Discussion

Postoperative Evaluation of Silicone Airway Splint in Nasal Bone Fracture Treatment

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This is a quantitative and objective study using spirometry to verify that the airway is maintained in the case of intranasal packing with a Doyle Combo Splint (Boston Medical Products, Westborough, MA, USA) [1]. The patient's discomfort during the nasal packing was scored on a survey using a visual analogue scale. Thus, the topic of this study is not a new one in which the airway was maintained after the nasal packing with the Doyle Combo Splint, and patient's discomfort was reduced because nasal respiration was possible. The researchers evaluated the patients using plain X-ray images postoperatively and immediately after removing the nasal packing. They reported that there was no difference in the degree of support for the reduced bone in the control group and experimental group using a Doyle Combo Splint with. Considering the purpose of the nasal packing, this result is the main point of this study.

However, the research method is insufficient for producing objective scientific results. Plain X-ray images can be changed depending on the angle because they are two-dimensional images. Some simple fractures can be displayed well on dedicated X-ray projections. On the other hand, complex fractures can only be partially evaluated because of the overlap of the various structures in the craniofacial skeleton, the complexity of which demands considerable expertise in evaluation [2]. Using computed tomography (CT) is limited due to the cost and radiation exposure; however, studies with CT are necessary for objective evaluation. Another limitation of this study is that the short-time progress was only observed for the evaluation of the patient's discomfort during the nasal packing.

A significant conclusion could be drawn if patient satisfaction, nasal deformities, and possible complications after removal of the nasal packing had been compared in the control and the experimental groups over an extended period of observation [3,4].

REFERENCES

1. Jones AS, Viani L, Phillips D, et al. The objective assessment of nasal patency. Clin Otolaryngol Allied Sci 1991;16:206-11.
2. Hardt N, Kuttenberger J. Craniofacial trauma: diagnosis and management. Berlin: Springer-Verlag; 2010.
3. Park WY, Kim YH. A clinical study of the nasal bone fracture according to Stranc classification. J Korean Soc Plast Reconstr Surg 2008;35:289-94.
4. Lee JH, Park WY, Nam HJ, et al. Complications of the nasal bone fractures according to the Stranc classification. J Korean Cleft Palate-Craniofac Assoc 2008;9:62-6.

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