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**Are biopsies during endoscopic ultrasonography necessary for a suspected esophageal leiomyoma? Is laparoscopy always feasible?**

Beji H *et al*. Necessity of biopsies for esophageal leiomyomas

Hazem Beji, Mohamed Fadhel Chtourou, Slim Zribi, Yassine Kallel, Mahdi Bouassida, Hassen Touinsi

**Hazem Beji, Mohamed Fadhel Chtourou, Slim Zribi, Yassine Kallel, Mahdi Bouassida, Hassen Touinsi,** Department of General Surgery Hospital Mohamed Taher Maamouri Nabeul, University of Tunis El Manar-Faculty of Medicine of Tunis, Nabeul 8000, Tunisia

**Author contributions:** Beji H and Chtourou MF designed the study; Zribi S and Kallel Y performed the research; Chtourou MF analyzed the data; Beji H wrote the letter; Bouassida M and Touinsi H revised the letter.

**Corresponding author: Hazem Beji, MD, Surgeon,** Department of General Surgery Hospital Mohamed Taher Maamouri Nabeul, University of Tunis El Manar-Faculty of Medicine of Tunis, 1007 Street Jabbari Tunis Tunisia, Nabeul 8000, Tunisia. hazembj@gmail.com

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**Abstract**

The present letter to the editor is related to the work entitled “Large leiomyoma of lower esophagus diagnosed by endoscopic ultrasonography-fine needle aspiration: A case report.” Although endoscopic ultrasonography seems necessary in a suspected leiomyoma of the esophagus, the performance of biopsies *via* fine needle aspiration is controversial as it increases the risk of complications such as bleeding, infection, and intraoperative perforations. Laparoscopy is the best treatment strategy for small tumors. Laparotomy with tumor enucleation or esophageal resection can be considered in large leiomyomas.

**Key Words:** Esophageal Leiomyoma; Endoscopic ultrasonography; Biopsy; Surgical resection

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**Core Tip:** Endoscopic ultrasonography seems necessary in a suspected leiomyoma of the esophagus. However, the performance of biopsies *via* fine needle aspiration is controversial. It increases the risk of complications such as bleeding, infection, and intraoperative perforations. Moreover, there is a possibility of an inconclusive biopsy due to inadequate material. Laparoscopy is the best treatment option for small tumors. Laparotomy with tumor enucleation or esophageal resection can be considered in large leiomyomas.

**TO THE EDITOR**

We read with interest a case report by Rao *et al*[1], who presented a patient having leiomyoma of the lower esophagus, successfully treated with laparoscopic local resection.

We agree with the authors on the importance of performing endoscopic ultrasonography (EUS) for large esophageal leiomyomas to rule malignancies. EUS is highly specific to leiomyoma with a diagnostic accuracy of 94.7%[2]. Esophageal leiomyoma presents on EUS as a homogenous, hypoechoic lesion with obvious margins, encircled by an hyperechoic area, and is easily distinguishable from an esophageal cyst, lipoma, or hemangioma[2,3]. However, performing biopsies *via* fine needle aspiration is controversial and presents many risks. It is associated with many complications such as intraoperative perforations, bleeding, and infection[3]. Moreover, an inconclusive biopsy is possible due to inadequate material[4]. Therefore, malignancy can only be ruled out after surgical resection[5-7].

The authors opted for laparoscopic local resection of the tumor. It is the treatment of choice, especially in small tumors < 5 cm[8]. However, a trans-Hiatal approach *via* laparotomy could have been discussed as a therapeutic option knowing that the tumor was large (8 cm × 6 cm × 3.5 cm), originated from the cardia, and entered the abdominal cavity next to the diaphragm and liver.

An esophageal resection can also be considered for big tumors situated at the gastroesophageal junction due to technical problems, poor wound healing in the defect of the esophageal muscle, and dysfunction of the lower esophageal sphincter following enucleation[9,10].

Submucosal tunneling endoscopic resection represents another therapeutic option. However this technique presents technical difficulties for tumors > 35 mm due to the reduced space of the submucosal tunnel[11].

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