



IS MASTOID PRESSURE DRESSING NECESSARY?

Erdogan OKUR, Murat C. MIMAN, Huseyin IŞIKLI, Huseyin YILDIZ,
Abdullah AYCICEK, Orhan K. KAHVECI, Ali ALTUNTAS



Afyon Kocatepe University Medical School, Otolaryngology, Turkey

INTRODUCTION

- Mastoid dressing consists of large gauze bands covering the operated ear and wrapped tightly around the head.
- Pressure dressings are widely regarded as necessary to minimize the risk of postoperative hematoma formation, especially when surgical drains are not inserted.
- The purpose of this study was to assess whether mastoid pressure dressing is necessary after ear surgery to prevent complications such as hematoma or protruding ear.

MATERIAL AND METHODS

- Sixty-four patients who had middle ear or mastoid operations via a postauricular incision were included in the study. Patients were allocated to mastoid dressing group and no-mastoid dressing group.
- Evaluations and measurements could be completed in 37 patients. Of the 37 patients, 17 were in the mastoid dressing group and 20 were in the no-mastoid dressing group. A careful follow-up was planned, and complications were recorded.
- We measured the distance from mastoid scalp to helix rim at most posterior level of upper auricular rim in the operated and non-operated ears (Fig 1). SPSS software was used for the statistical analysis.

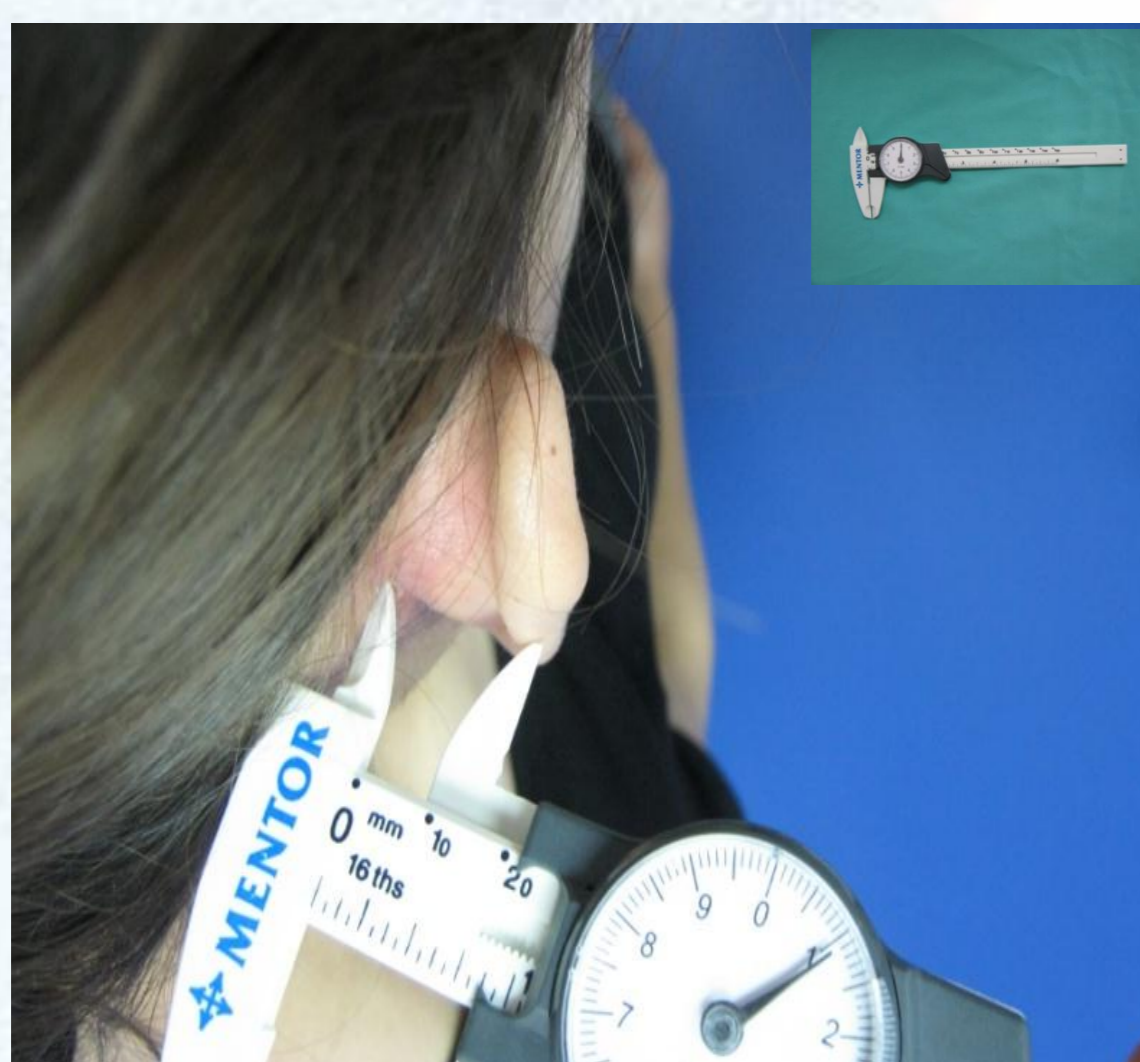


Fig 1. The caliper used to measure mastoid to helix distance

RESULTS

- In the mastoid dressing group, one patient had minor skin lesion (Fig 2). No patient had bruising or erythema in the no-mastoid dressing group.
- For mastoid to helix distance of the operated ears of the patients, there were no statistically significant difference between mastoid dressing group and no-mastoid dressing group (Table 1). We found a significant difference for the measured distance in between operated and non-operated ears of mastoid dressing group (Table 2), the mean value of distance in the operated ears being lower than that of non-operated ones ($p < 0.05$). On the other hand, there was no significant difference for the measured distance in between operated and non-operated ears of no-mastoid dressing group (Table 2), the mean value of distance in the operated ears being higher than that of non-operated ones ($p > 0.05$). Presence of mastoidectomy did not change the results (Table 3)

Table 1. Results of operated ears with and without mastoid dressing

Mastoid Dressing (+) n=17 Mean ± SD (mm)	Mastoid Dressing (-) n=20 Mean ± SD (mm)	p
15,53 ± 4,3	17,20 ± 2,9	>0,05

Table 2. Results of nonoperated ears and operated ears with or without mastoid dressing

	n	Operated ear Mean ± SD (mm)	Nonoperated ear Mean ± SD (mm)	p
Mastoid Dressing (+)	17	15,53 ± 4,3	16,47 ± 3,9	<0,05
Mastoid Dressing (-)	20	17,20 ± 2,9	16,90 ± 3,6	>0,05

Table 3. Results of nonoperated ears and operated ears with or without mastoidectomy and mastoid dressing

	n	Operated ear Mean ± SD (mm)	Nonoperated ear Mean ± SD (mm)	p
Mastoid Dressing (+), Mastoidectomy (+)	9	14,90 ± 4,4	15,70 ± 3,4	>0,05
Mastoid Dressing (+), Mastoidectomy (-)	8	16,43 ± 4,3	17,57 ± 4,5	>0,05
Mastoid Dressing (-), Mastoidectomy (+)	8	17,25 ± 3,7	17,25 ± 4,0	>0,05
Mastoid Dressing (-), Mastoidectomy (-)	12	17,17 ± 2,3	16,67 ± 3,4	>0,05

DISCUSSION AND CONCLUSION

- This study showed that the mastoid to helix distance did not change significantly when the mastoid dressing was not applied while mastoid dressing seemed to decrease the mastoid-to-helix distance. For this reason, the application of a mastoid pressure dressing following middle ear and mastoid surgery seems to be unnecessary and may contribute to increased wound morbidity.



Fig 2. Minor skin lesion related to mastoid dressing (arrows)