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学位論文内容の要約

学位論文題目

Comparison of prognosis of the remaining teeth between implant-supported fixed prostheses and removable partial dentures in partially edentulous patients: A retrospective study

（部分歯列欠損患者におけるインプラント支持固定性補綴装置と可撤性部分床義歯の残存歯の予後の比較）

博士の専攻分野名称　　博士（歯学）　　氏名　山田　怜

The present study evaluated and compared the prognosis of remaining teeth with ISFP or RPD from viewpoints of survival and complication-free rates.

The subjects were partially edentulous patients who inserted ISFP or RPD at the Clinic of Removable Prosthodontics in Hokkaido University Hospital from 2003 to 2016. We obtained the patient's age, gender, the number of remaining teeth, Eichner classification, the type of prostheses, and the states of remaining teeth at date of prostheses insertion from clinical data.

The investigated teeth were those adjacent to edentulous spaces (A-teeth), those except for teeth adjacent to edentulous spaces (R-teeth), and those opposing to edentulous space (O-teeth). The endpoint for survival was defined as tooth extraction. The endpoint for complications was defined as loss of cementation or fracture of crown restoration, fracture of teeth, caries, periapical disease, and periodontal disease. Kaplan–Meier analysis was used to evaluate survival rates and complication-free rates for three types teeth respectively. The log-rank test was used to compare the survival curves between the ISFP group and RPD group. A multivariate stepwise Cox regression model was used to estimate the risk factors on the survival and complications of the investigated teeth.

As a result, 233 patients were evaluated. ISFP were 89 patients (male: 24, female: 65). RPD were 144 patients (male: 37, female: 107). The mean observation period was 55.6±35.3 months. In ISFP, the survival rates of A-teeth were 92.8% in 10-year, those of R-teeth were 98.1%, and those of O-teeth were 97.5% respectively. In RPD, the survival rates of A-teeth were 89.7% in 10-year, those of R-teeth were 91.6%, and those of O-teeth were 93.9% respectively. There was no statistically significant difference between survival curves of ISFP and those of RPD at A-teeth ($p=0.5278$) and O-teeth ($p=0.1892$). In R-teeth, statistically significant difference between that of ISFP and RPD was found ($p=0.0003$). In ISFP, the complication-free rates of A-teeth were 61.9% in 10-year, those of R-teeth were 78.9%, and those of O-teeth were 68.9%, respectively. In RPD, the complication-free rates of A-teeth were 56.8% in 10-year, those of R-teeth were 65.2%, and that of O-teeth were 65.7% respectively. There was no statistically significant difference between ISFP and RPD in A-teeth ($p=0.9082$) and O-teeth ($p=0.3919$). In R-teeth, there was statistically significant difference ($p=0.0049$). There was a significant difference in the prognosis of A-teeth, R-teeth, and O-teeth in both ISFP ($p=0.0024$) and RPD ($p=0.0282$). Cox proportional hazard analysis indicated that endodontic therapy and jaw performed were significant prognostic factors in the survival of the A-teeth. In R-teeth, Eichner classification, type of protheses, endodontic performed, splint of teeth, and type of teeth were indicated as significant prognostic factors in the survival. In O-teeth, Eichner classification was indicated as significant prognostic factors in the survival. The jaw was shown to be a statistically significant difference in the complications of A teeth. Eichner classifications, opposing teeth, type of teeth, and jaw were significant prognostic factors in the complications of the R-teeth. Eichner classifications and jaw were significant prognostic factors in the complications of the O-teeth.

In the partially edentulous space, the difference between ISFP and RPD does not affect the prognosis of the tooth adjacent to edentulous spaces and the tooth opposing to edentulous space. However, it was suggested that it may affect the prognosis of the remaining tooth except for teeth adjacent to edentulous spaces.