The Scarless Rhytidectomy Incision in Superficial Parotidectomy

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Abstract

Post-operative scars usually occur at the incision sites following various procedures of the parotid gland surgery. From 1982 to 1996, 201 cases of scarless rhytidectomy incisions were analysed and reported, with satisfactory results.

In otorhinolaryngology, head and neck surgeons today must have technical resources to perform complex surgical procedures in a manner that produce the least amount of disfigurement to the patient.

In 1907 Charles Miller, first published the details of his "face-lift"(1).

In 1912 Eugen Holländer also published a paper on correction of rhytidosis.

In 1920 Adalbert Bettman, became the first surgeon who designed the rhytidectomy incision and set the precedence for more contemporary rhytidectomy.

Nowadays, society places a great deal of emphasis on self image. This has become more apparent by the increased usage of various flaps in the reconstructive efforts of various types of oncologic surgical diseases. Superficial parotidectomy should be done by planning an approach consistent with aesthetic rhytidectomy principles.

MATERIAL AND METHOD

A review was made of 201 patients undergoing rhytidectomy incision for superficial parotidectomy from March 4, 1982 to April 10, 1996 at the Ear - Nose - Throat Department of Pramongkutklao Hospital. The average patients' age was 59, male and female ratio was 1:2, 75 per cent in the working group, 10 per cent in the university student group, 10 per cent consisting of well - adjusted home makers. A fourth group not previously described was apparent from this review, consisting of young soldiers and grown children. Histopathologic study showed mixed tumors 63 per cent, Warthin's tumor 15 per cent, muco-epidermoid carcinoma 12 per cent, adenocystic carcinoma 5 per cent and squamous cell carcinoma 5 per cent respectively.

Under general anaesthesia, after the patient was prepared and draped in the usual manner, in the supine position, an incision was started in the

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temporal region, approximately 2 to 3 cm behind the temporal hair line[2]. A gentle curvlinear incision was extended from this point and brought down inferiorly to the root of the helix and sloped down into the helical crease at its anterior border superior to the tragus. Continuing inferiorly, it was extended posteriorly to the tragus along the inner aspect of the tragus and back anteriorly and inferiorly into the inferior preauricular crease. The incision was then brought around the inferior border of the lobule and leaving a small amount of free skin (approximately 1 mm) around the ear lobe. The incision was then curved back upon the posterior auricle running approximately 1 cm far away from the post auricular skin crease. At the superior border at the level of the posterior portion of the external auditory canal, the incision was brought straight back into the occipital hair line with an inferior extension along the inferior border of the hair line. (Fig. 1 & 2)

After the superficial parotidectomy was finished, the periauricular incision was closed with 6-0 nylon suture in a single layer with the hemovac tubing in place. An elastic bandage was applied around the wound for pressure dressing. The patient returned on the first post-operative day in order to remove the drain and dressing. The preauricular sutures were removed on the fifth post-operative day and the post auricular sutures on the tenth post-operative day.

RESULTS

Few complications occurred in our series and those happening in the first few days following surgery were small hematoma 4 cases and infection 2 cases. Those occurring after one week were ear lobe distortion 1 case and facial asymmetry 10 cases which usually resolved as the edema subsided.

DISCUSSION

Skin thickness reaches its peak at 35 years of age in women and 45 years in men[3]. After skin thickness peaks, there is gradual thinning and atrophy over the rest of the life span. The epidermis undergoes a progressive loss of retepeg height and a slowing of cell turn over in the basal layer. The dermis also gradually thins out with the loss of collagen, degeneration of elastic fibres, and diminution of the water content[4]. There is progressive atrophy of sebaceous and eccrine glands

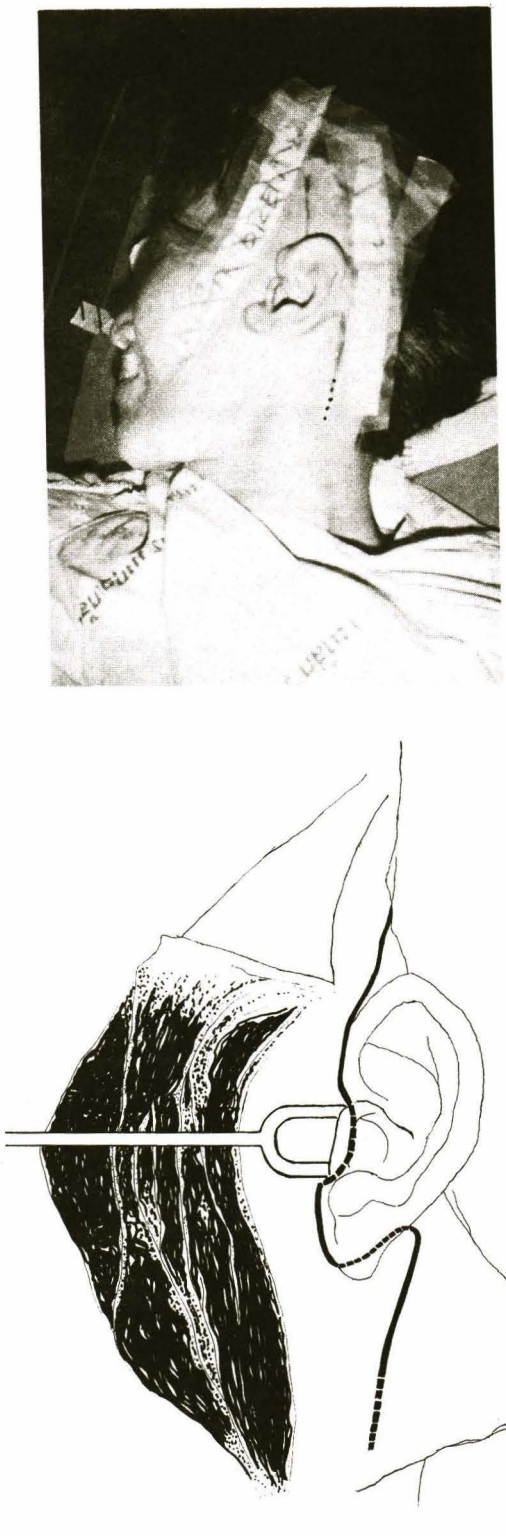

Fig. 1&2 Solid line indicates skin incision that can be extended inferiorly along the inferior border of the hair line.

and obliteration of the dermal and subdermal capillary arcade.

The external skin is the most obvious structure affected by removal of parotid mass, and also coincident progressive degeneration and stretching of the underlying connective tissue and fascia which allows drooping of the facial muscle, fat, and parotid salivary gland. The rhytidectomy incision is most effective for reversing the changes associated with sagging and relaxation of facial structure which are caused by post superficial parotidectomy.

Although the facial nerve is a major concern in any type of surgery in this area, it can be safely identified in the same procedure as other incisional methods for superficial parotidectomy (5,6) especially Blair incision(7).

After the first few days hematoma can be removed by evacuating the old hemoglobin(8) and the infected wound can be covered by a heavy dose of antibiotics following gram-stain, culture and sensitivity test. Though the complication which occurs one week post-operatively is distortion of ear lobe and facial asymmetry, it usually improves to a cosmetically acceptable level(9).

SUMMARY

The rhytidectomy incision for superficial parotidectomy has convinced us that this method has few complications, is scarless, with good exposure and can be used in all patients irrespective of age. The advantage has been a much better appearance both for socio-interpersonal relationship and psychological benefit.

(Received for publication on January 29, 1997)

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แผลเป็นหลังผ่าตัด โดยวิธี Rhytidectomy incision ในก้อนทูมของต่อมน้ำลายพาโรติด

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แผลเป็นหลังผ่าตัดก้อนทูมของต่อมน้ำลายพาโรติด เกิดขึ้นได้หลายแบบ ผู้รายงานขอเสนอ วิธีการลงแผลผ่าตัดแบบ Rhytidectomy รวบรวมการผ่าตัดระหว่างปี พ.ศ. 2525-2539 จำนวนผู้ป่วย 201 ราย แผลเป็นหลังผ่าตัด เล็กน้อย เป็นที่น่าพอใจ

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