Evaluation of Nasal Tip Definition in Closed Rhinoplasty

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BACKGROUND

Trends in rhinoplasty techniques have seen a significant shift from closed to open over the last decade.1,2 The ideal surgical approach for rhinoplasty continues to be debated amongst aesthetic surgeons. Each technique has its merits. Open rhinoplasty is deemed the procedure of choice in all but the simplest rhinoplasties, reserving the traditional closed approach for hump reduction cases due to reduced operative times and reduced swelling and scarring. However, even in minor “hump reduction” cases, we feel there may be aesthetic shortcomings using a simplistic traditional closed technique. A pattern, a poor tip definition, was noted in a series of closed rhinoplasty procedures. It was hypothesized that closed rhinoplasty performed to correct simple dorsal hump abnormalities leads to poor tip definition postoperatively in those that had preexisting tip abnormalities.

AIM

The aim of this study was to objectively and subjectively analyze the loss of nasal tip definition in a series of patients who underwent a traditional closed rhinoplasty.

METHODS

Thirty patients who underwent primary closed rhinoplasty by a single surgeon were photographed over an 8-year period.

All cases were assessed preoperatively and were deemed appropriate for closed rhinoplasty. Nasal analysis was assessed objectively using 4 anthropometric measurements (nasolabial angle, columellar-lobular angle, tip projection, and supratip break) using postoperative photographs. Nasal tip definition was also assessed subjectively using the panel of 30 postoperative photographs.

Fig. 1. Graphic depicting the reduced tip projection (green area) and narrow columellar-lobular angle (pink area) associated with the traditional closed technique.

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RESULTS

Thirty patients who underwent primary closed rhinoplasty by a single surgeon were included in this study. Nasal analysis revealed a wider nasolabial angle (mean, 104°), a narrower columellar-lobule angle (mean, 29°), and a mean tip projection of 0.63, which is considered inadequate. The supratip break was completely neutral, and no concavity was seen in our series of patients. The panel of photographs found a classic rounded tip profile associated with the closed technique. There was a lack of supratip break and the indistinct tip defining points (Fig. 1).

CONCLUSIONS

In summary, the traditional closed approach consistently generated a “rounded” underprojected nasal tip. Ultimately, our experience showed that the closed technique resulted in diminished control of the tip, leading to suboptimal aesthetic outcomes.

The aesthetic outcomes in closed rhinoplasty show a clear lack of tip definition. Although it would seem that performing closed rhinoplasty for simple dorsal hump abnormalities is an optimal surgical approach, as it is relatively straightforward with short operative times, it may not be suitable if the patient displays any preexisting tip abnormalities. We must conclude that the indications for closed rhinoplasty are diminishing.

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