Functional and Aesthetic Outcomes of Spreader Graft in Rhinoplasty

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INTRODUCTION: Spreader grafts are widely used for different purposes in rhinoplasty. For correction of the middle third and harmony of brow tip lines, correction, , excessive width of middle third , asymmetry of the middle third, disruption of aesthetic brow tip lines, correction of internal nasal valve. The aim of this study to share our functional and aesthetic results in the patients whom we applied spreader graft while rhinoplasty.

MATERIALS AND METHODS: We reviewed the aesthetic and functional results of a 27 patients from 43 rhinoplasties in whom spreader graft was used, between 2010- 2015 that we found CT images. 16 M 11 W. mean age was 29 (21-39). Dorsal aesthetic lines were evaluated with photograph by two surgeons and nasal valve angles were measured from preop and postop CTs.

RESULT: Symmetry of the middle third of the nose and aesthetic brow tip lines were obtained in the patients. Preoperative cottle sign was positive at all patients and it was the main indication for us to use spreader graft. Postoperative all patients expressed relaxation during breathing and cottle sign was negative. While normal internal nasal valve(INV) angle is between 10 and 15°, in our patients postoperative INV angle mean angle was 12.1°, while preoperative 8,2°.

CONCLUSION: Spreader grafts are used for different purposes: avoiding inferomedial collapse of the upper lateral cartilage after dorsal reduction, maintaining dorsal aesthetic lines after osteotomies, symmetries of the middle third. It is also used for functional recovery of opening the nasal valve ¹. The evaluation of the results of spreader graft is difficult and subjective ². Measuring nasal valve angle is an objectie criteria of functional outcome, the brow tip aesthetic lines referred by Tardy and Sheen are options for aesthetic evaluation. Our common indication of using spreader graft is internal nasal valve insufficiency. Besides, it also gives aesthetic outcomes and patient satisfaction.

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