

Radiological Diagnosis

Diagnosis of the case presented in the previous edition

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Elastofibroma of the back



A 56-year-old female patient, pain-free prominence in the right dorsal region, perceived in the last year, with no signs of inflammation.

Comments

The elastofibromas of the back are benign soft-tissue tumors presenting slow growth. They can be bilateral, are predominant in females, and, in most cases, they are found in the inferior subscapular region, between the scapula and the thoracic wall. They are composed of elastic fibers surrounded by a dense collagen matrix.⁽¹⁾ Their pathogenesis is not yet totally understood, and it has been suggested that microtraumas caused by friction between the scapula and the thoracic wall might cause the proliferation of the fibroelastic tissue. However, this theory has not been totally proven.

Usually found in individuals over 50 years of age (in whom their prevalence can be up to 24%), elastofibromas might be related to intense physical activity. However, elastofibromas have also been

described in younger individuals, including children.⁽²⁾ Frequently asymptomatic, when large, they can be palpable or cause shoulder discomfort.

In the computed tomography such lesions present indistinct margins and have density similar to the muscles, with interposed hypodense striae containing fat.⁽³⁾ The magnetic resonance shows lesions with well-defined margins, adjacent to the inferior margin of the scapula and to the thoracic wall. Elastofibromas present low signal intensity in the T1- and T2-weighted images, representing fibrous tissue, interspersed with areas of greater signal intensity corresponding to fat.⁽⁴⁾ A positron emission tomography-computed tomography scan can show accumulation of the radioactive drugs due to hypermetabolism in these lesions.⁽⁵⁾

When such a lesion is present in this typical location and with the characteristics described above,

it is not necessary to perform additional tests for diagnostic confirmation.⁽⁶⁾ Some authors advocate reserving surgical resection for symptomatic cases or for those in which the diagnosis is uncertain.⁽⁷⁾

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