Chest Wall Swelling A Diagnostic Dilemma

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ABSTRACT

A haematoma is a collection of blood, usually clotted, outside of a blood vessel that may occur because of an injury to the wall of a blood vessel allowing blood to leak out into tissues where it does not belong. A haemangioma is an abnormal proliferation of blood vessels that may occur in any vascularized tissue. We report a case who presented with chest wall swelling, in which MRI has reported as haemangioma, subsequently patient underwent excision, of the mass. Later histopathological examination revealed it as haematoma. We report this case for its diagnostic dilemma.

KEYWORDS: Haematoma, haemangioma, chest wall swelling

INTRODUCTION

Spontaneous haematoma is rare and limited to sporadic case reports, associated with neoplasm, aneurysm and arteriovenous malformations[1]. Haematological, bleeding and clotting disorders rank high among the cause for spontaneous haematomas, followed by anti-coagulant and anti-platelet drugs[1,2]. Haemangioma is a common benign vascular neoplasm that closely resembles normal vessels and can be found in all organs of the human body [3]. MRI imaging allows characterization of a haemangioma with typical features, which vary depending on anatomic location[3].

CASE REPORT

A 16 year old male presented to outpatient department with right sided chest wall swelling of 4 months duration, gradually increasing in size, no history of trauma, no history of pain, no history of any previous pathology. On examination a firm swelling felt in the right parasternal area 3rd intercostal space, measuring about 4×2 cm(Fig 1), which was non mobile.

Ultrasonogram chest wall done showed well defined hypo echoic lesion measuring 3×1.5cm noted in right anterior chest, deep to Pectoralis muscle, no vascularity, FNAC done showed scantily cellular and scattered debris laden macrophages admixed with occasional spindle cells suggestive of osteochondroma. MRI done showed ill-defined intramuscular enhancing lesion in the right parasternal region suggestive of neoplastic aetiology likely haemangioma (Fig 2). All other blood examination was normal.
Figure 1: Firm swelling felt in the right parasternal region on 3rd intercostal space

Figure 2: Ill-defined intramuscular enhancing lesion in the right parasternal region suggestive of neoplastic aetiology likely to be haemangioma
Exploration done showed well defined swelling measuring about 3×2cm, deep to pectoralis muscle, feeding vessel found, ligated and cut. Histopathologically well defined lesion with fibro collagenous pseudo capsule with centrally shows large areas of haemorrhage admixed with lymphocytic infiltrate suggestive of haematoma (Fig 3). On follow up of 3 months there was no recurrence.

Figure: 3 Histopathological picture of the lesion suggestive of haematoma

DISCUSSION

A haemangioma is an abnormal proliferation of blood vessels that may occur in any vascularized tissue. Trauma is reported to play a very important role in initiation of haemangioma in young patients[4]. The treatment of choice of intramuscular haemangioma is complete excision with clear resection margin. Local recurrence is reported as approximately 18% when complete resection is not achieved[5, 6, 7]. A haematoma is a collection of blood, usually clotted, outside of a blood vessel that may occur because of an injury to the wall of a blood vessel allowing blood to leak out into tissues where it does not belong. Normally the haematoma gets completely absorbed, but if it is large, the blood may not be completely reabsorbed in which case it becomes encapsulated by a fibrous wall forming a chronic swelling[8]. Management of chronic haematomas includes simple analgesics and anti-inflammatory, aspiration, or incision and drainage[9]. Surgical excision (including the fibrous pseudo capsule) along with cutaneofascial suture to obliterate the dead space is the treatment of choice in cases of large haematomas[9]. In this case there was a preoperative diagnosis. When operating on haemangioma utmost care as to be taken, otherwise catastrophe may occur.

CONCLUSION

Haemangioma and haematoma both can originate in chest wall. It is difficult to diagnose before surgery. Surgeons should be alert in treating such condition to avoid catastrophe, and the possibility of, recurrence.
REFERENCES


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