



The relationships between oral intake and days to discharge after treatment in patients with head and neck cancer undergoing chemoradiotherapy

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Introduction & Objectives

Nutrition and food oral intake are important factors in mortality and quality of life of patients with head and neck cancer receiving chemoradiotherapy (CRT).



The aim of this study was to examine the relationships between **total and oral intake calories during CRT** and **days to discharge after completing the CRT**.

Methods

The study protocol was approved by institutional Review Board of Fujita health University (HM17-016)

1. Study design: Retrospective cohort study

2. Subjects: Thirty two patients with head and neck cancer who underwent CRT and visited the hospital dental clinic before the CRT treatment from Jul, 2014 to Oct, 2016. RT dose given was 70Grays in 7 weeks.

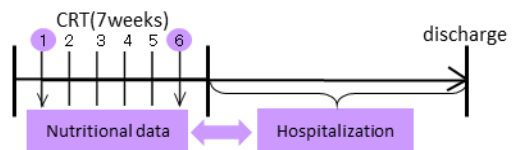
3. Date Collection:

We retrospectively collected the following nutritional data at 1 and 6 weeks after the onset of CRT.

- Total intake calories including all enteral and parenteral nutrition
- Oral intake calories
- Body mass index (BMI)

We divided subjects into 2 groups.

- LOW group: oral intake was less than 500Kcal at 6 weeks.
- HIGH group: oral intake was more than 500Kcal at 6 weeks.

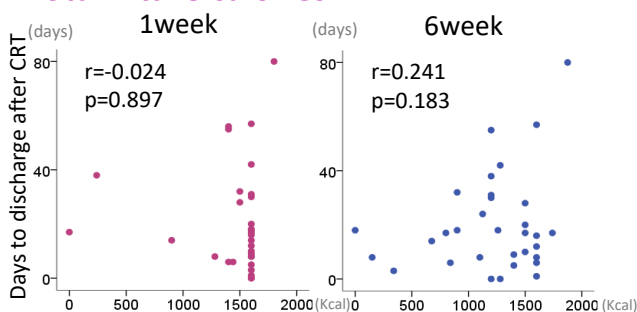


4. Statistical analysis:

We tested the correlations between days to discharge after CRT and the nutritional status measures using simple correlation analysis, and tested the differences in days to discharge between HIGH and LOW groups using Mann-Whitney U test.

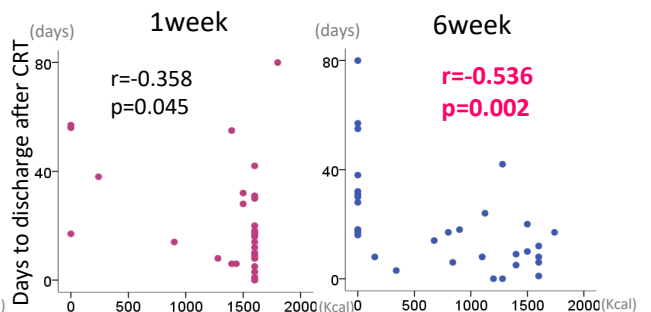
Results

Total intake calories



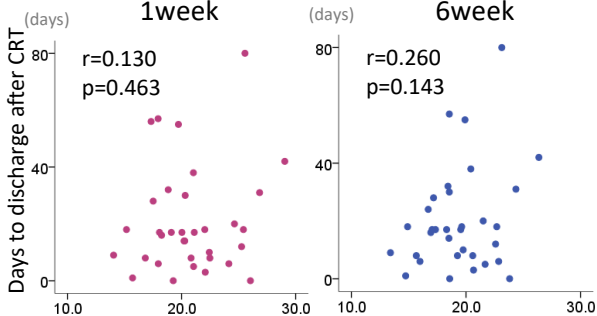
Total intake calories at 1 week or 6 week were not significantly associated with days to discharge after CRT.

Oral intake calories

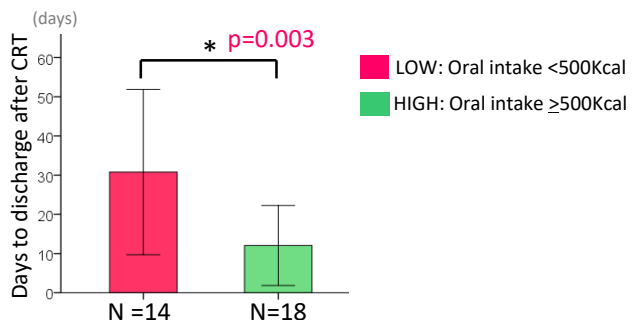


Oral intake calories at 6 week had significant correlation with days to discharge.

BMI



BMI at 1 week or 6 week had no significant correlation with days to discharge.



Days to discharge was longer in LOW group than in HIGH group.

Conclusions

The more patients had oral intake at late stage of CRT, the shorter they stayed in a hospital after CRT treatment. Our findings suggest that the ability of oral intake during chemotherapy is associated with a hospital stay after CRT. The influencing factors to oral intake during CRT such as oral mucositis, dysphagia, pain and nausea should be concerned while patients receive the CRT.