



A Rare Case Report of Fibromatosis Scapula BALASUBRAMANIAN

Department of Orthopaedic Surgery,
MADRAS MEDICAL COLLEGE AND GOVERNMENT GENERAL HOSPITAL

Abstract : 32 yrs male with complaints of swelling over right upper back for 8 months with restriction of shoulder movements. X-ray was not confirmatory, MRI came as chondrosarcoma, Scintigraphy showed no evidence of skeletal metastasis, Tru cut biopsy was not confirmatory, Open biopsy report was DD of fibromatosis and neurofibroma. Confirmed as fibromatosis and subtotal scapulectomy was done with preservation of glenoid.

Keyword : Fibromatosis is an aggressive benign soft tissue tumor

Introduction:

Fibromatosis refers to a group of benign soft tissue tumor which have certain characteristics in common, including absence of cytologic and clinical malignant features, a histology consistent with proliferation of well-differentiated fibroblasts, an infiltrative growth pattern, and aggressive clinical behavior with frequent local recurrence.

Clinical features:

A 32 yrs male with C/O pain in Right shoulder for 8 yrs and Swelling in Rt. Upper back 8 months. Pain in shoulder for 8 yrs, pricking nature, present at rest and aggravated during work. Noticed a swelling in upper back 8 months ago insidious onset, gradually increasing in size and now attained the present size.

H/o restriction of movements around shoulder joint.

No H/o fever, loss of weight, loss of appetite or cough with expectoration.

H/o biopsy done twice.

O/E:

A 4cm scar seen behind the posterior axillary border.

Fullness in axilla present. Diffuse swelling around 8x12 cm extending from inferior, lateral, posterior border of scapula to the axilla.

Firm to hard in consistency, no lymphadenopathy.

Both active and passive movements of abduction, flexion, external rotation movements are restricted.

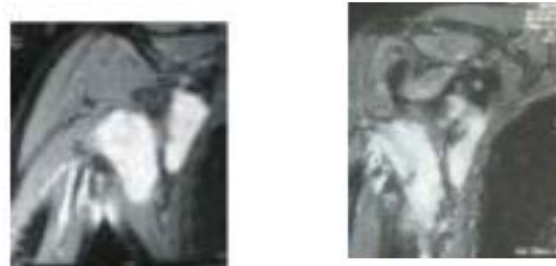
Pre op clinical photo



Pre op X-rays



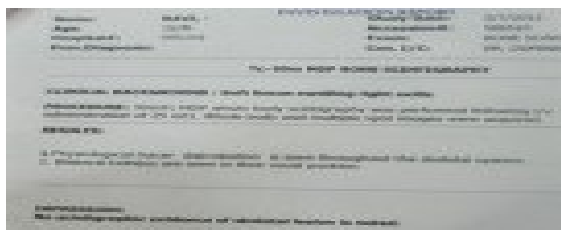
pre op MRI





MRI : multiple exostosis in the right scapula and clavicle with enhancing intramuscular soft tissue lesions in subscapularis and latissimus dorsi. Suggestive of malignant transformation of osteochondroma (Chondrosarcoma)

Scintigraphy:

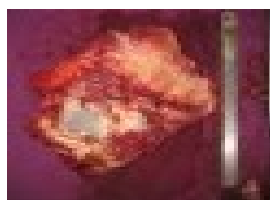


• **Tru-Cut Biopsy:** Section Shows tiny fragments consisting of neoplasm of soft tissue and intervening fibrocartilaginous tissue. Suggestive of soft tissue neoplasm. Exact nature of tumor could not be determined. If clinically suggestive of malignancy biopsy has to be repeated. • **Open Biopsy :** Fragments of spindle cell fibrocollagenous tissue showing fascicular pattern. No evidence of cellular atypia, mitosis and necrosis.

D/D of fibromatosis and neurofibroma. Procedure Done: Sub total Scapulectomy with preservation of glenoid.
Position Incision



Intra op photo



Excised Scapula

Post op Clinical Photo



Post op x-ray



HPE of specimen : Suggestive of Fibromatosis with inferior, lateral and posterior margins of scapula positive.

Discussion:

Fibromatosis is a non metastasizing spindle cell proliferation with high potential of local infiltration and recurrence. Aggressive fibromatosis is a type of musculo-skeletal fibromatosis. While it is a non metastasizing fibrous lesion, it is thought to be a true neoplasm that arises from fascial and musculo-aponeurotic coverings. It does not have any propensity for metastasis although can aggressively invade local structures.

The optimal management for aggressive fibromatosis depends on tumor location and extent. Surgical resection is the main stay of treatment to give a local clearance. Surgery done is radical excision with a wide margin and / or radiation.

Moderate-dose radiotherapy alone for gross disease or after a microscopically incomplete resection yields local control rates of approximately 75 - 80%³.

Treatment with pharmacologic agents Tamoxifen, COX-2 inhibitor or NSAID results in objective response rates of approximately 40 to 50%. The likelihood of local recurrence after surgery is high, particularly if margins are positive. Despite their local infiltrative and aggressive manner mortality is minimal to non-existent in peripheral tumor.

Most unpredictable outcome. Usual recurrence in 1 year. Absence of clinical recurrence for 18 to 20 months is a favourable outcome.

Conclusion Aggressive fibromatosis is a locally aggressive benign tumour arising from the musculo-aponeurotic coverings and invade the bone which need wide local excision to prevent local recurrence.