Post-auricular Open Drainage to Reduce Postoperative Bleeding in Rhytidectomy

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Abstract. In 200 patients undergoing rhytidectomy with and without additional procedures, 14 patients experienced postoperative hematoma, only 1 of which required corrective surgery under general anesthesia. Post-auricular open drainage was associated with a low rate of hematoma, i.e., 2.6% in 117 female patients in whom the drainage procedure was used. Factors affecting the probability of experiencing hematoma include male sex, elevated blood pressure, and the absence and type of drainage.

Key words: Rhytidectomy — Hematoma — Post-auricular drainage

Postoperative bleeding is a major complication of rhytidectomy. A report in 1975 by Berry et al. [3] investigated hemorrhagic complications associated with face-lift operations in female patients. It was noted that open post-auricular drainage showed promise in decreasing postoperative hematoma. This method of drainage became popular on our service because of its simplicity and efficacy and has become the method of choice at the present time.

In 1977 a new study on postoperative hematoma following rhytidectomy was started, with particular stress on the type of drainage used. The different variables evaluated and analyzed in the present study are: (a) type of drainage, (b) sex, (c) age, (d) pulse, (e) pre- and postoperative blood pressure, (f) local or general anesthesia, (g) temperature, (h) blood studies, (i) rhytidectomy alone or combined with blepharoplasty, (j) additional procedures, (k) primary or secondary operation, and (l) whether it was private or service case.

Material and Methods

The present report consists of 200 consecutive random cases of rhytidectomy performed at Lenox Hill Hospital in New York City. Included are facelift operations performed in 1977, 1978, and the beginning of 1979 by 23 different attending physicians and residents. The 200 patients consisted of 191 females and 9 males. The statistics on the 191 females were used only when comparing the present study with regard to hemorrhage to the 1975 report, which consisted of females only.

Primary operations were performed in 160 patients and secondary operations in 40. Additional procedures were performed in 68 patients. Of the total 200 cases, 150 were private and 50 were service. In this study there were 14 cases of postoperative hematoma. Only 1 case is described as an extensive hematoma which required corrective surgery under general anesthesia. One other hematoma is described as moderate and required removal of sutures at the bedside. The remaining 12 patients had small hematomas. Hematoma in 8 patients was controlled by expression of clots at the bedside, and the remaining 4 were controlled by (a) removal of sutures, (b) closure by suturing, (c) redressing of the bandage, and (d) no treatment.

In the post-auricular open drainage technique, the surgeon leaves the wound open in the upper 1/2 of the incision behind the ear. A soft pressure dressing is applied overnight. When the dressing is removed the following morning, there is a moderate amount of bloody drainage seen in the dressing.

Results

In the previous report in 1975 [3], 51 of 205 patients were treated by open drainage, with an overall hematoma rate of 13.2%. In the present report (1977–1979), using the same technique in 117 out of 191 females, the overall hematoma rate dropped to
5.8% (Table 1). In those patients in which the post-auricular drainage was employed, the hematoma rate was a low 2.6%.

In Baker's analysis in 1977 [1], 234 of 1,500 patients (15.6%) developed hematoma. Baker advocated clipping the sutures in the vicinity of the collection to reduce the compression of the flap by the underlying expanding clot. Pitanguy and Ceravolo [7] also advocated removal of 2 or 3 stitches on the mastoid or supra-auricular area to treat postoperative hematoma.

Results at our hospital have led us to believe that the open post-auricular drainage gives the best results in controlling postoperative hematoma. The decrease in overall hematoma from 13.2% in 1975 to 5.8% in 1977–1979 suggests its efficacy, and when we studied those cases in which only this technique is utilized, we found a low incidence of hematoma of 2.6%. Post-auricular open drainage is, therefore, recommended as a useful routine in the rhytidectomy operation.

**Sex and Age**

Postoperative hematoma occurred in 3 of 9 male patients or 33⅓% of the total male patients as compared with hematoma in 11 out of 191 females or 5.8% (Table 2). Other reports [1–5, 8] mention a similar low percentage of males seeking the operation but do not mention if increased hematoma was observed in those patients. According to our present study, sex does seem to have a profound effect on the incidence of hematoma, occurring almost 6 times as frequently in the male as in the female. The low number of males in this series, namely 9, may influence the value of this finding.

Most of the patients were between the ages of 50 and 69. As shown in Table 2, there was a slight increase in hematoma in patients over 70 years of age.

**Elevated Pulse**

In the report by Berry et al. in 1975 [3], a high significant correlation was found in the incidence of postoperative hematoma and an elevated postoperative pulse rate (100 beats/min or more). This finding was not substantiated in the present study (Table 3).