

Intraglandular lipoma of the parotid gland

K. V. Chidananda, S. Sivamani, V. P. Viswakumar, K. G. Nayak, K. K. Sai Geetha, P. Vinayaka

Department of Surgery, K. V. G. Medical College Sullia, D.K District, Karnataka - 574 327, India

For correspondence:

Dr. K. V. Chidananda, Department of Surgery, K. V. G. Medical College Sullia, D. K District, Karnataka - 574 327, India.

E-mail: dr_chida@rediffmail.com

ABSTRACT

A 56-year-old female patient, with a relatively rare condition, intraglandular lipoma of the parotid is reported. Lipoma of the parotid gland constitute around 3% of all parotid tumors and include tumors which are outside the parotid capsule - peri parotid, tumors surrounded all around by the parotid gland -intraglandular, lipomatous pleomorphic adenoma, lipoadenoma and nontumorous interstitial lipomatosis and liposarcoma. These are asymptomatic and occur both in the deep and the superficial lobe of the parotid. The most favored age group is from the fifth to sixth decade of life and is ten times more common in the males. Surgical excision, preserving facial nerve is the treatment of choice.

Key words: Intraglandular lipoma, lipoma, parotid gland

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INTRODUCTION

Lipomas are benign tumors of adipose tissue and are known to occur anywhere in the body. Breast, pancreas and kidneys are well-recognized locations for intraglandular lipomas. Intraglandular lipomas of the parotid gland are rare tumors.^[1] Accessing the MEDLINE, with the key words parotid, benign tumors, lipoma, we came across around thirty individual case reports, over a period of two decades, of which there is only one case report each from India^[2] and Pakistan.^[3] Salivary gland tumors are known to have racial and geographical variations.^[4,5] A study from Paris estimates that 2-3% of all parotid tumors are lipomas.^[6] The condition is extremely rare in the female being ten times commoner in the male and the most common age group is the fifth and sixth decade of life.^[7]

CASE REPORT

The patient, a 56-year-old female, had noticed a small nodule on the right side of her face near

the angle of the mandible around seven months ago. Since then the lesion had steadily grown to the present size of 8 x 3 cm. Apart from her anxiety on account of the swelling, there were no other symptoms. The swelling did not increase in size during meal times or on chewing lemon. The patient had undergone hysterectomy in 1984 for menorrhagia and metrorrhagia and appendicectomy in 2001 for acute appendicitis, both at another institution.

Patient had mild pallor and second-degree hemorrhoids. Rest of the general physical examination and systemic examination failed to detect any other condition. Local examination revealed an 8 x 3 cm right parotid swelling, oblique, with the lower portion more anteriorly placed. The skin over the swelling appeared normal. The swelling was uniformly soft in consistency. The lower edge was slipping under the examining finger. The swelling was not compressible. The deep lobe appeared normal, on bimanual palpation with the index finger inside the mouth. Two diagnoses were considered viz. Warthin's tumor and Intraglandular lipoma and the patient was admitted for evaluation and surgery.

Routine examination of the blood showed hypochromic microcytic anemia, Hemoglobin 9.6 gm% and the Erythrocyte sedimentation rate was 68 mm at the end of first hour. On correction of anemia the sedimentation rates returned to normal. Blood sugars,

blood urea, serum creatinine, electrocardiogram, chest radiographs were all normal. Fine needle aspiration cytology (FNAC), was done on three occasions without a definite opinion. Ultrasonography of the parotid region detected a mass lesion, which was hypo echoic with hyper echoic regions.

The computerised axial tomographic Scan showed enlargement of the right parotid gland. A mass lesion 4.5 x 3.1 cm, which had displaced the retromandibular vein laterally and sternomastroid posteriorly. There was no bony erosion. At its upper end the mass was more deeply placed in the parotid gland and as one came down the mass was more superficial within the parotid. There was no extension of the mass lesion beyond the confines of the parotid gland. The left parotid gland was normal. The mass had an attenuation of -62H.U. The C.T. findings could conclusively suggest a lipoma which was intra glandular [Figure 1].

The surgery was undertaken under general anesthesia with endotracheal intubation using classical Blair's incision. Superficial parotidectomy was done. During surgery, the fatty tumor was well encapsulated and the lower portion was covered by only a thin layer of parotid tissue [Figure 2]. The upper portion of the tumor was extending deeper to the plane of the facial nerve, between its two main divisions and could be removed preserving the facial nerve and the deep portion of the parotid gland. The postoperative course was uneventful. Patient has been followed-up for 15 months at the time of this communication and there is nothing to suggest a recurrence.

The specimen on grossing by the pathologist measured 7 x 5 x 3 cm with fibro fatty tissue surrounding the mass. Sections studied showed lobules of adipose tissue separated by a thin core of connective tissue stroma. Features were consistent with that of a lipoma.



Figure 1: CT scan showing the hypodense mass in the right parotid gland



Figure 2: Showing the reflected superficial portion of the parotid gland. The retromandibular vein and the encapsulated lipoma

DISCUSSION

In the case of parotid swellings, diagnosis relies to a greater extent on the imaging techniques and cytology. The availability of modern imaging techniques has permitted an accurate preoperative diagnosis to be made in most of the cases. In this regard, both CT scan and magnetic resonance imaging compare well with one another^[8] and are superior to ultrasonography. Knowing the nature of the lesion and its location within the parotid gland is of great value to the operating surgeon as he knows before hand whether the deep portion of the parotid gland is to be removed or not. An intraglandular lipoma arising from the deep lobe of the parotid is also well-recognized.^[9-11] Even surgical excisions less than classical superficial parotidectomy viz. limited superficial parotidectomy is advocated,^[12] for benign tumors. Our patient had all the features of a benign parotid tumor and the consistency was soft and at the lower anterior edge of the tumor the slip sign was positive. A working diagnosis of Warthin's tumor and Intraglandular lipoma was made. The prevalence of Warthin's tumor is highly variable among different races. Almost unknown in the Negroids,^[4,5] the prevalence in the Caucasians is around 15%^[12] and the prevalence equals that of pleomorphic adenoma in the Mongoloid races.^[13] Further the prevalence of this condition in the females is on the increase. Though the consistency and the slip sign were present, since intraglandular lipoma is a rare condition in the female,^[7] it was entertained as a second possibility. While FNAC is of great value in the diagnosis of parotid tumors,^[14] its accuracy drops to less than 50% in the case lipomatous lesions of the parotid gland.^[15] Failure to detect malignant cells in the FNAC does not exclude a malignant tumor. In our case three attempts were made without result.

While most reports of this condition are case reports of single cases and includes cases in children, a review of 32 cases,^[7] highlights the rarity of the condition in

the females. Males outnumber females by 10:1 and the most favored age group is the fifth and sixth decade of life. Another review of 11 cases,^[16] showed only two lesions to be truly intraparotid lipomas while nine tumors were found to be compressing the lateral surface of the parotid gland i.e. periparotid lipomas. Certain conditions are better diagnosed in retrospect and a lipoma of the parotid is one such. In one report of nine cases of fatty tumors of the parotid,^[17] there was one case of liposarcoma; which emphasizes this point. Other fatty tumors of parotid include lipomatous pleomorphic adenoma, lipoadenoma and non tumorous interstitial lipomatosis.^[18] Intraglandular lipomas of the parotid gland are rare tumors, particularly so in a female. The case reported here being a well-encapsulated lipoma could be removed surgically through limited superficial parotidectomy.

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