

Temporomandibular Joint Cyst as a Preauricular Mass

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(Editorial Comment: The authors describe a rare entity that may mimic a common benign parotid neoplasm. The clinical presentation, work-up, and treatment are summarized.)

Preauricular masses are usually parotid tumors. Rarely, they are temporomandibular joint cysts. These cysts are divided between ganglion cysts and synovial cysts. Twelve temporomandibular joint cysts have been reported. Eight have been ganglion cysts and 4 have been synovial cysts.¹ This is the 5th synovial cyst reported as a temporomandibular joint cyst. Treatment is uncertain; however, surgical excision of the temporomandibular joint cyst has the highest success rate.

CASE REPORT

A 47-year-old woman presented to the Ear, Nose, and Throat Clinic with a preauricular mass. She admitted to the mass growing slowly and being present for approximately 1 year. She had left preauricular pain and discomfort when chewing. The pain had become worse before her visit. She had a history of temporomandibular joint dysfunction and was being treated by her dentist. Her past medical history was basically unremarkable.

Her physical examination showed a 2-cm mass in the left preauricular region. The mass was tender to the touch and mobile. There was no facial nerve paralysis or paresis. The rest of her head and neck examination was unremarkable.

A fine-needle aspiration was performed. The results were nondiagnostic. Epithelial cells were obtained, but we could not make a diagnosis. She was offered an additional fine-needle aspiration, even with the use of ultrasound needle-guided aspiration, but she refused. Therefore, a computed tomography (CT) scan was obtained, which showed

a cystic lesion near the parotid gland but did not involve the parotid gland (Fig 1). Because the pain was becoming unbearable and there was no diagnosis of this cystic lesion, she was offered surgery. She was taken to the operating room where a superficial parotidectomy was performed for exposure. The cystic lesion involved the left temporomandibular joint. The cystic lesion was removed, and the entire joint and capsule of the temporomandibular joint was reconstructed at the time of surgery.

Pathological examination showed that this was a synovial ganglion cyst of the left temporomandibular joint. She was followed up in 1 week with no complications. She admitted her pain was gone. Postoperatively, she had no pain on chewing. Six months postoperatively, she only complained of occasional temporomandibular joint problems, which were very mild compared with her past history.

DISCUSSION

A preauricular mass can resemble a parotid mass. The majority of these masses are benign. However, a temporomandibular joint cyst can present as a parotid mass without involving the parotid gland.

Temporomandibular joint cysts can be a ganglion or synovial cyst. These terms are used interchangeably, but both cysts are different histologically.² Ganglion cysts measure approximately 1.5 cm to 2 cm and evolve from myxoid degeneration involving the tendon or sheath and not the joint capsule.³ Synovial cysts are lined by synovial cells, and may or may not communicate with the joint capsule.⁴

A temporomandibular joint cyst was first described by Atydt in 1977.⁵ There have only been 4 synovial cysts reported, and this case is the 5th. Patients present with a painful preauricular mass. There is a female predominance to male approximately 3 to 1. These usually present in the 2nd and 4th decade of life. The etiology is unknown. However, Janecka and Conley⁶ reported a case that developed from trauma. It has been reported by other investigators that trauma can play a role in the develop-

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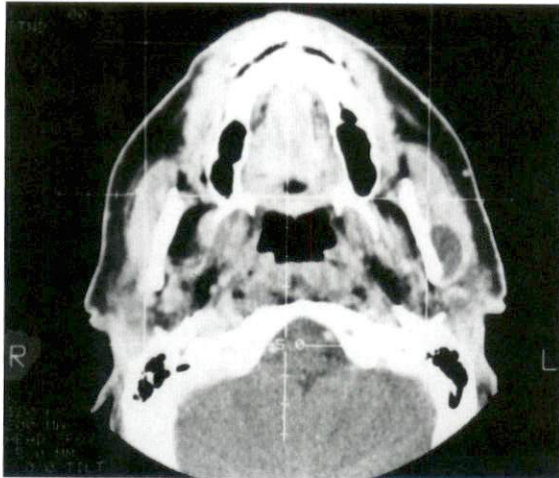


Fig 1. Case 1. The above CT scan shows a left periauricular lesion not involving the parotid gland.

ment of temporomandibular joint cysts. Other possibilities include rheumatoid arthritis, osteoarthritis, and synovitis. The work-up is minimal and difficult to establish, with few cases reported. Most investigators recommend a CT scan of the mass for evaluation. The literature supports all 3 tests in decreasing order, a CT scan, an ultrasound of the mass, and a fine-needle aspiration. The differential diagnoses include parotid mass, sebaceous

cyst, benign cervical lymph epithelial cyst, neurofibroma, and hemangioma.

Treatment of these temporomandibular joint cysts must be made by a classical parotidectomy approach involving dissection and preservation of the facial nerve.⁷

Few other treatments have been reported that include aspiration, compression of the cyst, and injection of a sclerotic agent. All have high recurrence rates of the cyst redeveloping and are not recommended.

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