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Case Report

Surgery Section

Uncommon Presentation of Retroauricular Lipoma: A Case Report

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ABSTRACT

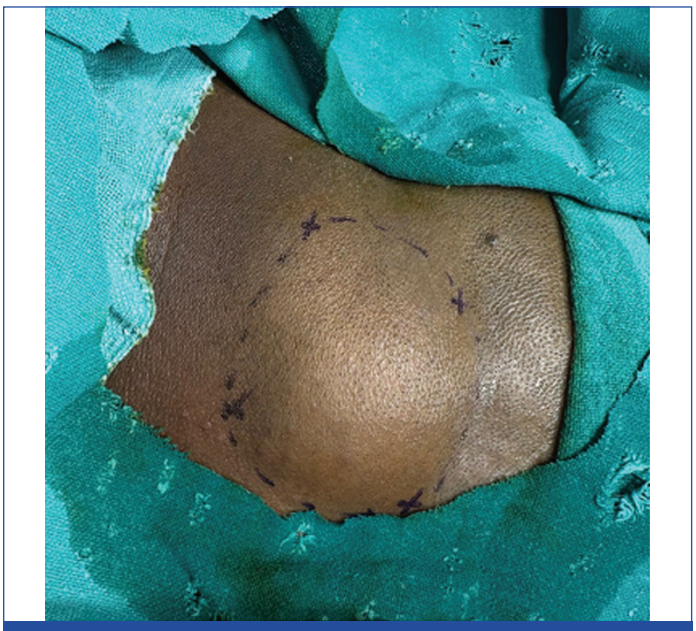
Lipomas are rare benign tumours composed of adipose tissue cells. They are the most common type of soft tissue tumours, but the presence of a lipoma in the retroauricular region is a rare clinical presentation. Lipomas are commonly found subcutaneously in the upper trunk, shoulders, neck, and back, and can occur in any part of the body with adipose tissue. They are noted for their presence as a soft, doughy mass, typically around 5 centimeters in size. These masses are usually painless and slow-growing, often diagnosed through radiological assessments. Management is recommended in most cases for aesthetic reasons, using both surgical and non-surgical methods. This is a case of a 55-year-old male presenting with a retroauricular, non-mobile, painless swelling for the past three years. He was successfully managed by surgical excision of the mass, which was confirmed as a lipoma by histopathological evaluation. Three months of follow-up showed no signs of recurrence. This case report highlights diagnostic challenges in retroauricular masses and considers a differential diagnosis of lipoma in consideration even in unusual locations.

Keywords: Auricular swellings, Cutaneous cysts, Epidermoid cyst, Spindle cell lipoma

CASE REPORT

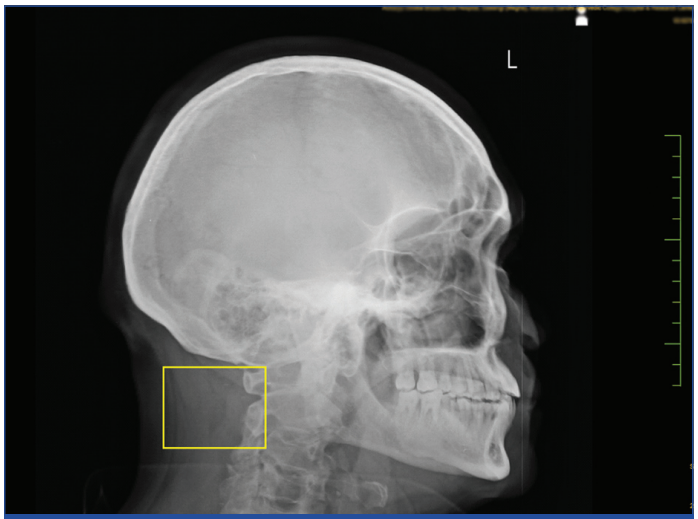
A 55-year-old male presented to the outpatient department with a complaint of a swelling behind his right ear that had been present for the last three years. The patient reported that he had felt completely well during this period. The swelling had an insidious onset and gradually increased in size, reaching its current dimensions. The ear pinna was not displaced, and potential parotid malignancies were ruled out. No other masses were observed in any other part of the body. The swelling was not associated with pain, discharge, or trauma, and there was no significant medical or surgical history noted. Additionally, the patient reported no hearing loss or other complaints.

On local examination, the swelling measured 4.0×4.0 cm and was located in the right posterior auricular region. It was non-tender and non-mobile, with normal-looking skin that was pinchable. There were no signs of redness, dilated veins, visible pulsation, punctum, or local rise in temperature. The swelling displayed a non-reducible slip sign, and fluctuation and transillumination tests were negative [Table/Fig-1]. Cervical lymphadenopathy was not found.

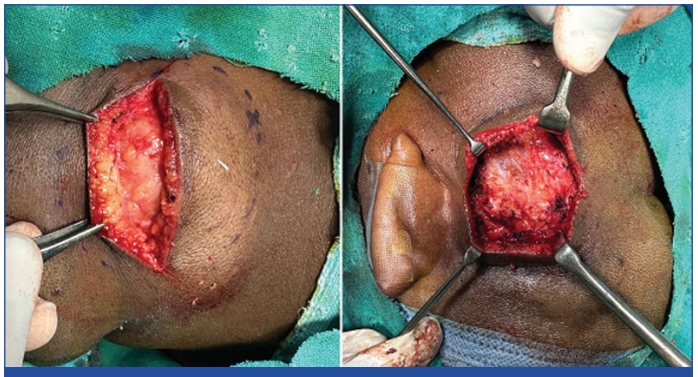


[Table/Fig-1]: Physical presentation of the retroauricular swelling.

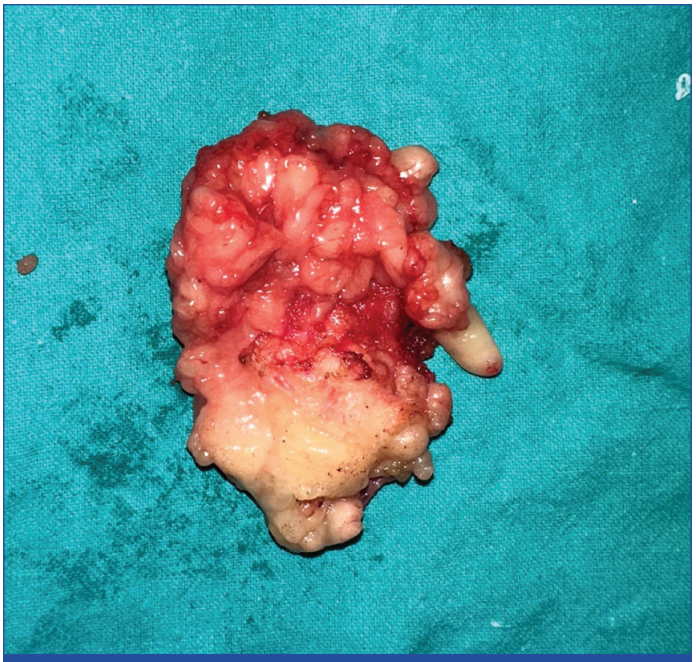
Radiological examination revealed a well-defined oval soft tissue mass that appeared radiolucent [Table/Fig-2]. Further ultrasound imaging showed an encapsulated, well-defined, isoechoic lesion with linear echogenic strands within the subcutaneous plane of the right retroauricular region No calcification or vascularity was noted on Doppler imaging, suggesting the presence of a lipoma. The patient was then planned for wide local surgical excision of the mass [Table/Fig-3,4].



[Table/Fig-2]: X-ray skull showed swelling with no calcification and/or intracranial extension.



[Table/Fig-3]: Intraoperative image.



[Table/Fig-4]: Excised specimen.

During the procedure, the patient was positioned in the left recumbent position, and local anesthesia (Lignocaine 10 milliliters) was administered. A minimally curved horizontal incision was made over the most prominent part of the swelling located in the right occipital region. The incision was deepened in layers, and the capsule of the lipoma was identified between the swelling and the surrounding soft tissue. A blunt dissection was performed to separate the capsule from the adjacent tissue. Due to tight adherence, the adherent tissues and base were separated using cautery.

Intraoperative findings revealed a capsulated mass of yellowish, fat-like tissue. The lipoma was excised in its entirety along with the capsule. Haemostasis was achieved, and the subcutaneous layer was sutured using Vicryl 2-0 RB, followed by skin sutures with Ethilon 2.0 RC. The procedure was successful.

Histopathological evaluation of the excised specimen showed mature adipocytes resembling subcutaneous fat. The cells appeared uniform, with varying sizes, and lobules were separated by thin fibrous septa. Hyperchromasia, nuclear atypia, and mitotic figures were not observed. These histopathological features confirmed the diagnosis of lipoma.

The patient was discharged on the 10th postoperative day. A three-month follow-up indicated normal findings, with no signs of recurrence.

DISCUSSION

Lipomas are benign tumours of mesenchymal origin that are commonly observed in the head and neck region [1]. Although they can occur in all age groups, a predominance is noted in adults between 40 to 60 years of age [2]. The occurrence of lipomas in the retroauricular or postauricular region is rare, with only a few cases reported worldwide [3-6]. According to the published literature, most of these cases have been observed in children. In some paediatric cases, lipomas of the ear are congenital.

A case reported by Lorente-Piera J et al., described an asymptomatic lipoma that later presented with symptoms such as nausea and vomiting. However, the patient did not report any fluctuations in hearing during these episodes nor did she experience ear fullness or tinnitus. An otoscopic examination revealed mild retraction in the posterosuperior quadrant of the left ear, along with myringo-incudopexy. Simultaneous audiological evaluations indicated bilateral mixed hearing loss—moderate in the right ear and mild in the left [1].

A review mentioned that patients typically present with conductive hearing loss, with surgical removal of middle ear lipomas documented in most cases. Early diagnosis has been helpful in achieving surgical excision with minimal interference to the ossicular chain, although there is no established protocol for surgical excision and ossicular reconstruction [7]. Research literature indicates that intracranial lipomas do not cause any symptoms, while inner ear lipomas are associated with hearing loss on the same side, which can be attributed to the lipoma mass or cochlear damage. Cases where the entire ear structure (cochlea, vestibule, and semicircular canals) is involved may pose challenges for surgical management [8].

In adults, cases of auricular lipomas have been found to be associated with hearing loss [1,7,8], which was not observed in this particular case. Differential diagnoses to consider include lymphadenopathy, epidermoid cyst, dermoid cyst, haemangioma, and trichilemmal cyst.

Radiological assessment tools such as ultrasound, computed tomography, and Magnetic Resonance Imaging (MRI) are crucial for diagnosis. These modalities can assist in characterising growth patterns, vascular involvement, and invasion into adjacent tissues. MRI is recommended for young patients due to its low radiation exposure [3,6,7]. It is also highly sensitive in differentiating between lipoma and liposarcoma, which can help both patients and clinicians in defining treatment regimes and prognosis. Additionally, MRI can provide useful insights for the surgical management of lipomas [6,8,9].

In most cases, lipomas can be left untreated as they typically pose no risk due to their characteristic feature of slow growth [10]. Surgical excision is recommended, with the mode of anaesthesia defined according to the associated risks [11,12]. While newer alternatives such as laser therapy, radioablation therapy, pharmacologic treatments, liposuction, and combination therapies are available, each comes with its own set of limitations [13].

CONCLUSION(S)

Retroauricular lipomas are a rare clinical presentation in adults and pose a potential diagnostic challenge, as these benign fatty tumours usually manifest as soft and painless masses, with discomfort arising only when the mass grows and affects adjacent structures. Histopathological confirmation is crucial for definitive diagnosis. This case report underscores the importance of considering lipomas as a differential diagnosis in instances involving retroauricular masses to ensure an optimal outcome.

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