Modification of MacFee Incision: A Balance Between Cosmesis and Accessibility

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Abstract Incision design is a critical element of operative planning. Incisions are chosen with the aim of optimizing exposure of relevant neck levels and minimizing morbidity. Various incisions have been proposed over the years but none fulfilled the criterias of ideal incisions. We propose a modification of MacFee s incision which is the balance between cosmesis and exposure.

Keywords Incision · Neck dissection · Macfee incision

Introduction

Incision design is a critical element of operative planning. Incisions are chosen with the aim of optimizing exposure of relevant neck levels and minimizing morbidity. Various incisions have been proposed over the years but none fulfilled the criterias of ideal incisions. The most important aspect of neck dissection is clearance of all levels of cervical nodes which requires adequate exposure. We report a modification of MacFee incision used in our center by the senior author over two decades with excellent results with no wound complications and acceptable cosmesis (Fig. 1b).

Technique- The upper component of MacFee is modified. The posterior vertical limb is drawn from mastoid tip vertically downwards towards neck crease at the level of upper border of cricoid cartilage. A horizontal limb along the neck crease at the level of cricoid cartilage for about two centimeters connecting posterior and anterior vertical limbs. Anterior vertical limb starts from midline submental region towards lateral to greater cornu of hyoid bone then

vertically downwards towards horizontal incision lateral to laryngeal framework with or without a z configuration. The lower component follows lowest neck crease which parallels clavicle (Fig. 1a) [1–3].

Conclusion

The advantage of this incision is excellent exposure to all limits of neck dissection, a less wider bridge and hence easier and less traumatic dissection of spinal accessory nerve so lesser shoulder morbidity. It is time tested since it has been used over two decades with excellent results (Fig. 2a, b, c).

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Fig. 1 **a** Preoperative marking.
b Post-operative result

Fig. 2 **a** Exposure of nerve above the bridge. **b** Level five exposure. **c** Width of the bridge

References

1. MacFee WE (1960) Transverse incisions for neck dissection. *Ann Surg* 151:279–284
2. Shaw HJ (1988) A modification of the MacFee incisions for neck dissection. *J Laryngol Otol* 102:1124–1126
3. White K, Mosdell DM, Morris D (1993) MacFee incision: a safe approach to the neck. *South Med J* 86:871–874