

Osteoblastoma causing rigidity of the elbow

Case report

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A 21-year-old man complained of pain and rigidity of the elbow with a flexion contracture of 100°. A radiographic examination revealed an 1.5-cm osteolytic injury in the center of a sclerotic lesion in the distal

humerus. The diagnosis of an osteoblastoma was later confirmed histologically. Once the tumor had been excised, the pain disappeared and functional mobility was reestablished.

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Case report

A 21-year-old man presented with a 3-year history of pain and rigidity of the elbow. The clinical examination showed a flexion contracture of 100°, but no restriction of pronation or supination. Radiographs revealed an osseous sclerosis in the distal third of the humerus and a deformity of the trochlea, with widening of the humeral palette. Linear tomography revealed a 1.5-cm osteolytic injury in the central part of the sclerosis. It was diagnosed as an osteoblastoma,

which was confirmed histologically by means of a puncture biopsy and surgical excision of the tumor (Figure 1). A posterior approach to the elbow was used, and an osteotomy of the olecranon was performed. The tumor nidus was resected, perforations were made in the peripheral osseous sclerosis, and arthrolysis and osteosynthesis of the osteotomy were carried out using a cancellous screw with a washer. A passive flexion of 120° and an extension of -35° were achieved during surgery. After 3 years, the range of motion is respectively 130° and -30°.



Figure 1. Sclerosis of the distal part of the humerus with widening of the humeral palette and deformity of the trochlea.

Linear tomography. An osteolytic injury, 1.5 cm in diameter, in the center of the sclerosis.

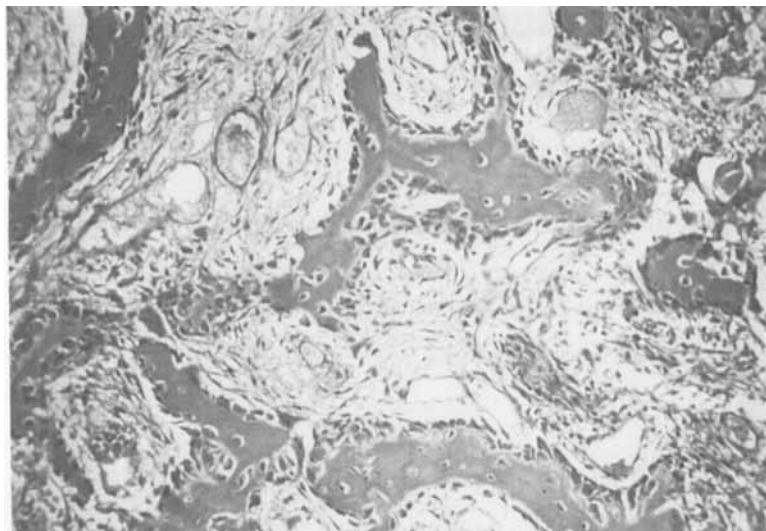


Figure 1. Osteoid tissue delimited by osteoblasts and osteoclasts. Osseous sclerosis can be seen in the peripheral osseous tissue with foci of formation of regular trabeculae, together with the proliferation of fusiform cells and a large number of osteoblasts. HE, $\times 120$.

Discussion

Several studies have reported the possibility of a scoliosis due to a muscular contracture caused by either an osteoblastoma or osteoid osteoma located in the concavity of the curve (Kirwan et al. 1984, Ransford et al. 1984, Pettine et al. 1986). Similar observations have also been made as regards the elbow by Brabants et al. (1986), who reported the almost total recovery of elbow mobility in a patient suffering from a subperiosteal osteoid osteoma located in the radial edge of the humeral palette after the resection of the tumor.

References

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