

Giant Lipoma Back Mimicking as Lipomeningomylocele -A Case Report

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Case Report

Abstract: Fat tissue appears in the embryo, and the formation of new lobules ceases in late fetal life or the early postnatal period. Lipoma is thought to result from a continuation of the proliferation of these fat tissue lobules. Thus lipoma is most common mesenchymal tumor & also known as ubiquitous tumor or universal tumor because it can arise from any part of body which contains fat. The treatment of giant lipoma is complete surgical excision but it associated with 5% recurrence rate.

Key words: Giant Lipoma, Universal Tumor, Lipomeningomylocele.

Introduction

Lipoma is most common mesenchymal tumor & also known as ubiquitous tumor or universal tumor because it can arise from any part of body which contains fat (Bussan et al., 2006). It account for 10% of all neoplasm & 5% of soft tissue tumor in children. Superficial lipomas are smaller than 5cm in 80% of cases, with only 1% of lesions greater than 10cm in size (Mustafa et al., 2009). Lipoma of more than 5 cm size in any dimension is known as giant lipoma. Lipoma can be sub classified according to their histological features, localizations, and dimensions (Huang et al., 2009). Weiss & Goldblum classified benign lipomatosis lesion in to five major categories - Lipoma, variant of lipoma, lipomatous tumor, infiltrating lipoma & hibernoma (Bancroft et al., 2006).

Case Report

A one-year-old child with a huge swelling on the back of chest in interscapular region is reported. Swelling was noticed by parents at the age of six month & now gradually increasing in size without any pain. Other parameters of the child were normal without any associated abnormalities. On local examination, a large swelling was present over the back of chest overlying left scapula & reached up to medial border of right scapula. Superiorly, it was up to the base of neck, inferiorly reaching the fourth thoracic spine. The swelling was non-tender on palpation, there was no increase in local temperature, and it was firm in consistency, with a smooth lobulated surface and measuring about 7x6 cm. It

was not fixed to the underlying structures or overlying skin. Movements of the upper limbs were within normal limits. First clinical impression was Lipomeningomylocele because of its anatomical position and appearance (Fig -1) and second differential diagnosis was subcutaneous lipoma. To confirm diagnosis the patient was advised MRI scan which rule out Lipomeningomylocele and confirmed the lesion to lipoma (Fig-2). The patient was operated for this subcutaneous lesion. A transverse incision was made over the swelling. A large tumor was noted, composed of fibrous tissue. Skin flap was raised by blunt & sharp dissection. The tumor was well encapsulated and totally enucleated after mobilization without cutting/damaging the muscles or capsule of mass & excise completely enblock (Fig-3). On gross cut section, the tumor was lobulated, greyish yellow, and greasy on touch, measuring 7x6x1.5cm (Fig-4). On histopathology, the diagnosis was benign lipoma. Microscopic section showed encapsulated lesion composed of mature adipose tissue. Postoperatively, the child had an uneventful recovery.

Discussion

Fat tissue appears in the embryo, and the formation of new lobules ceases in late fetal life or the early postnatal period. Lipoma is thought to result from a continuation of the proliferation of these fat tissue lobules (Hecio et al., 2009). The mechanism of the uncontrolled growth of giant lipomas has proposed that after a blunt trauma rupture of the fibrous septaes (preventing migration of fat) accompanied by tears of the anchorage between the skin and deep fascia may result in local proliferation of adipose tissue. (Vandeweyer and Scagnol, 2005). Clinical examination alone is often insufficient to identify the nature and exact origin of the mass, in which case imaging is necessary, particularly when the tumor is deep seated. Despite the common nature of this tumor, sonographic descriptions are few and conflicting (Ahuja et al., 1998). MRI is the preferred modality for the

evaluation of a soft tissue mass(Riiki et al.,2012). A major concern facing a giant lipoma should be to rule out malignancy; however, such a transformation for subcutaneous lipomas is exceedingly rare (Vandeweyer and Scagnol, 2005).It is unusual for children to have classic lipomas. Lipoblastoma and lipoblastomatosis are more often diagnosed in pediatric patients. So it should be included in the histological differential diagnosis of lipomas. Thus, a discerning clinical diagnosis and histological analysis is important for diagnostic confirmation (Hecio et al., 2009). The treatment of giant lipoma is complete surgical excision but it associated with 5% recurrence rate (Mustafa et al., 2009). Recently, suction-assisted lipectomy and liposuction have been reported as effective treatment of giant lipomas. However, large hematomas and recurrence caused by incomplete removal of the neoplasm are possible complications of liposuction (Vandeweyer and Scagnol, 2005). So conservative nonoperative management should be considered with asymptomatic disease in which the morbidity and mortality of excision is high (Sreekrishna et al., 2010).

Conclusion

Though the location of Giant Lipoma on back in this age group is rare and theory of trauma cannot explained this uncontrolled growth but surgical excision is the simple and best method for its management despite description of minimal invasive methods like liposuction for this type of patients.

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Fig 1: preoperative picture of Giant Lipoma back

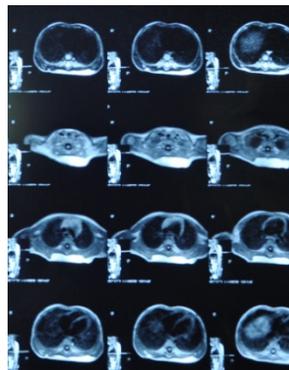


Fig 2: MRI Scan of patient showing subcutaneous nature of Lesion and rule out any intraspinal communication



Fig 3: peroperative picture of Enblock specimen showing lobular surface of Lipoma



Fig 4: Macroscopic cut section of lipoma specimen