



POSNA

The Core Curriculum

Myositis ossificans

Objectives

1. Describe history and physical findings suggestive of traumatic myositis ossificans
2. Describe the characteristic microscopic pathology of traumatic myositis ossificans
3. Discuss the treatment of myositis ossificans
4. Discuss lesions which may be difficult to differentiate from traumatic myositis ossificans

Discussion point

1. What is fibrodysplasia ossificans progressiva?

Discussion

Traumatic myositis ossificans has long been recognized as a complication of blunt trauma. It is most often noted in the quadriceps in the lower extremity, and the brachialis in the upper. In a prospective study of quadriceps hematomas, myositis ossificans developed in 16%. The pathology of myositis ossificans has been well described, and has a characteristic pattern of more mature bone peripherally and more immature cells centrally. This pattern can generally be recognized with imaging studies of the injured limb. The major masqueraders of myositis ossificans that behave poorly are parosteal sarcoma and periosteal sarcoma. This differentiation can usually be made with imaging studies (usually plain radiography suffices) as myositis ossificans characteristically has a radiolucent line between the ossifying soft tissue mass and the bone.

Treatment of myositis ossificans is largely protection from reinjury as the lesion matures. The average period of disability from myositis ossificans in a study from West Point was 73 days. When a mature lesion restricts function, resection can be considered, but this has been performed at a rate of less than 10% following myositis ossificans.

Fibrodysplasia ossificans progressiva is a rare condition characterized by progressive extraskeletal ossification with no effective treatment at present. It has no relationship with traumatic myositis ossificans although the terminology used in some of the older literature sometimes uses myositis ossificans progressiva to describe the progressive condition.

References

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