

Giant Occipito Cervical Lipoma Case Report and Review of Literature

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ABSTRACT

Lipomas are benign tumors composed of adipose tissue. They are almost encountered in the shoulder, back and neck regions. Clinically, they are usually presented as asymptomatic due to their slow growth. Recurrence is very rare after surgical resection. Giant lipoma in the cervical region is rare and thus requiring surgical excision is for esthetic reasons, pain and limitation of neck mobility or problems in daily living. Some of these giant lipomas may become malignant and deteriorate quality of life. In the present study, we report a case of giant lipoma of the neck which was treated surgically with excellent outcome.

Key words: Giant Lipoma–Benign Tumor–Surgery–Quality Of Life

1 INTRODUCTION:

Lipomas are the most common benign tumors of mesenchymal origin. They may arise in any location where adipose tissue is normally present but, their occurrence in the head and neck [1] region is relatively rare (13%). Lipomas occur more frequently in adults aged between 50 and 60 years old, but are uncommon in children. So, 5% of lipomas are multiple and more common in young men.

Lipomas are slow growing tumors; they are mostly of small size and remain asymptomatic for many years; only a few of them grow to reach an exceptionally large size.

A giant lipoma was defined by Sanchez et al [2] as a lesion that measures at least 10 cm in one dimension or weighs a minimum of 1000 g. We report a large lipoma occupying the cervico occipital region in a 50 years old male patient.

Case report:

A 50 years old male patient was admitted to our department for the management of huge cervico occipital mass. The history revealed that the growth had been present for 10 years;

Our patient had no history as trauma, systemic disease or predisposing factors as obesity.

A physical examination revealed a mobile and soft mass in consistency. The surface of the mass was lobulated, and margins were well defined. The skin overlying the lesion was normal.

The clinical examination revealed no neurological deficits.

Cranio-cervical computed tomography revealed subcutaneous neck mass. It is oval in shape, multilobulated, well limited, surrounded by a thin capsule. The mass had a fat density and measured 120mm X 74mm. The neighbouring muscles and bone were of normal appearance.

Patient was operated under general anesthesia in the prone position and the subcutaneous mass was removed totally in “block resection” after a careful dissection of the subcutaneous tissues surrounding the capsule. Hemostasis was performed and drain was placed for two days in order to prevent the accumulation of blood in the operative bed.

The patient was discharged on the fourth day and the sutures were removed on the tenth day.

Histological examination confirmed the diagnosis of benign lipoma.

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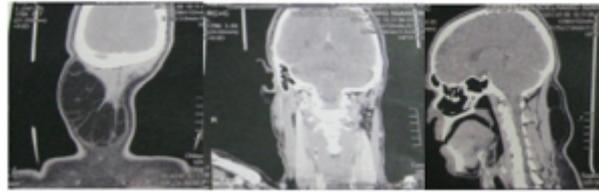


Figure 1. Axial, Coronal and sagittal CT scan show giant cervico occipital lipoma without infiltration of bone and muscle masses

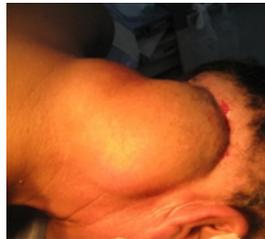


Figure 2. Giant lipomatous mass

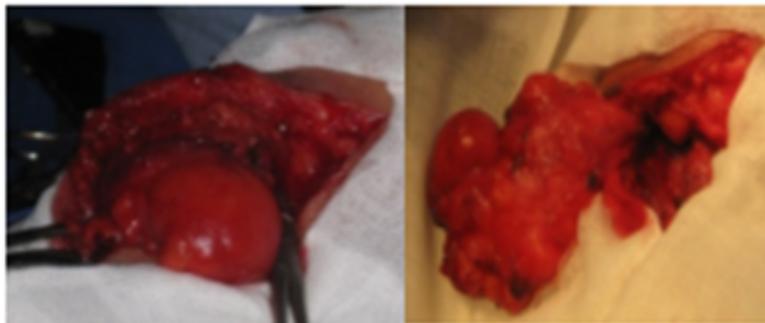


Figure 3. Intra-operative image showing Over the neck and occipital exposure of the lipomatous mass area of the head



Figure 4. Lipoma after the excision

There was no recurrence in the follow-up period over one year.

2 DISCUSSION:

Lipoma is a benign tumor of mesenchymal origin [3]. It constitutes 5% of all benign tumours of the body and can be found anywhere in the body [4]. Only 13% of Lipoma are located in the head and neck region of which posterior neck is the commonest site [3] [5].

Lipomas are most commonly encountered in women [3], between the ages of 50 and 60 [6] [3]. In men, these tumours are rare and inflammation is more common because of the

Hairy skin [7]. Solitary lipomas are seen in 80% of cases, especially in women, while multiple lipomas are seen in men [8].

Lipomas are usually slow growing and only few of them grow to reach a large size, deteriorating the quality of life. Most of lipomas (80%) are less than 5cm with only 1% of them up to 10 cm in size. For lipoma to be referred to as «

giant », it should be more than

10 cm in diameter, although some authors believe it should be more than 5 cm [8].

Giant lipomas are defined by Sanchez et al as lesions with a size of at least 10 cm in one dimension or weighing a minimum of 1000 g [4]. Also in literature, giant lipoma localizations were reported as back and posterior cervical area [9]. The largest lipoma in the literature was reported in 1894; it weighed 22,7kg and was located on the left scapula of young man [9].

The exact aetiology of Lipoma is still unknown. Subcutaneous lipoma is associated with trauma, obesity or hypercholesterolemia [9]. The traumatic factor causing the lipomas explained by the rupture of the fibrous septae, which induces adipose tissue migration and proliferation [10] [9] [11]. In our present case, we didn't detect any one of these parameters.

Lipomas are usually asymptomatic, but they can cause pain when they are large and press on the sensorial nerves. Our patient had no pain but on the opposite he presents difficulties in moving his neck. In addition to physical examination, imaging (US, computed tomography and MRI) assessment are necessary in order to evaluate the nature of the lesion and the surgical planning [12] [3] [13]. MRI provides high tumor delineation and better definition of the location, extent of the lesion and detects clearly the limits of tumor with muscles, bone and vessels. Intravenous administration of gadolinium defines the margins of the tumor and can also depict the irregular vascularization if malignancy transformation is considered. [12]

In the present case, the benign nature of the lipoma was confirmed by computed tomography which showed a well limited subcutaneous mass with a fat density, surrounded by a thin capsule and with no infiltration of subcutaneous tissues, muscles or bone.

The main problem in the diagnosis of giant lipomas is to rule out malignant neoplasms, especially liposarcomas [10]. Clinically, features suggesting a malignant lipoma are a diameter greater than 10cm, rapid growth of the mass in recent months and deep lesion not being mobile to the underlying tissue. In these cases, the possibility of liposarcoma must be considered. MRI could also not be decisive in order to formulate an exact diagnosis because, the both aspect and low contrast of lipomas and the well-differentiated liposarcomas are common. So, in these cases, the final diagnosis is based on histopathological and immunohistochemical examination [14]

Giant lipomas are primarily a cosmetic problem [8] [9] they may also cause functional limitation [8] because of their large size and weight, or signs of compression may be present; however, this is unusual [9] Our patient required a surgical treatment because of his physical appearance and many problems encountered in his daily living as inability to lie in the supine position, difficulty with dressing and sitting in comfortable position.

Surgical excision is the treatment of choice and since they have a well-defined pseudo capsule, dissection around these

benign lesion is performed easily [7]. Resection may be difficult due to large size and adherence to surrounding tissues. In the case of suspicious lipoma, fine needle aspiration biopsy can be performed prior to surgery.

Intraoperatively, our lesion was soft, yellow and lobulated. It was mobile with smooth surface and without infiltrating of subcutaneous tissues, muscles or bone.

Histopathological examination must be performed carefully in order to perform a good diagnosis. It allows the assessment of mitotic activity, cellular atypia, necrosis and invasion of contiguous tissues [11] [15]. Immunohistochemical evaluation is helpful for the diagnosis of liposarcoma. Vimentin and S-100 protein are positive both in lipoma and liposarcoma but the FISH is positive in liposarcoma. So, it constitutes a fundamental tool for the diagnosis of liposarcoma [10].

The prognosis of lipomas is good if the resection is complete. [16] [17] [18] [19]

Recurrence is possible in malignant forms and in case of incomplete excision.

3 CONCLUSION:

Predisposing factors and aetiopathogenetic mechanisms underlying the development of lipomas are still unknown. The diagnosis is frequently based on clinical manifestations. However, a small subcutaneous mass, mobile on underlying spaces and not painful suggests a benign lipoma. This cannot be asserted for a big mass as the one encountered in the present case. In summary, considering the size of the mass, its unusual site and the differential diagnosis with liposarcoma, we considered that the surgical policy is mandatory.

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