



## Giant lipoma of the neck: A case report

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### Abstract

Lipomas are mesenchymal tumors, secondary to hamartomatous proliferation of mature adipose cells, affecting all ages, that is presented by a painless mass evolving since several years, Giant cervical lipomas are very rare, they usually affect the posterior triangle. Ultrasonography is the first examination required for diagnosis CT or MRI scans are indicated to confirm the diagnosis and eliminate liposarcoma. Post-operative surveillance should be extended due to possible recurrence and possible malignant transformation. In this article, we report a young patient who has a giant lipoma of the neck evolving for 10 years.

**Keywords:** lipoma, CT scan, liposarcoma, excision

### Introduction

Lipomas are benign tumors made of cells that synthesize fat. A lipoma is giant when it is more than 10 centimeters. Giant cervical lipomas are very rare; Lipomas in the neck usually involve the posterior triangle <sup>[1]</sup>.

**Case report:** This is a patient aged 25 years, with no particular history, who has for 10 years a left side mass, painless gradually increasing in size, without evidence of cervical compression.

The clinical examination found a mass 15 cm long axis, of consistent soft, painless. Cervical ultrasound showed a homogeneous hypoechoic formation compressing the large vessels of the neck.

At surgery, the tumor, well encapsulated, inside the sternocleidomastoid muscle, non-adherent, the excision was performed in total measured 14 cm long axis, measured 250g (Figure 1 and 2). The postoperative follow-up was without particularity. Histological examination concluded with a cervical lipoma. There was no recurrence after 14 months of follow-up.



**Fig 1:** The excision of the encapsulated mass resting on the left jugulo-carotidian axis



**Fig 2:** Excised specimen measuring approximately 14x5 cm

### Discussion

Lipomas are the most common mesenchymal tumors secondary to hamartomatous proliferation of mature adipose cells <sup>[2]</sup>. Only about 25% of lipomas and their variants appear in the region of the head and neck <sup>[3]</sup>. The common places for lipomas are the back, the arm, the shoulder, the anterior chest wall, the breast, the thigh, the abdominal wall, the legs, the forehead and the face, in descending order of frequency.

They consist of mature fat cells without cellular atypia, constitute 15% of benign soft tissue tumors.

Ultrasonography is the first examination required for diagnosis and it has been shown that fine needle aspiration cytology (FNAC) or computed tomography (CT) is indicated to confirm the diagnosis <sup>[4]</sup>. The lipomas are characterized by homogeneous images of low density with a CT value of -50 to -150 HU without enhancement to contrast injection, with a lipoma capsule barely visible or an adjacent mass effect. Heterogeneity within a fat lesion points to the risk of liposarcoma. In magnetic resonance imaging (MRI), lipomas have regular boundaries with uniform

fat signal intensity on all sequences which distinguishes them from surrounding fatty tissue<sup>[5]</sup>. Calcification is rare, is formed in an area of ischemic necrosis centrally, but is more generally a feature of a liposarcoma<sup>[6]</sup>.

Intraoperatively, lipomas can be considered subcutaneous masses that are soft, yellow, shiny, smooth, mobile, encapsulated and sometimes lobulated. Microscopically, the lesions show lobular growth of mature adipocytes with defined borders, a fibrous capsule and a central vacuole<sup>[7]</sup>.

Lipomas may be subject to malignant transformation. Molecular biology distinguishes a lipoma from a liposarcoma.

Post-operative surveillance should be prolonged because of possible recurrence and possible lipoma conversion to liposarcoma.

### **Conclusion**

Les lipomes géants dans la région du cou sont rares et des complications telles que le saignement d'un ulcère de décubitus et la transformation maligne sont des complications importantes. Avant la chirurgie, un scanner ou une IRM est nécessaire. Les lipomes peuvent avoir des présentations inhabituelles, ils peuvent imiter une tumeur maligne chez un patient âgé. La chirurgie précoce est obligatoire pour ces lipomes géants.

### **References**

1. Sanchez MR, Golomb FM, Moy JA, Potozkin JR. Giant lipoma: Case report and review of the literature. *J Am Acad Dermatol.* 1993; 28:266.
2. Truhan AP, Garden JM, Caro WA, Roenigk HH., Jr Facial and scalp lipomas: Case reports and study of prevalence. *J Dermatol Surg Oncol.* 1985; 11:981–4.
3. Kransdorf MJ. Benign soft-tissue tumors in a large referral population: Distribution of specific diagnoses by age, sex, and location. *AJR Am J Roentgenol.* 1995; 164:395–402.
4. Sharma BK, Khanna SK, Bharati M, Gupta A. Anterior neck lipoma with anterior mediastinal extension-a rare case report. *Kathmandu Univ Med J.* 2014; 11: 88-90. Ref.: <https://goo.gl/Htzw7g>
5. Austin R, Mack G. Infiltrating (intramuscular) lipoma and angiolipoma – A clinicopathologic study of six cases. *Arch Surg.* 1980; 115:281-4.
6. Chikui T, Yonetsu K, Yoshiura K, Miwa K, Kanda S, Ozeki S, *et al.* Imaging findings of lipomas in the orofacial region with CT, US, and MRI. *Oral Surg Oral Med Oral Pathol Oral Radiol Endod.* 1997; 84:88-95.
7. Weiss SW. Lipomatous tumors. *Monogr Pathol.* 1996; 38:207-39