HEMANGIOMA OVER ANTERIOR CHEST WALL: A RARE ENTITY

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ABSTRACT

Intramuscular hemangiomas are rare benign tumors affecting mainly the muscles of the upper and lower extremities.Amongst them Hemangioma affecting chest wall are much less in incidence . If they do not cause swelling and pain, they may go unnoticed for many years and an accurate preoperative diagnosis may be difficult. The local recurrence rate is high, ranging from 30 to 50%, necessitating wide local excision with clear resection margin.

INTRODUCTION

Intramuscular hemangioma is a rare benign tumor mainly found in the limbs of adolescents and young adults, often presenting with pain and swelling over extremities. Hemangioma arising from the chest wall is extremely rare and has only been reported only in a few documented cases .High level of clinical suspicion ,Bedside surgical examination requires to suspect it and radiological investigation also play a major role. Therefore preoperative diagnosis of intramuscular hemangioma is challenging and often relies on postoperative histopathological confirmation. Given its high local recurrence rate (30–50%), resection with enough surgical margin is crucial . We report the case of a 26-year-old Female who was incidentally discovered to have a chest wall tumor diagnosed as intramuscular hemangioma.

Case Summary

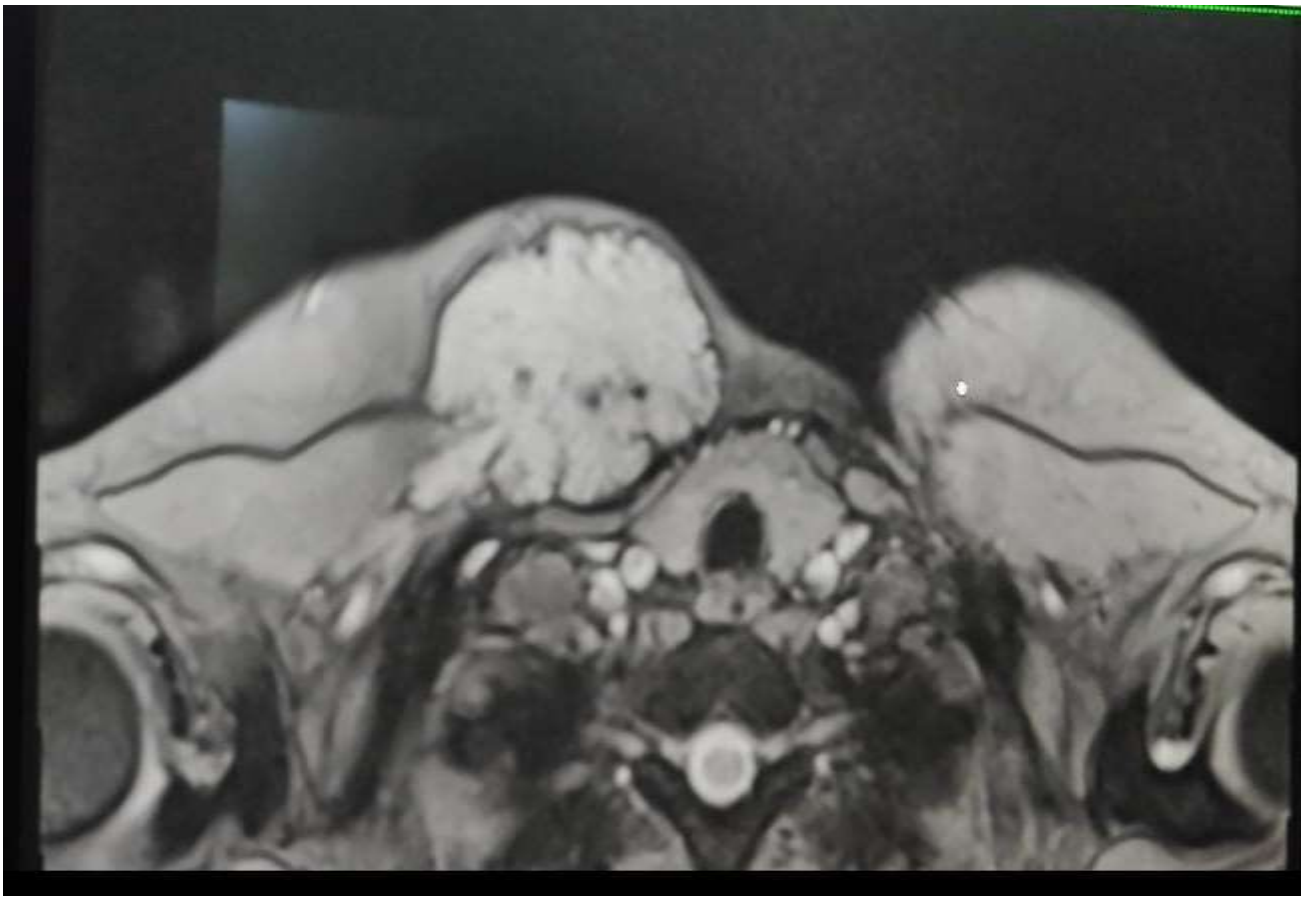
A 22 year old female presented to surgical out patient department with complaints of swelling over right upper side of chest since last 4 years which was gradually progressive in size over time.Swelling isnot associated with complaints of pain,No breathing difficulty,No complaints of weight loss.

On examination approximately 6*2cm2 swelling noted over right upper chest which is soft in consistency.No tenderness.Overlying skin appears normal.No signs of ulceration or any sinus noted.Transillumination test is negative .We Have done CECT Chest and MRI to look for any intrapulmonary communication or any fixity to deeper structures

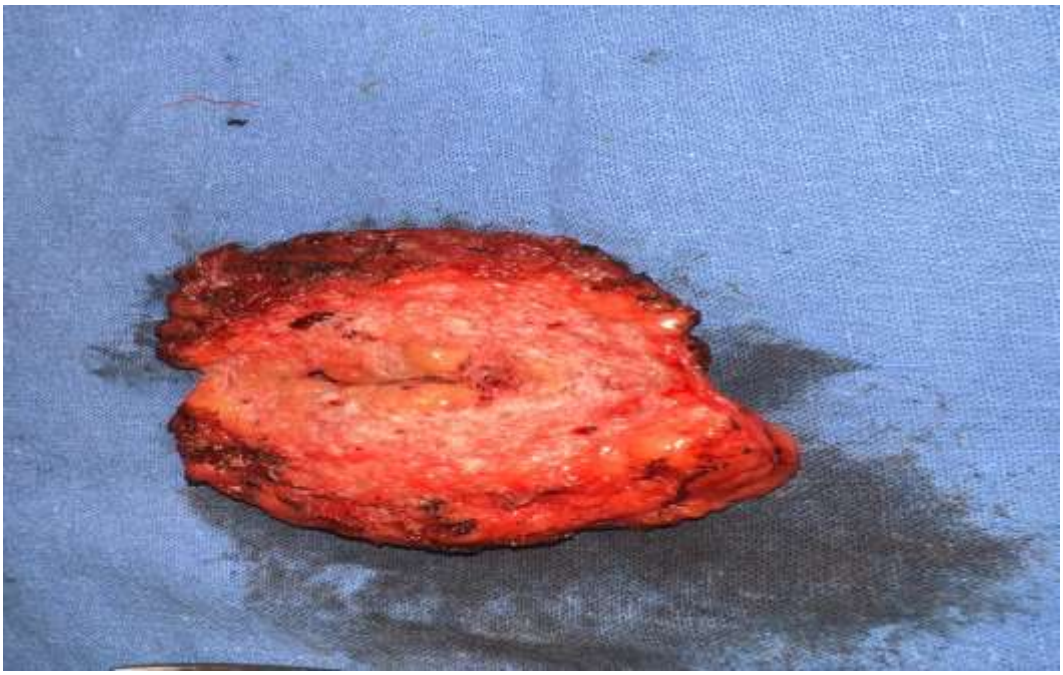
After reviewing CT and MRI,Wide local Excision of Tumor is planned .Wide local Exision was done and drain was placed.Drain was removed on Post-operative day-3.Patient was tolerationg full diet from pod-1 and discharged on pod-4.

Clinical picture of Hemangioma over Right Upper Chest

CT SCAN OF RIGHT HEMANGIOMA



MRI OF RIGHT INTRAMUSCULAR HEMANGIOMA



SPECIMEN PICTURE OF EXCISED HEMANGIOMA

SPECIMEN PICTURE

DISCUSSION

Intramuscular hemangioma is defined as a proliferation of benign vascular channels within skeletal muscle. The lower limbs followed by upper limbs are commonly affected, particularly the thigh and calf and arm, followed by the head, neck, while the tumor rarely arises in the chest wall. We suspect that intercostal intramuscular hemangiomas also pose a high risk of recurrence,therefore these tumors should be included in the differential diagnosis of chest wall tumors, especially in young people.Approximately 94% of Intramuscular Hemangiomas occur before the age of 30 years without gender predilection.More Commonly they are congenital in origin, developing from abnormal embryonic sequestration, although trauma is thought to play an important role as an initiating factor in young patients. Despite some mitotic activity and infiltration, the tumor is completely benign and never metastatizes.

The primary symptom includes exercise-induced pain associated with swelling.. But, the possibility of an intramuscular hemangioma should be considered in asymptomatic chest wall swellings becausethe diagnosis of Intramuscular hemangioma of the chest wall requires a high index of suspicion. Computed Tomography is very useful in the evaluation as it reveals the involvement of adjacent structures and identifies focal calcifications (phleboliths) present in approximately 25% of cases.Any Chest wall swelling can be considered in its differential diagnosis.It Includes liposarcoma (but the phleboliths are unusual in liposarcoma), infection

(which was unlikely if there is lack of general signs of inflammation), neurogenic tumor (which is located near the spine), elastofibroma dorsi (which have a more compact tissue and usually are bilateral), plasmacytoma or primary bone tumor (but there was no osseous involvement).

In all cases the definitive diagnosis is made by histologic study of the surgical and/or biopsy specimen.

Complete surgical excision with clear resected margins is the best therapeutic approach, although every patient of intramuscular hemangioma should be treated individually with consideration given to tumor location, surgical accessibility, depth of invasion, patient's age, and cosmetic factors. Radiotherapy, cryotherapy, embolization, electrocoagulation, and injection of sclerosing agents may be beneficial in case of impractical and/or only partial surgical exeresis. A local recurrence in up to 18% of patients after surgical resection has been reported.

Conclusion

Intramuscular hemangiomas should be considered in the differential diagnosis of chest wall tumors using enhanced-contrast media, particularly in young patients. Wide local resection with clear surgical margins is preferable for intramuscular hemangioma because of its high recurrence rate despite its benignity. Postoperative follow-up may also be necessary after resection.

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