

# Elastofibroma dorsi. A case report

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## Case Report

General Surgery



**Background:** Elastofibroma dorsi (ED) is a rare benign pseudotumor of soft tissues, previously considered among the rare benign tumors, however, a prevalence of 2.73% of ED has recently been reported in the population, in postmortem studies it was reported a prevalence of up to 25% in the group of older adults. Therapeutic management is excision in those symptomatic patients. Its diagnosis is confirmed by pathological study after the surgical procedure. Derived from its rare recurrence has an excellent prognosis. This is a 55-year-old male with no medical history of importance for the current condition, with no history of anorexia, weight loss or previous trauma, working as an orderly in a pants factory in the region for more than 10 years, who refers to a 4-year history of a subscapular mass causing mild pain and discomfort when moving the right upper limb.

**Keywords:** Elastofibroma dorsi, soft tissues, latissimus dorsi.

**E**lastofibroma dorsi (ED) is a rare benign pseudotumor of soft tissues, previously considered among the rare benign tumors, however, a prevalence of 2.73% of ED has recently been reported (1) in the population, in postmortem studies it was reported a prevalence of up to 25% in the group of older adults (2). However, the presence of multiple EDs is considered a rare condition (3). Composed of elastic and collagen fibers, with adipose tissue, which is usually located in the lower pole of the scapula, with an unknown pathogenesis. It has a predilection for the female sex in the sixth decade of life (4). Therapeutic management is excision in those symptomatic patients. Its diagnosis is confirmed by pathological study after the surgical procedure. Derived from its rare recurrence has an excellent prognosis (5).

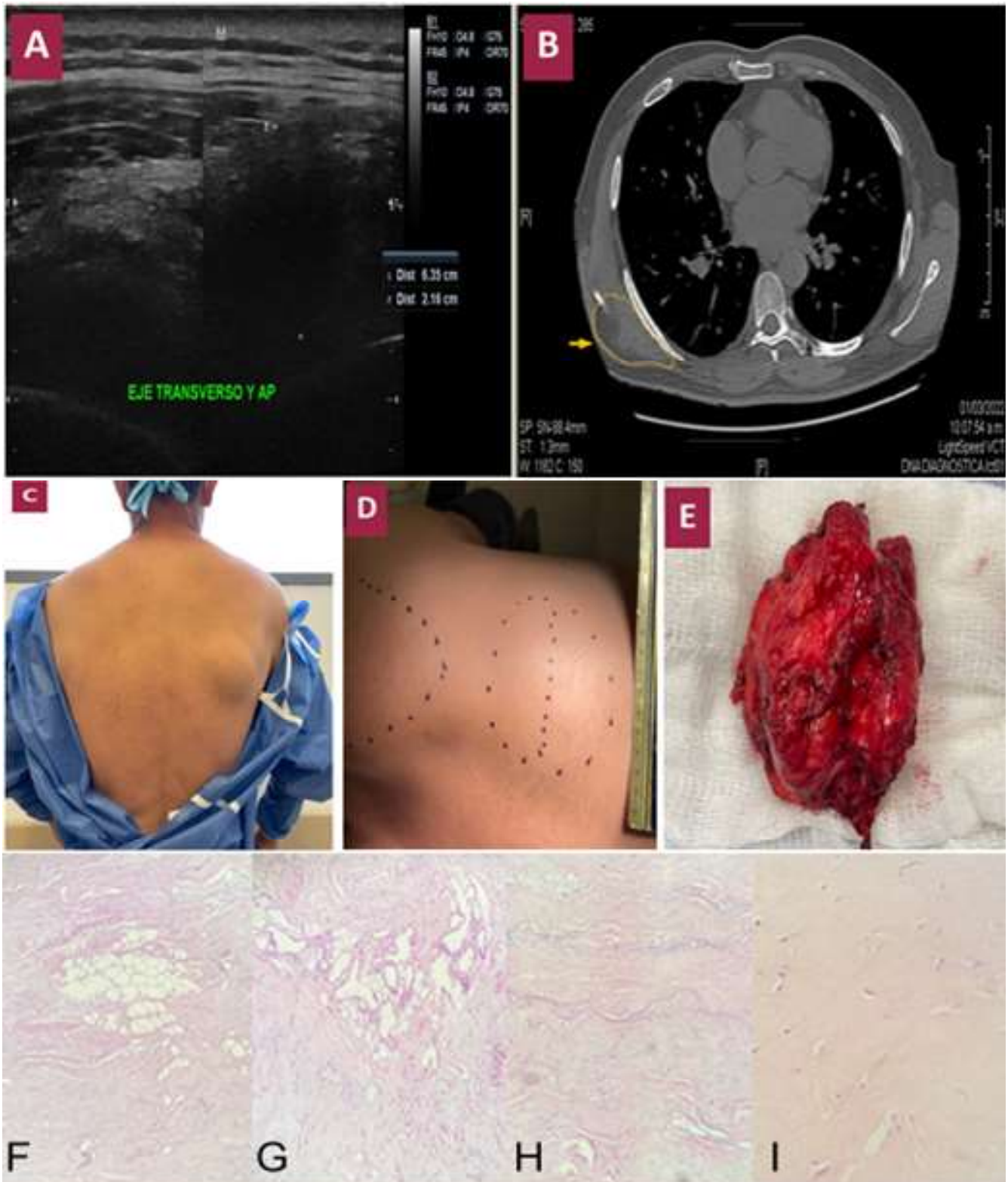
## Case report

This is a 55-year-old male with no medical history of importance for the current condition, with no history of anorexia, weight loss or previous trauma, working as an orderly in a pants factory in the region for more than 10 years, who refers to a 4-year history of a subscapular mass causing mild pain and discomfort when moving the right upper limb. Physical examination revealed a soft, mobile mass at the lower right scapula of 8 x 9 cm. The ultrasound of soft tissues identified in the right subscapular region in the area that corresponds to the latissimus dorsi, a heterogeneous image with echogenic predominance

color Doppler, longitudinal diameter cannot be obtained, its AP and transverse diameter 21 x 63mm, suggestive image of elastofibroma of the right latissimus dorsi. In the CT of soft tissues, it was reported an oval nodular image, with a solid appearance at the subscapular level from the right side, measuring 61 x 50 x 42 mm with an estimated volume of 84 cc, a compatible finding with elastofibroma dorsi. In simple phase presented 29 HU, reaching up to 41 HU after the application of intravenous contrast medium. Surgical resection of the lesion located deep to the latissimus dorsi muscle was performed, obtaining a 50 x 60 x 40 mm piece of fibrous consistency. Through anatomopathological study, fibroelastoma was reported. Differential diagnoses such as soft tissue tumors, dysmoid fibromatosis and fibrolipoma. The patient was discharged 24 hours after the surgical procedure, asymptomatic. In his evaluation of 6 months of postoperative follow-up, he evolved without complications, so he did not require adjuvant treatment because he had no evidence of recurrence.

## Discussion

The case of an ED without relevant symptoms was documented. Some risk factors associated with ED, such as genetics and environmental ones, have been reported, however, the exact pathogenesis is unknown, guiding that minor trauma is the key to its development, supported by the high prevalence in elderly patients and manual workers where the



**Figure 1.** A. Ultrasound of soft tissue. B. CT of soft tissue. C. Tumor in subscapular region. D. Pre-Surgical marking. E. Resected piece. F, G, H, I. Microscopic pathology. Presence of increased fibrofatty tissue of semi-firm consistency, its architecture preserved with distribution of fibroblasts and elastin fibers, as well as areas with adipocytes.

majority of cases, ED is completely asymptomatic and the diagnosis is incidental as a finding in an imaging study, which based on the imaging characteristics makes biopsy unnecessary in most cases. The ED can be seen in the image as mature fat infiltrated with streaks of elastic fibrillar tissue in the tumor. Regarding medical management, surgical resection is justified when the diagnosis is not certain, or the size of the tumor is large enough to cause symptoms. It is reported that surgical resection is considered curative, and that recurrence is derived from incomplete resection. ED is a benign soft tissue tumor that is diagnosed incidentally in most cases and its multiple presence is unusual.

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## Conclusion

This case report documented radiologically and histopathologically an Elastofibroma dorsi. The imaging findings are characteristic, not requiring a biopsy or surgical intervention. Its finding is usually incidental and the surgical procedure for its resection is justified when symptoms occur.

## Conflicts of interests

The authors declare no conflict of interest

## Acknowledgements

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