



Rhytidectomy Approach to the Excision of a Branchial Cyst

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ABSTRACT

Branchial cysts are congenital anomalies of the branchial apparatus related to the partial obliteration of a brachial sulcus. They usual appear as oval, tender and mobile cysts located anteriorly the sternocleidomastoid muscle. They are usually surgically removed. The traditional approach is made through an orizzontal incision in the neck. This approach guarantees an optimal radicality but it produces an anesthetic cervicotomic scar. Keeping in mind that these cysts often occur in young people, aesthetic result should be improved. In this work we present a different surgical approach made through a modified rhytidectomy.

A 28year old man present to our attention with a right laterocervical cyst. This lesion was surgically removed with a rhytidectomy approach. We evaluated the operating time and the aesthetic and functional results. The incision was conduced in the retroauricular sulcus and extended to the hairline. We preserved the great auricular nerve, the spinal accessory nerve, giugular vein and carotid artery.

Operating time was 90 minutes. The patient had no nerve deficits and 1 month after surgery, he was satisfied of the aesthetic result.

The use of rhytidectomy in the surgical approach to a brachial cyst improves aesthetic results if compared to the usual cervicotomy, allowing no nervous or vasal injuries instead of a minimal increase of the operating time.

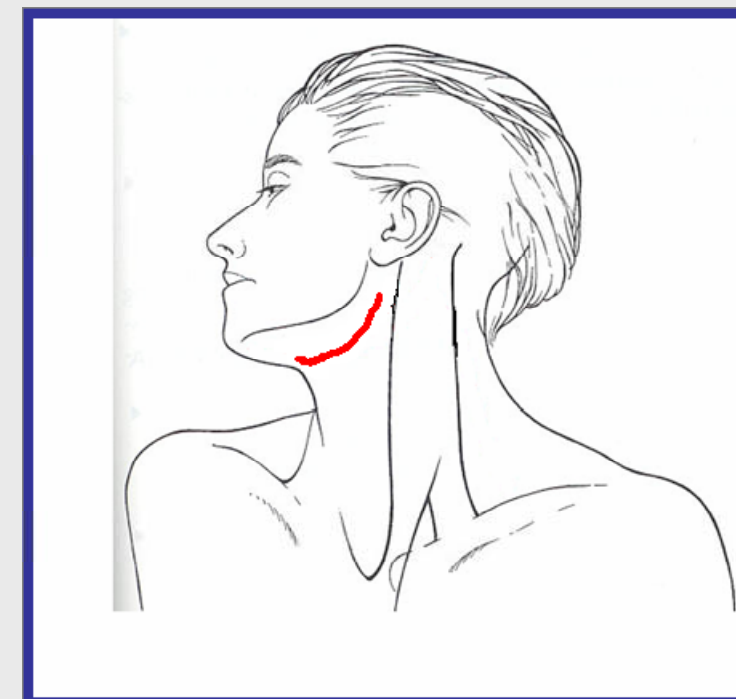
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INTRODUCTION

Branchial cysts, or cervical lymphoepithelial cysts, are congenital anomalies of the branchial apparatus, due to incomplete obliteration of the fetal branchial arches. They appear as unilateral soft-tissue swelling in the lateral aspect of the neck, located anteriorly the sternocleidomastoid muscle.

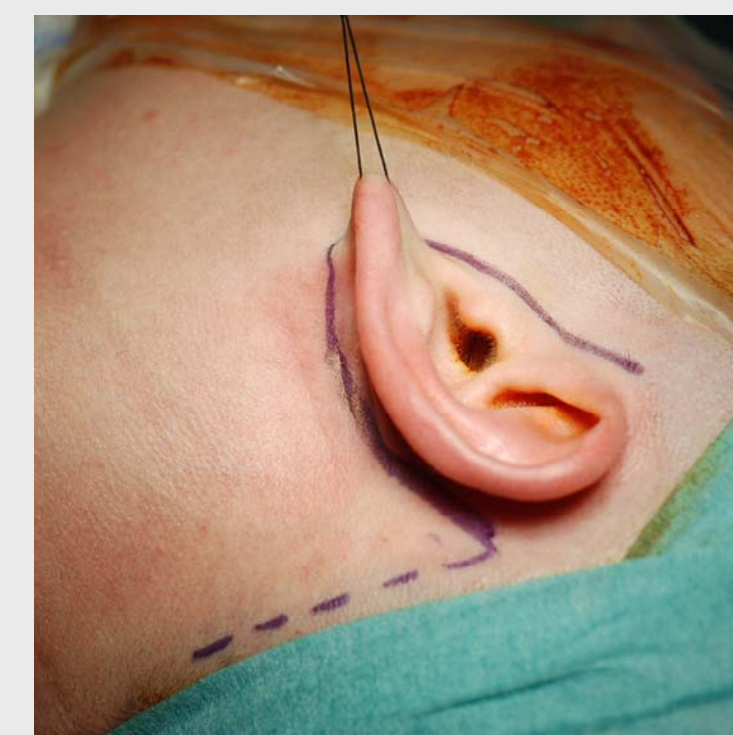
The treatment of choice is the surgical excision, usually performed with a cervical incision. Surgical complications include injury to surrounding structures such as the carotid sheath and the spinal accessory and hypoglossal nerves



These pathologies are usually located high and lateral in the neck, making them suitable for the rhytidectomy approach

In 1967 Appiani described for the first time the facelift incision in parotidectomy in order to obtain superior cosmetic results.

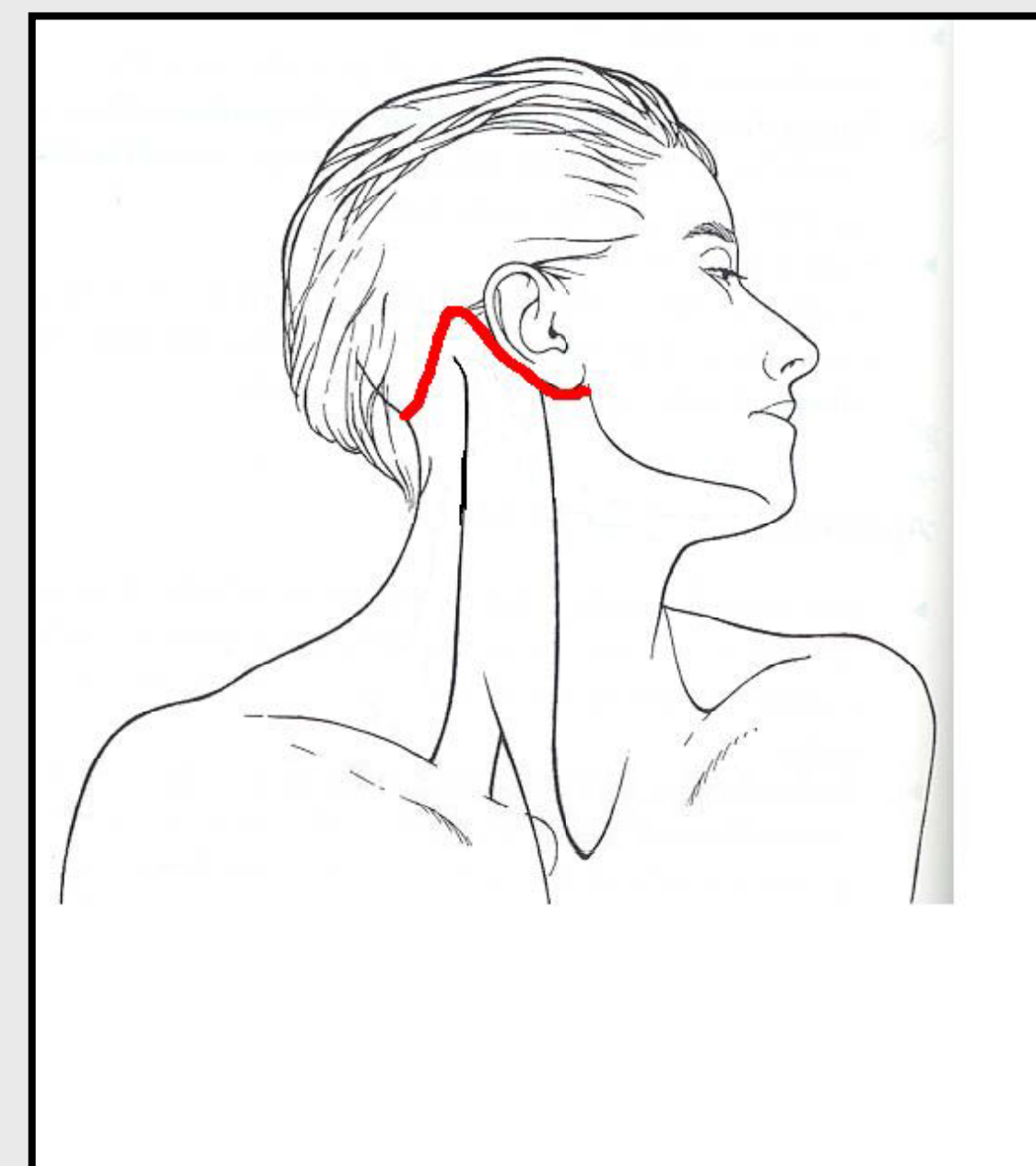
The incision is usually made in the preauricular fold and then extended distally around the origin of the earlobe to the retroauricular fold. At the level of the tragus the retroauricular incision is extended posteriorly and then curved in an occipital direction, just below the hairline.



CASE REPORT

A 28 year-old-man presented to our attention with a 8 months story of a right superior laterocervical mass. Ultrasound study and Magnetic Resonance confirmed the presence of an oval underfascial mass of 24x21x34 mm located along the anterior margin of the right sternocleidomastoid muscle, at the level of the II branchial arch.

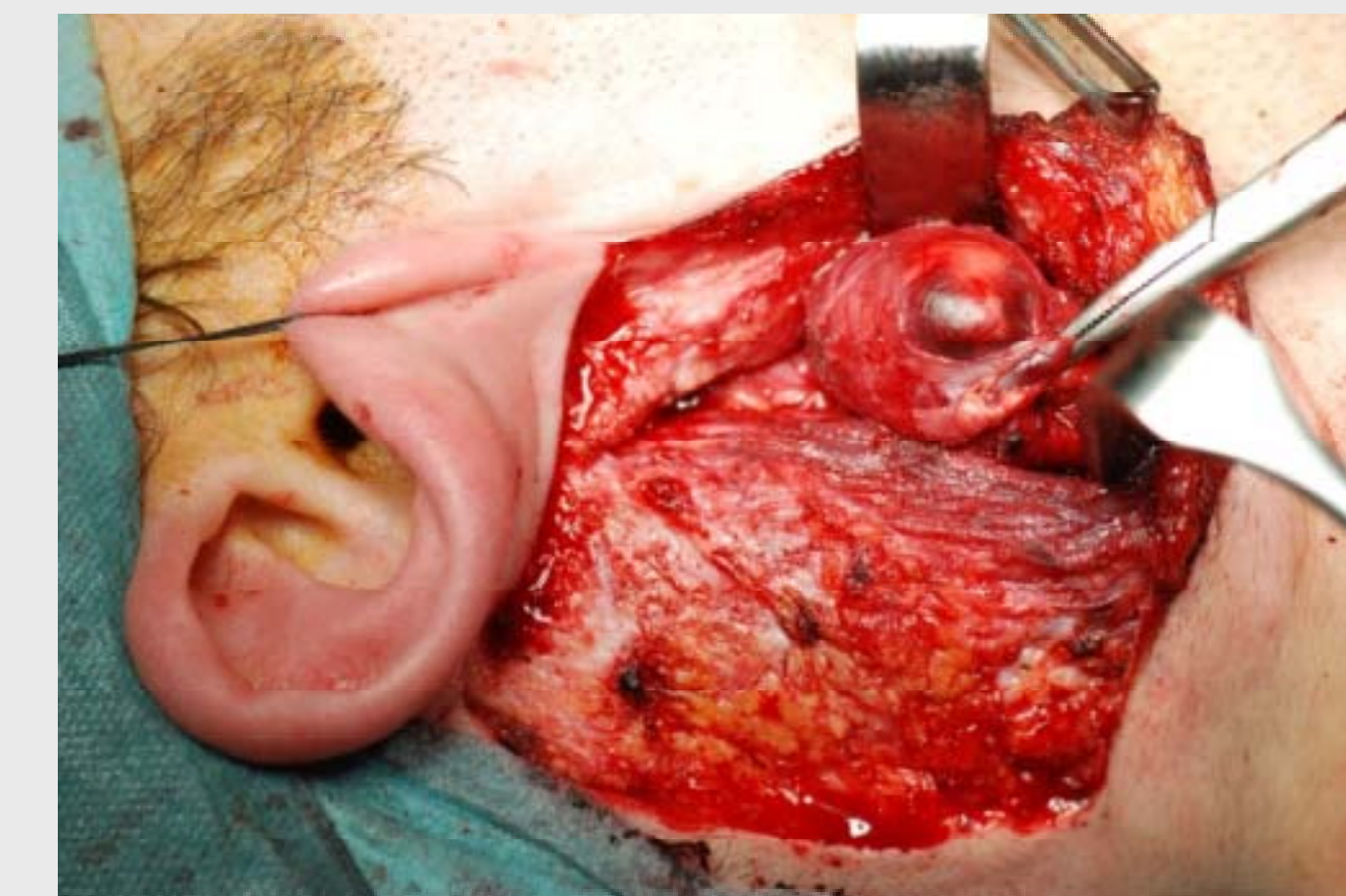
The treatment was the surgical excision, performed through a modified rhytidectomy approach



The incision of skin, subcutaneous tissues and platysma muscle was conduced in the retroauricular fold and extended 0,5 cm below the hairline. The cyst was identified deep along the anterior margin of the sternocleidomastoid muscle. The jugular vein, the spinal accessory nerve and the carotid artery were identified and preserved.

The cyst was then excised, maintaining the integrity of the capsula.

RESULTS



CONCLUSIONS

The use of a modified rhytidectomy incision in the excision of a branchial cyst allows to reach a better aesthetyc result if compared to the usual cervicotomy.

Branchial cyst usually occurs in young people, who have a higher tendency to develop hypertrophic scar. With this approach the anaesthetic results are not visible because covered by hairs.

There was an increase of the operating time of about 30 minutes (90 minutes instead of 60). There were no vascular of nervous damages.

The patient said to be satisfied of the result.



40 days after surgery

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