

# A minimally invasive endoscopic approach to oesophageal lipoma

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**L**ipomas of the oesophagus are rare and often asymptomatic.<sup>1,2</sup> Symptomatic oesophageal lipomas have historically been treated with invasive procedures using an open cervical or thoracic approach.<sup>3,4</sup> This case demonstrates that lipomas with certain favourable characteristics are amenable to endoscopic resection, which is a safe, less invasive and effective approach.

## Case presentation

We present the case of a 74-year-old man who was found to have a 2.5 x 1cm benign-appearing, pedunculated lesion of the upper oesophagus during endoscopic investigation of iron deficiency anaemia (Figure 1). Retrospectively, the patient described a history of atypical dysphagia for 10 years with intermittent coughing and choking.

Due to the patient's symptomatology, he was recalled for repeat endoscopic evaluation under general anaesthesia. Biopsy of the lesion was attempted, at which point it was clear that the lesion was entirely in keeping with an oesophageal lipoma. The lesion was removed using hot snare to the stalk base, and three endoclips were used to close the mucosal defect (Figure 2).

The patient underwent barium-swallow 24 hours post-procedure, which demonstrated brisk

flow of contrast without leak and no residual filling defect (Figure 3).

Histology confirmed a benign oesophageal lipoma. The patient reported complete resolution of symptoms.

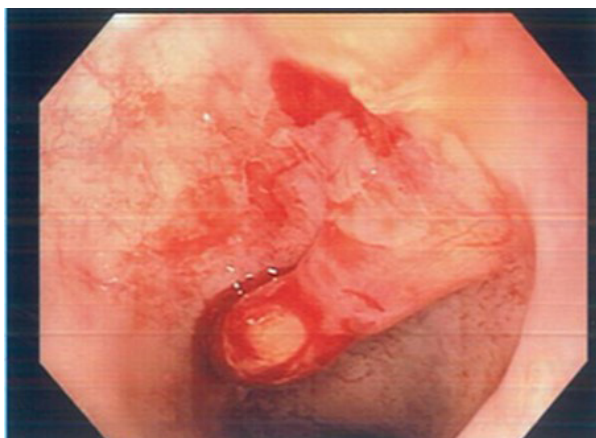
## Discussion

Lipomas of the oesophagus are extremely rare, accounting for only 0.4% of all benign tumours of the gastrointestinal tract.<sup>2</sup> Their aetiology is not completely understood, with some authors reporting an association with prior trauma<sup>3</sup> and others reporting development from redundant mucosal folds.<sup>1</sup> The unifying feature among authors is that they most often originate from two distinct areas of lower resistance in the upper oesophagus—Killian's dehiscence and Laimer's triangle.<sup>1,4,5</sup>

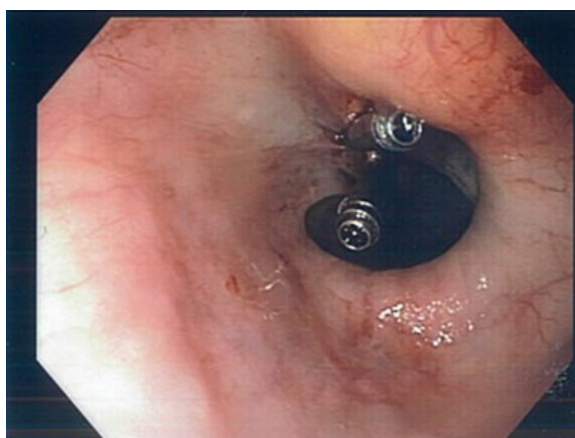
The majority of oesophageal lipomas are asymptomatic.<sup>1,2,4</sup> However, they are prone to elongation as a result of propulsive forces within the oesophagus and tend to become symptomatic as they increase in size.<sup>1,4</sup> Some authors suggest that any lipoma over 2cm in diameter is capable of producing symptoms, although there are a number of case reports in the literature where the symptomatic lipomas are smaller than this.<sup>6,7</sup>

The most commonly described symptoms are

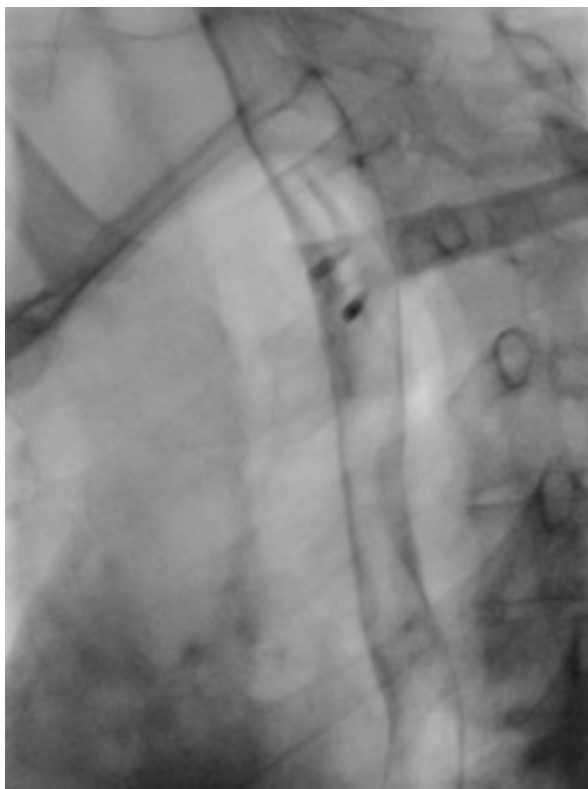
**Figure 1:** Endoscopic visualisation of oesophageal lipoma.



**Figure 2:** Mucosal defect post-resection closed with endoclips.



**Figure 3:** Post-procedure barium swallow; endoclips are seen with no evidence of leak identified.



dysphagia and globus sensation.

Iron deficiency anaemia is uncommon and usually only occurs in lipomas of the lower oesophagus that are exposed to gastric acidity causing ulceration and occult bleeding.<sup>4</sup>

Laryngeal prolapse is a rare symptom, with some patients providing the remarkable history of regurgitating and then swallowing a fleshy mass. Even more rare is that of airway occlusion leading to asphyxiation and sudden death.<sup>1,3,4</sup>

Evaluation and resection of the offending lipoma is required to avoid these potentially life-threatening events. The imaging modalities of choice include barium swallow and computed tomography. An intraluminal filling defect and/or hypoattenuating submucosal mass with fat characteristics are the key radiological features, respectively.<sup>2,8</sup> Direct visualisation with endoscopy reveals a pliable mass with uniformly yellow colour, smoothly covered in squamous epithelium.<sup>2</sup> The use of endoscopic ultrasonography has also been described, which may be useful in identifying the presence of a large feeding vessel in the stalk

of pedunculated lesions.<sup>4</sup>

The treatment of symptomatic oesophageal lipomas has historically been invasive, with surgical techniques that include cervical or thoracic oesophagotomy and even oesophagectomy.<sup>4,8</sup>

Advancement in endoscopic technology has seen a shift in the paradigm whereby selected cases are now amenable to endoscopic resection.<sup>4,9,10</sup> Size and location are key considerations, with smaller and pedunculated lesions naturally easier to snare than their larger counterparts.<sup>4,10</sup> The most important risk to consider is that of uncontrollable bleeding from a large feeding vessel,<sup>6</sup> although studies suggest that with the correct application of the snare, this risk remains low.<sup>4</sup>

In conclusion, this case supports the existing research that endoscopic resection of small, symptomatic oesophageal lipomas is safe and effective, may prevent the risk of potentially life-threatening events and reduces the morbidity and mortality associated with more invasive procedures.<sup>3,4,7</sup>

**COMPETING INTERESTS**

None declared.

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