

Case Report

A Case Report of Parotid Gland Lipoma

Dr. K. Subrahmany Eswar^{1*}, Dr. Geetanjali¹, Dr. Kalaichezhian², Dr. Prabhakaran. M³

¹Post Graduate Resident, Department of Radio-Diagnosis, Sree Balaji Medical College and Hospital, 7 Works Road, Chromepet, Chennai, Tamilnadu, India

²Consultant, Department of Radio-Diagnosis, Sree Balaji Medical College and Hospital, 7 Works Road, Chromepet, Chennai, Tamilnadu, India

³Head of Department, Department of Radio-Diagnosis, Sree Balaji Medical College and Hospital, 7 Works Road, Chromepet, Chennai, Tamilnadu, India

Article History

Received: 12.06.2021

Accepted: 15.07.2021

Published: 19.07.2021

Journal homepage:

<https://www.easpublisher.com>

Quick Response Code



Abstract: Lipomas are the most common benign soft tissue tumors of the mesenchymal origin. It is a slow growing mass which is usually painless, asymptomatic and normally arises where fat is present. Its occurrence in parotid region is found to be more rare where they can be found nearby the parotid capsule, inside the capsule or within the gland. Parotid gland lipomas occurs about 0.6 – 4% of all lipoma cases. We report a rare case of parotid gland lipoma of a 38 year old female patient who presented with swelling in the left side of the neck. CT scan showed a fat density mass lesion in the left parotid gland region extending into the left sternocleidomastoid muscle displacing the left retromandibular vein.

Keywords: Benign, lipoma, parotid gland, CT.

Copyright © 2021 The Author(s): This is an open-access article distributed under the terms of the Creative Commons Attribution **4.0 International License (CC BY-NC 4.0)** which permits unrestricted use, distribution, and reproduction in any medium for non-commercial use provided the original author and source are credited.

INTRODUCTION

Lipomas are the most common benign soft tissue tumors of the mesenchymal origin [1]. It is a slow growing mass which is usually painless, asymptomatic. It is usually soft with doughy consistency and normally arises where the fat is present [2]. Its occurrence in head and neck region is very rare in about 15 % of all cases. Its occurrence in parotid region is found to be more rare where they can be found nearby the parotid capsule, inside the capsule or within the gland and near the deep parotid lobe [3]. Parotid gland lipoma occurs about 0.6 – 4% of all lipoma cases [1]. The mean age for occurrence of lipoma in parotid gland is between 5th and 6th decades of life and 10 times more common in males than females [1, 2]. Lipoma may be solitary or multiple, mobile and well-differentiated mass in the parotid region. Surgical excision of the tumour is always best treatment, but it is challenging because of the facial

nerve which could be damaged if not performed by the experienced hands [6].

METHODS

It is an observational study and is carried out in the department of Radio-diagnosis at Sree Balaji Medical college & hospital, Chennai. A female patient aged 38 years presented with swelling over the left side of the neck since 2 years. The patient voluntarily included in the study and the patient was neither supported nor additionally burdened financially.

CASE REPORT

A 38 year old female came with the history of painless swelling over the left side of the neck since 2 years.

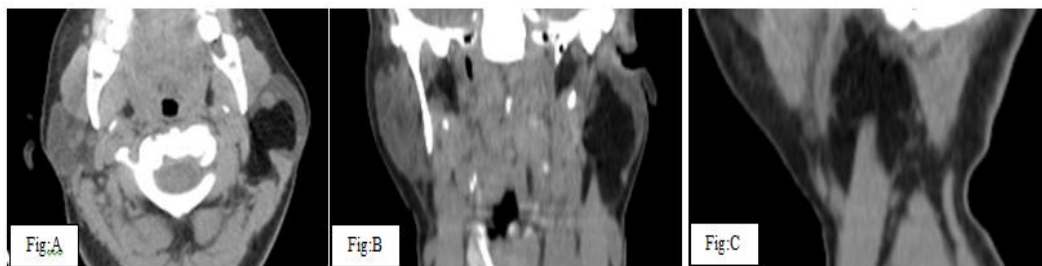


Fig: A, B, C showing a fat density mass lesion on the left side of parotid gland

CT scan showed an irregular fat (~ - 100 - 110 HU) density mass lesion measuring ~ 3.8 x 2.7 x 4.9 cm noted in the mid and inferior surface of left parotid gland. The lesion is seen extending inferiorly along the anterior triangle and abutting the anterior surface of left sternocleidomastoid muscle. Left retromandibular vein is seen displaced supero-laterally. No fat stranding seen. No significant parotid group of nodes noted.

DISCUSSION

Lipomas are the most common benign soft tissue tumors of the mesenchymal origin which are similar to the mature adipose tissue. Lipomas rarely occur in the head and neck region and more rarely occurs in parotid gland [1, 5]. Various causes of lipoma are trauma, hereditary, obesity, endocrine disorder, corticosteroids, and radiation [5, 7]. Parotid gland lipoma occurs about 0.6% - 4% of all lipoma cases [1, 5]. It is more common in males than females and the mean age for occurrence is between 5th and 6th decades of life [5]. In about 75 % cases lipomas usually occur in the superficial lobe of the parotid gland and about 6.5% in the deep lobe [2]. It occurs about 16.5% cases in both deep and superficial lobe on the inferior part of the parotid gland [1]. Deep lobe parotid lipomas may extend between the sternocleidomastoid and digastric muscles. In some cases, they may extend to the parapharyngeal space, causing medial displacement of the lateral pharyngeal wall [10]. Facial nerve involvement, and pain are uncommon which have been rarely described [6]. In our case it is rare of about 6.5 % cases as it is extending to the sternocleidomastoid muscle. The retromandibular vein is formed by the union of the superficial temporal and maxillary veins, descending into the substance of the parotid gland, superficial to the external carotid artery but beneath the facial nerve, between the ramus of the mandible and the sternocleidomastoideus muscle [12].

CT is more reliable and accurate than FNAC and are sufficient for a preoperative diagnosis of lipoma [9, 11]. It is helpful in giving information about pathological features of the tumors, to locate the exact site and its extent to important anatomic structures. In CT scan lipomas show as a fat density mass lesions. In CT scan, Lipomas have density lesser than water, it has negative attenuation which ranges between - 50 to - 150 HU units and with no contrast enhancement [8, 10].

CONCLUSION

In conclusion, although lipoma of the parotid gland is rare, it should be considered as one of the differential diagnosis in all cases of parotid swellings. Assessment of the exact site of tumour is important for the further treatment. CT scan locates the exact site of the tumour and in this case it showed an irregular fat density mass lesion in the mid and inferior surface of left parotid gland which extends to the left sternocleidomastoid muscle displacing the left retromandibular vein.

Compliance with ethical standards

Funding: There is no funding.

Conflict of Interest: Author declares that they have no conflict of interest.

Ethical approval (animals): This article does not contain any studies with animals performed by any of the author(s).

Ethical Approval

All procedures performed in studies involving human participants were in accordance with the ethical standards of the institutional and/or national research committee and with the 1964 Helsinki Declaration and its later amendments or comparable ethical standards.

Informed Consent: Informed consent was obtained from individual participant included in the study.

Conflicts of interest and sources of financial support: Nil

Acknowledgments: Nil

REFERENCES

1. Raju, D., Srikanth, G. G., Rashmitha, A., & Kistareddy, S. (2020). A rare case of parotid gland lipoma arising from the superficial lobe of the parotid gland. *Journal of Indian Academy of Oral Medicine and Radiology*, 32(2), 186.
2. Paparo, F., Massarelli, M., & Giuliani, G. (2016). A rare case of parotid gland lipoma arising from the deep lobe of the parotid gland. *Annals of maxillofacial surgery*, 6(2), 308-310.

3. Chowdhury, R. M., Roy, D., & Pattari, S. K. (2017). Lipoma of parotid: a case report. *The Egyptian Journal of Otolaryngology*, 33(4), 691-693.
4. Dispenza, F., De Stefano, A., Romano, G., & Mazzoni, A. (2008). Post-traumatic lipoma of the parotid gland: case report. *ACTA otorhinolaryngologica italica*, 28(2), 87-88.
5. Mesolella, M., Ricciardiello, F., Oliva, F., Abate, T., Di Lullo, A. M., & Marino, A. (2014). Parotid lipoma: a case report. *Case Reports in Clinical Medicine*, 2014, 3, 437–442.
6. Payne, R. T. (1952). A case of lipoma of the parotid gland. *Br Med J*, 2, 865–866.
7. Bouatay, R., Kolsi N., Bouaziz, N., Harrathi, K., & Koubaa, J. (2019). Lipoma of the Parotid Gland: A Case Report. *Sch J Oto*, 2(3).
8. Raju, D., Srikanth, G. G., Rashmitha, A., & Kistareddy, S. (2020). A rare case of parotid gland lipoma arising from the superficial lobe of the parotid gland. *Journal of Indian Academy of Oral Medicine and Radiology*, 32(2), 186-188.
9. Sato, T., Terada, C., Ide, S., Tatehara, S., & Satomura, K. (2021). A case of lipoma of the parotid gland: Distinguishing the tumor from the fatty parotid gland by the injection of indigo carmine into Stensen's duct for appropriate enucleation. *Journal of Oral and Maxillofacial Surgery, Medicine, and Pathology*.
10. Tong, K. N., Seltzer, S., & Castle, J. T. (2020). Lipoma of the parotid gland. *Head and neck pathology*, 14(1), 220-223.
11. Paparo, F., Massarelli, M., & Giuliani, G. (2016). A rare case of parotid gland lipoma arising from the deep lobe of the parotid gland. *Annals of maxillofacial surgery*, 6(2), 308-310.
12. Gray's Anatomy (20th U.S. edition of Gray's Anatomy of the Human Body, published in 1918 – from <http://www.bartleby.com/107/>).

Cite This Article: K. Subrahmany Eswar *et al* (2021). A Case Report of Parotid Gland Lipoma. *EAS J Radiol Imaging Technol*, 3(4), 228-230.