

The Varied Imaging Features Of Musculoskeletal Fibromatosis

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Musculoskeletal fibromatosis is a soft tissue tumour of mesenchymal cells. Clinically, it is divided into two groups: superficial and deep. The histopathological hallmark of this entity is the proliferation of spindle shaped cells arranged in a fascicular pattern within collagenous stroma which contains blood vessels. Musculoskeletal fibromatosis displays a wide spectrum of radiological characteristics, ranging from benign non-invasive to locally infiltrative. Additionally, fibromatosis tend to recur even after surgical resection. MRI is the imaging of choice. Most fibromatosis demonstrate intermediate signal on T1W, mixed heterogeneous signal on T2W, and heterogeneous, often moderate to marked enhancement. Split fat sign, fascial tail sign and bandlike low signal intensity are some radiological signs infrequently described in literature. Yet, neither the signal intensity nor signs described previously are specific to fibromatosis. Moreover, the aggressive characteristics of deep fibromatosis can mimic malignant soft tissue sarcoma. All these limitations impose a diagnostic challenge to the radiologist. Radiologists should be aware of the variety of radiological presentations of musculoskeletal fibromatoses in order to make a correct diagnosis and guide clinician towards the appropriate management algorithm. Herein, we present a case series of histologically proven musculoskeletal fibromatoses that were encountered in different locations in the body and with varied radiological findings.