

## CLINICAL ASSESSMENT OF CUSTOM FACEGUARDS PROVIDED FOR FOOTBALL PLAYERS SUSTAINED NASAL BONE FRACTURES

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### **Introduction**

Maxillofacial traumatic injuries sometimes occur in contact sports such as soccer, rugby football and American football. Recently, effectiveness of wearing faceguard (FG) for early and safe return to contact sports after maxillofacial bone fracture came to be known widely. The aim of this study was to investigate the clinical assessment of FG applied to football players sustained nasal bone fracture.

### **Methods**

Eight male football players (21.5yrs old; soccer 6, rugby football 1, futsal 1) who suffered nasal bone fracture and applied custom FG in our hospital were participated in this study. After using FG, a questionnaire survey with 11-point rating scales was carried on. The questionnaire was structured into four parts: 1) questions about age, sex, type of sports; 2) questions about frequency of use, presence of any dissatisfaction; 3) protection ability and feeling of FG use; 4) evaluation about visual field in 4 directions of upper side, lower side, inside and outside.

### **Results & Discussion**

Questionnaires were returned from all patients. Most players satisfied the protection ability of their FG, but dissatisfied about narrow visual field. About feeling of FG use, the assessments from the athletes who used FG more than 3 weeks were relatively better than others. Wearing period of FG, under 3 weeks is considered relatively short as for nasal bone fracture case. We always recommended for athletes to consult their team doctor before they stop wearing FG, especially if they want to stop at the early stage. We predicted that each evaluation score about visual field was same level, because the outlines concerning the view through FG for athlete with the nasal bone fracture resemble each other. There were large differences for the evaluation about visual field by each athlete. It was confirmed that the demand of visual field area was different by kind of sports, position and competition level.

### **Conclusion**

We investigated the clinical assessment of custom FG from athlete sustained severe maxillofacial injuries, particularly nasal bone fracture. The results were as follows: 1) The assessments about protection ability and feeling of FG use marked higher scores, 2) It was needed to pay more attention about design of outlines concerning the view through FG.