign mesenchymal tumors of oesophagus contributing about 2/3rds of all the benign tumours of the oesophagus. Leiomyomas usually arise as intramural growths,most commonly along the distal 2/3rds of the oesophagus.In our case it was in the proximal 1/3rd of the oesophagus.They are multiple in approximately 5% of patients¹.Oesophagealleiomyomas rarely cause symptoms when they are smaller than 5cms in diameter.In our case though it was small,it was symptomatic.Large tumours can cause dysphagia,vague retrosternal discomfort,chest pain,oesophageal obstruction and regurgitation.Rarely can they cause gastrointestinal bleeding with erosion through mucosa.Very few physical findings are noted other than the non-specific symptoms associated with oesophageal leiomyomas.In extremely rare cases where severe oesophageal obstruction is caused by a leiomyoma,weight loss and muscle wasting maybe observed².Microscopically,leiomyomas comprise of bundles of interlacing smooth muscle cells,well demarcated by adjacent tissue by a definitive connective tissue capsule. They are composed of fascicles of spindle cells that tend to intersect with each other in varying angles.The tumour cells have blunt ended elongated nuclei and show minimal atypia with few mitotic figures³.On IHC, the specific findings in leiomyoma are diffuse positivity for SMA and Desmin and negativity for CD117 ,CD 34 and S-100 protein⁴. Barium swallow and endoesophageal ultrasonography help in diagnosis of leiomyoma .Asymptomatic or smaller leiomyomas may be followed up periodically with regular barium swallow and endoscopy⁵.

CONCLUSION

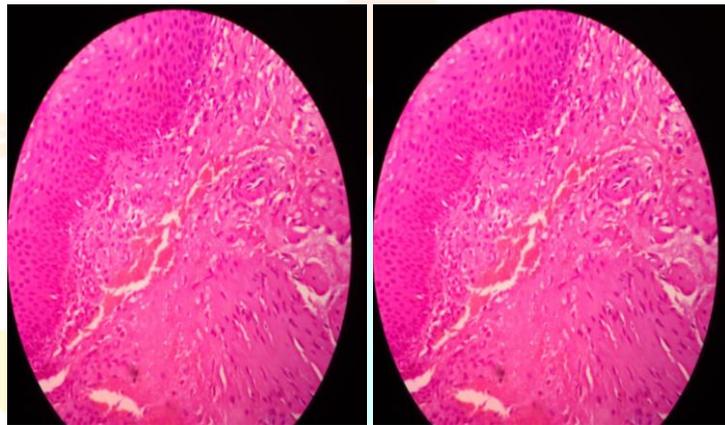
Leiomyomas are rare , benign oesophageal neoplasms with an indolent clinical course.Symptoms mimic that of oesophageal carcinoma. Esophagoscopy and endoscopic ultrasonography are the main diagnostic methods.Symptomatic large leiomyoma should be treated surgically while small asymptomatic lesions maybe managed by regular follow-up and repeated endoscopies.

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- 4.RaoM,Meng Q Q,Gao P J.Large leiomyoma of lower esophagus diagnosed by endoscopic ultrasonography-fine needle aspiration:A casereport.World J Clin Cases.2020 /nov;8(22):5809-15
- 5.Mutrine C J,et al.Esophageal leiomyoma: a 40 year experience.Ann Thorac Surg.2005;79:1122-5



Figures 1&2: Tumor beneath stratified squamous epithelium(H&E 40X)



Figures 3&4-Tumor showing interlacing bundles and fascicles of benign spindle cells(H&E100X)



Figure 5 SMA positive(100X)

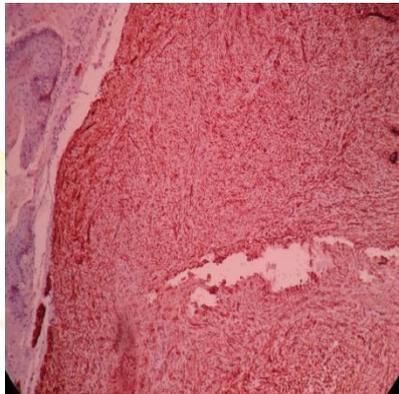


Figure 6:Desmin positive (100X)

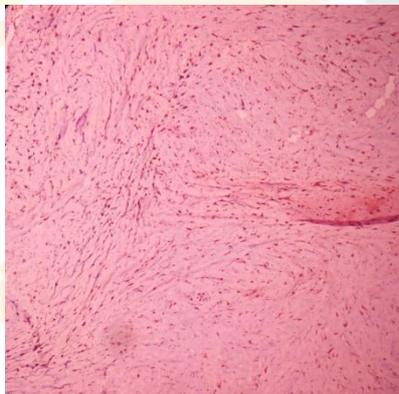


Figure 7:CD117 negative (100X)

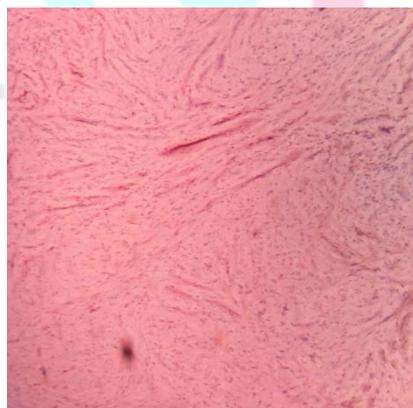


Figure 9:S100 negative (100X)