Subcutaneous Leiomyosarcoma
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History
4 year old female with firm mass. No history of trauma or infection. No pain or discoloration.

Diagnosis
Subcutaneous Leiomyosarcoma

Discussion
Cutaneous leiomyosarcoma has been recorded in persons of all ages, but there is an increase in incidence after age 40 years of age; half of the cutaneous leiomyosarcomas presented in the fifth to seventh decades and mainly located on the extremities. The tumour frequently occurs on the extremities and shows a predilection toward the hair-bearing extensor surfaces. This is associated with the greater density of hair follicles and erector pili muscles on the extensor surfaces. Other common sites of leiomyosarcomas are in the retroperitoneum, peripheral soft tissue, vascular tissue and the gastrointestinal tract.

The cause of cutaneous leiomyosarcoma is unknown but may be related to translocation between chromosomes 12 and 14 and immunosuppressive states (HIV, treated leukemia, post-transplantation). Other possible predisposing factors may include leiomyomas as precancerous lesions and antecedent physical trauma or exposure to radiation at the site of cutaneous leiomyosarcoma occurrence.

Pain is the most common symptom of leiomyosarcoma, occurring in 80 to 95% of patients. Pruritis, burning, and bleeding are also common. Leiomyosarcoma which may be a variant of embryonal rhabdomyosarcoma in children has a very good prognosis. Treatment is wide local excision.

The natural history of cutaneous leiomyosarcoma appears to be one of local recurrence.

Findings
MR-Sagittal T1 and fat-suppressed T2, axial fat-suppressed T2 and axial and coronal fat-suppressed post-gadolinium T1 images demonstrate a circumscribed subcutaneous lesion contiguous with the superficial fascia in the medial right leg and irregular peripheral enhancement.

Reference
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