

Lipoma of the Parotid About Three Cases

Faiçal Choumi^{1*}, Mohamed Amine Ennouhi¹, Mohamed Sina², Lahcen Khalfi³, Mohammed Moumine¹, Mohamed Nassih¹

¹Service of Stomatology, Maxillofacial Surgery and Plastic Surgery

²Anatomopathology service Military Hospital Moulay Ismail Meknes – Morocco Faculty of Medicine and Pharmacy of Fez - Morocco

³Service of Stomatology, Maxillofacial Surgery and Plastic Surgery Military Teaching Hospital Mohamed V Rabat - Morocco

Case Report

***Corresponding author**
Faiçal Choumi

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Abstract: The parotid gland lipomas are rare; they are located mainly in the superficial lobe. We report 3 cases of parotid lipomas whose diagnosis was suspected by tomodensitometry and confirmed by histology. Treatment was a superficial parotidectomy for two patients and enucleation for one patient. Parotid lipomas are located mainly in the superficial lobe. The diagnosis is based on imaging, but only histology can confirm. The treatment of superficial lipomas is based on superficial lobe parotidectomy but sometimes enucleation could be enough. In all cases, the recurrence rate is very low.

Keywords: Parotid gland, lipoma.

INTRODUCTION

Lipomas are benign tumors of the soft tissues, located mainly in the upper back, abdomen and shoulders [1]. Histologically, these tumors correspond to an adipocyte proliferation compartmentalized in a fibrous capsule. In 13% of cases they occur in the head and neck, parotid localization is rare, and represents between 0.6 and 4.4% of tumors of the gland [1-3]. They are most often localized to the superficial lobe of the parotid, exceptionally to the deep lobe [2, 4]. Clinically, the lipomas of the parotid are most often asymptomatic and very slow growth. On clinical examination, it is a soft, usually well-circumscribed, preauricular swelling, which makes the differential diagnosis with other benign tumors of the parotid. Diagnosis is based on imaging, including computed tomography (CT) and magnetic resonance imaging (MRI), but only histology confirms the diagnosis with certainty [3].

The treatment is based on surgical excision of the tumor and may require superficial or total parotidectomy depending on the location of the lipoma. The authors report through three cases of lipomas developed at the expense of the superficial lobe of the parotid the main clinical, radiological and therapeutic features of these tumors.

Observations

Observation1

A 54-year-old patient, with no specific history, who had a swelling in the left parotid area that had been evolving for five years, gradually increasing in size and painless.

The examination showed a left atrial tumefaction obliterating the rounded, well-defined, rounded retromandibular sulcus of soft consistency, measuring 6 cm in diameter, mobile with respect to the superficial plane and slightly adherent to the deep plane. The skin in view was normal in appearance

without local inflammatory signs and without signs of facial paralysis (fig1). The palpation of the ganglionic areas showed the absence of cervical lymphadenopathy.

Maxillofacial CT showed a hypodense, homogeneous, well-defined image of fat density at the expense of the superficial lobe of the parotid measuring 5 cm long axis (fig2).

The treatment consisted of an excision of the tumor under general anesthesia by performing the first facelift approach, after detachment of the superficial musculo-aponeurotic system. The fat mass was discovered with the presence of a cleavage plane between the mass and the parotid, which allowed enucleation of the tumor without recourse to superficial parotidectomy (fig3).

Histological examination revealed the diagnosis of lipoma. Postoperative follow-up was

simple without signs of paralysis or facial paresis. After a decline of five years, no recurrence was noted.

Observation 2

50-year-old patient, with no history, who had a swelling of the right parotid region that had been evolving for six years, gradually increasing in size and painless. The examination showed an oval swelling of 5 cm long axis, which had the same clinical characteristics as the first patient. Cervical ultrasound revealed 35/20 mm parotid homogenous formation of hypoechoic echostructure relative to parotid parenchyma reminiscent of a pleomorphic adenoma of the right parotid with absence of cervical lymphadenopathy. CT Maxillofacial showed a hypodense formation of the right parotid rectilinearly polylobed, well limited, homogeneous, of greasy density, measuring 45x30 mm, without net enhancement after iodized injection and does not cross the gland (fig4) with no cervical lymphadenopathy . The patient had a right extra-facial superficial parotidectomy. Histological examination revealed the diagnosis of lipoma. Postoperative outcomes were marked by transient facial paresis without evidence of facial paralysis. After a decline of ten years, no recurrence was noted.

Observation 3

45-year-old patient, with no particular antecedent, who had a swelling under left angulomandibular which had been evolving for three years, gradually increasing in size and painless. The examination showed a tumefaction under left angulomandibular obliterating the retromandibular sulcus, rounded well limited, painless, 6cm in diameter and which had the same clinical characteristics as the other patients. Cervical ultrasound showed a heterogeneous hyperechoic formation of the left angulomandibular region appearing in relation to the lower pole of the left parotid gland, measuring 35x22mm. The remaining parenchymal parenchyma was homogeneous with no cervical lymphadenopathy. Maxillofacial CT showed the presence of a hypodense formation of fat density at the expense of the lower lobe of the left parotid of 4 cm long axis, with no cervical lymphadenopathy. The patient had a left superficial parotidectomy. Histological examination revealed the diagnosis of lipoma. The suites were simple without signs of paralysis or facial paresis. After a decline of ten years, no recurrence was noted.

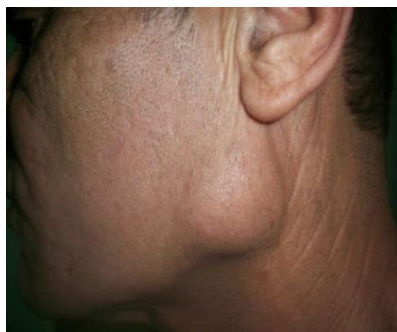


Fig-1: Profile picture showing a left parotid swelling.



Fig-2: Facial Tomodensitometry axial section showing a hypodense image of superficial lobe of the left parotid, homogeneous, well-circumscribed fat density. (Patient 1)

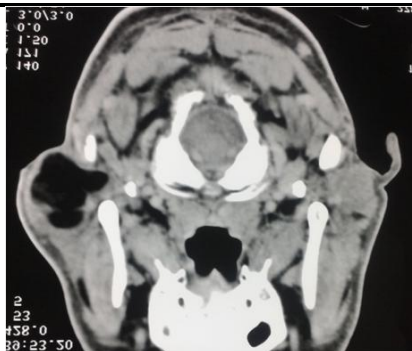


Fig-3: photo showing the surgical specimen (lipoma)



Fig-4: Facial Tomodensitometry axial section showing a hypodense formation of the right parotid coarsely lobed, although limited, homogeneous density fat. (Patient 2)

DISCUSSION

The cervico-cephalic lipomas represent 13% of the lipomas, they occur electively in the posterior cervical triangle and the face, most often superficial subcutaneous, rarely they develop in the parotid where they represent 0.6 to 4.4% of all tumors of the gland [1-3, 5]. They are tumors that develop from the fatty tissue of the gland, repress and sometimes infiltrate the glandular parenchyma, most often localized to the superficial lobe, exceptionally to the deep lobe [2, 4]. They are more common in men than in women with a sex ratio of 4: 1, and usually occur in the fourth decade of life [2]. Clinically, the lipomas of the parotid are most often asymptomatic, very slow growth. On clinical examination, it is a soft, usually circumscribed, pre-auricular tumefaction erasing the contours of the mandible, which makes the differential diagnosis with other benign tumors of the parotid region and with other anatomico-clinical forms. lipomas (angiolipoma, sialolipoma, fibrolipoma) [2, 6]. When they become large, fleeting pains are described, exceptionally facial paralysis can be observed [2, 7]. Diagnosis is based on imaging, ultrasound can distinguish an intra or extraglandular process, and see the solid or liquid nature of the lesion without providing a specific diagnosis. It is the CT and especially the MRI which make it possible to specify the greasy nature of the mass and to specify its relations with the parotid, as it is the case of the second patient where the ultrasound objectified a homogeneous hypoechogenic image evoking in firstly a pleomorphic adenoma, and it is the CT which objectified the greasy nature of the tumor. High-resolution CT (multi-ribbed spiral scanner with helical

acquisition) is a valuable aid to diagnosis because normal parotid tissue has a density similar to striated muscle tissue, whereas lipoma is characterized by homogeneous, well-encapsulated and negative density tissue. between -50 and -100 Hounsfield units [1, 2]. According to Koreantager [8], the CT diagnosis is confirmed in all cases by pathological examination in its series of eight parotid lipomas. Also for our three patients, the diagnosis of lipoma was made by CT and confirmed by histology.

Currently, MRI is the test of choice for parotid tumors with greater sensitivity and specificity, but it is not always available. For our three patients the diagnosis of lipoma was made by CT and confirmed by histology, the MRI was not asked mainly because appointments a little late and nothing can replace a formal histological diagnosis that only surgery will bring [1, 2]. Fine needle aspiration can guide the diagnosis when it is positive (neoplastic lesion), but there are false negatives that do not exclude malignant tumors [2, 9, 10]. Surgical treatment of lipomas in the superficial lobe of the parotid usually consists of superficial parotidectomy because enucleation alone increases the risk of recurrence and increases the risk of facial nerve injury during reoperation [7, 11]. But in all cases, the recurrence rate of intraparotid lipomas is about 5% in all locations and techniques [2]. This low rate of recurrence requires that the preservation of the facial nerve should be a priority by limiting itself to a superficial parotidectomy for the lipomas located at the superficial lobe of the parotid. For our three patients, the treatment was surgical, the

enucleation was sufficient for the first patient without having to resort to superficial parotidectomy, because the lipoma was encapsulated and superficial with presence of a cleavage gap between the lipoma and the parotid tissue. For the other two patients extra-facial superficial parotidectomy was performed. After a decline of five years for the first patient and ten years for the other two, no case of recurrence was noted.

CONCLUSION

The lipomas of the parotid are rare, they are generally asymptomatic outside the swelling of the parotid region which poses the differential diagnosis with the other benign tumors of the region. CT and MRI remain the complementary examinations of choice, but only histology confirms the diagnosis. The surgical treatment of the superficial lobe lipomas is usually based on superficial parotidectomy, but sometimes the enucleation can be sufficient as for our first patient because of the encapsulated and superficial nature of the lipoma. No cases of recurrence were noted for our three patients.

Conflict of interest : No

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