INTRODUCTION:
Epidermal cysts are common lesions occurring in the skin [1]. With review of literature Only 1.6% occur in the oral cavity and are rare [2]. However, primary epidermal cysts of salivary glands appear to be very rare and literature search for the past 25 years revealed only handful of cases in parotid gland [3] and even rarer in submandibular gland [1, 4, 5].

The epidermal cyst is a benign cyst and develops out of ectodermal tissue. Known by several synonyms in literature such as, epidermal cyst, epidermal inclusion cyst, infundibular cysts, and keratin cysts [24]. They arise following a localized inflammation of the hair follicle or occasionally after the implantation of the epithelium, following a trauma or surgery.

Diagnosis of an epidermal cyst in the parotid gland is essential as it could be easily mistaken for a salivary gland abscess, neoplasm, and other cysts [6]. Role of FNAC in the literature has been inconclusive and out of 28 cases in literature, 4 cases report the usefulness of FNAC in identifying such lesions. But in our case we were not able to correctly identify the nature of cystic lesion via FNAC Therefore, an excisional biopsy was necessary for a prompt diagnosis and confirmation. Literature search for the past decade revealed the following:

<table>
<thead>
<tr>
<th>NO</th>
<th>Author</th>
<th>year</th>
<th>age</th>
<th>gender</th>
<th>side</th>
<th>Location</th>
<th>Radiological appearance</th>
<th>dimensions</th>
<th>treatment</th>
<th>recurrence</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Princ et al. [7]</td>
<td>1982</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
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<tr>
<td>2</td>
<td>Choi et al. [8]</td>
<td>1988</td>
<td>22</td>
<td>Male</td>
<td>Right</td>
<td>Superficial lobe</td>
<td>Fatty</td>
<td>4 cm</td>
<td>Superficial parotidectomy</td>
<td>Following previous</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>22</td>
<td>Male</td>
<td>left</td>
<td>Superficial lobe</td>
<td>Fatty</td>
<td>5 cm</td>
<td>Superficial parotidectomy</td>
<td>simple excision, which was performed 1 year earlier</td>
</tr>
<tr>
<td>3</td>
<td>Moody et al. [9]</td>
<td>1998</td>
<td>37</td>
<td>Male</td>
<td>Right</td>
<td>Superficial lobe</td>
<td>Fatty</td>
<td>1.5 cm</td>
<td>Superficial parotidectomy</td>
<td>NA</td>
</tr>
<tr>
<td>4</td>
<td>Yutaka et al. [10]</td>
<td>1999</td>
<td>38</td>
<td>Female</td>
<td>Right</td>
<td>Deep lobe</td>
<td>Cyst</td>
<td>4 cm</td>
<td>Total parotidectomy</td>
<td>NA</td>
</tr>
<tr>
<td>5</td>
<td>Baschinsky et al. [11]</td>
<td>1999</td>
<td>38</td>
<td>Male</td>
<td>Left</td>
<td>Tail of the parotid gland</td>
<td>Cyst Cyst</td>
<td>1.7 cm</td>
<td>Superficial parotidectomy</td>
<td>NO</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>26</td>
<td>Male</td>
<td>Right</td>
<td>Superficial lobe</td>
<td>Soft tissue mass</td>
<td>2.7 cm</td>
<td>Superficial parotidectomy</td>
<td>No</td>
</tr>
<tr>
<td>6</td>
<td>Naujoks et al. [12]</td>
<td>2007</td>
<td>46</td>
<td>Male</td>
<td>Right</td>
<td>Superficial lobe</td>
<td>Soft tissue mass</td>
<td>2.3 cm</td>
<td>Superficial parotidectomy</td>
<td>No</td>
</tr>
<tr>
<td>7</td>
<td>Lee. [13]</td>
<td>2008</td>
<td>15</td>
<td>Female</td>
<td>Right</td>
<td>Superficial lobe</td>
<td>Fatty</td>
<td>2.7 cm</td>
<td>Superficial parotidectomy</td>
<td>No</td>
</tr>
<tr>
<td>8</td>
<td>Islam and Hoffman. [14]</td>
<td>2009</td>
<td>69</td>
<td>Male</td>
<td>Left</td>
<td>Superficial lobe</td>
<td>Cyst</td>
<td>2.6 cm</td>
<td>Superficial parotidectomy</td>
<td>No</td>
</tr>
<tr>
<td>9</td>
<td>Saylam et al. [15]</td>
<td>2009</td>
<td>42</td>
<td>Female</td>
<td>Right</td>
<td>Superficial lobe</td>
<td>Fatty</td>
<td>3 cm</td>
<td>Superficial parotidectomy</td>
<td>No</td>
</tr>
<tr>
<td>10</td>
<td>Ömer et al. [16]</td>
<td>2009</td>
<td>32</td>
<td>male</td>
<td>left</td>
<td>Superficial and deep lobes</td>
<td>Septated cystic mass</td>
<td>NA</td>
<td>total parotidectomy</td>
<td>No</td>
</tr>
<tr>
<td>11</td>
<td>Behrad Aynehchi et al. [17]</td>
<td>2010</td>
<td>18</td>
<td>male</td>
<td>right</td>
<td>Superficial and deep lobes</td>
<td>Fatty</td>
<td>4.520.5 cm</td>
<td>Total parotidectomy with parapharyngeal space dissection</td>
<td>No</td>
</tr>
</tbody>
</table>
A well-defined iso-dense lesion seen related and abutting right parotid gland. It appeared separable from underlying supero-lateral aspect of its superficial lobe of right parotid gland and causing focal contour bulge. Following IV contrast injection it showed no significant enhancement and measures about 32×21×24 mm at its maximum dimensions.

### Case report:

We present our case of a 47-year-old male patient presented to our outpatient department with a complaint of progressive swelling on the right parotid area in front of tragus for 4 years. There was no history of pain, fever, difficulty in swallowing, or any discharge from the swelling. While patient was otherwise medically free with no history of trauma or any previous surgeries reported in the facial region.

On examination, there was a localized rounded swelling in the right preauricular region, swelling was 3×3 cm in size and normal skin color with no discharge. Facial nerve was found to be intact. On palpation, the swelling was soft in consistency, nontender, and nonpulsatile and mobile. Bimanual palpation was normal and no palpable lymphadenopathy was identified in neck.

### CT scan showed:

A well-defined iso-dense lesion seen related and abutting right parotid gland. It appeared separable from underlying supero-lateral aspect of its superficial lobe of right parotid gland and causing focal contour bulge. Following IV contrast injection it showed no significant enhancement and measures about 32×21×24 mm at its maximum dimensions.

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**Fig1. CT Neck W/IV contrast, a, axial view, B, coronal view**

Patient was planned for total Excision of Cyst under General Anesthesia. The Cyst was found to be above the Superficial lobe and removed in toto. Cyst was adherent to overlying skin. Meticulous dissection undertaken to release it. While taking care not to spill the content of cyst or making the skin flap extremely thin in the process. The gross examination revealed: a cystic to firm mass measuring 3×2.5×2 cm FIG(2).
Histopathological examination of the cyst is required for confirmation of diagnosis. Histologically, epithelial cyst has stratified squamous epithelial lining and is usually lined with cheezy material or keratin. But a dermoid or epidermoid cyst contains skin adnexa or other epithelial structures like sebaceous gland or hair follicle. Implantation dermoid is not derived from epidermal appendages and may contain foreign body [36] even though it appears very similar to epidermal cyst. Simple excision of the cyst in the parotid gland was not recommended to avoid the possible remnants of the lesion which may be responsible for late recurrence. In one case report, superficial parotidectomy had to be done after 1 year from the initial excision [15]

Conclusion:
Epidermal cysts of the parotid gland origin are extremely rare and a diagnostic challenge, but still, epidermal cysts should be considered as a differential diagnosis in cases of painless long standing enlargement of parotid gland which is soft in consistency. Best treatment option for such cases is local complete excision of cyst.

REFERENCES

ATYPICAL CASE OF AN INFECTED EPIDERMOID CYST OF PAROTID GLAND: A CASE REPORT

INTERNATIONAL JOURNAL OF ADVANCES IN CASE REPORTS e-ISSN: 2349 – 8005.2015


