



National Cancer Center Hospital

FINDINGS FROM A WEB-BASED QUESTIONNAIRE SURVEY OF DENTISTS AT CANCER TREATMENT HOSPITALS ACROSS JAPAN ABOUT TREATMENTS FOR OSTEORADIONECCROSIS (PART 2)

Wakako Yatsuoka¹⁾, Madoka Sakuramachi²⁾, Takao Ueno¹⁾, Hiroyuki Okamoto³⁾, Kouji Katsura⁴⁾, Hiroshi Igaki²⁾

1) Department of dentistry, National Cancer Center Hospital, 2) Department of Radiation Oncology, National Cancer Center Hospital, 3) Division of Radiation Safety and Quality Assurance, National Cancer Center Hospital, 4) Department of Oral Radiology, Niigata University Medical and Dental Hospital

ABSTRACT

Introduction: This study aimed to understand the current status of osteoradionecrosis (ORN) of the jaw treatment in Japan.

Methods: From July 2023 to January 2024, a web-based survey of dentists was conducted, focusing on ORN diagnosis and treatment. This abstract highlights the treatment aspect..

Results: The median (range) ratings for treatment methods were: oral care 9 (0-10), local washing 9 (5-10), antimicrobial administration 8 (0-10), hyperbaric oxygen 4 (0-10), necrotic bone removal 8 (0-10), and laser therapy 3 (0-8). Reasons for choosing conservative treatment included lack of surgical tolerance (84 responses), patient refusal of surgery (59 responses), low benefit relative to surgical risks (52 responses), and inadequate facility equipment (14 responses).

Conclusions: Conservative treatments like oral care, local cleansing, antimicrobial administration, and necrotic bone. Surgery was often avoided due to patient factors.

INTRODUCTION

Radiotherapy for head and neck cancer contributes significantly to patient prognosis.

However, osteoradionecrosis (ORN) of the jaw (Figure 1) has become a problem as a late adverse event after treatment.

In actual cancer treatment practice, the management of ORN has not yet been standardized.

The aim of this study was to understand the current status of ORN treatment in Japan.



Figure 1. Osteoradionecrosis

METHODS AND MATERIALS

A Web-based survey of dentists was conducted from July 2023 to January 2024.

The questionnaire consisted of two sections, focusing on diagnosis and treatment, respectively.

This Abstract focuses on the treatment aspect.

The questionnaire items included ORN treatment details and difficulties encountered, using multiple choice items and a Likert scale, respectively.

The Likert scale ratings ranged from 0 to 10, with the median reflecting the importance of the treatment method.

RESULTS

121 respondents were obtained.

The median (range) ratings for methods used for conservative treatment were as follows: (Figure 2)

- 9 (0-10) for oral care,
- 9 (3-10) for local washing,
- 8 (0-10) for antimicrobial administration,
- 4.5 (0-10) for hyperbaric oxygen(HBO),
- 8 (0-10) for necrotic bone removal,
- 0 (0-8) for laser therapy

The top reasons for choosing conservative treatment (multiple responses) were lack of surgical tolerance (84/114 responses). (Table1)



Figure 2. Methods used for conservative treatment

Ranking	Response details	Number of responses	Rate
1	lack of surgical tolerance	84	74%
2	patient refusal of surgery	59	52%
3	low benefit relative to surgical risks	52	46%
4	facility insufficiently equipped to perform surgery	14	12%

Table 1. Reasons for choosing conservative treatment

DISCUSSION

With regard to conservative treatment, a high percentage of patients were treated through oral care, local cleansing, antimicrobial administration, and necrotic bone removal.

The ISOO-MASCC-ASCO guidelines¹⁾ recommend these conservative treatments, which may be effective in mild cases, particularly regarding HBO.

In many cases, surgery was not performed owing to patient-mediated factors, such as surgical tolerance and wishes.

Guidelines recommend the removal of necrotic bone to the extent that local anaesthesia is sufficient for patients for whom major surgery is not indicated.

CONCLUSIONS

Oral care, local washing, antimicrobial administration, and necrotic bone removal were performed as a preferred conservative treatment.

Surgery was often avoided due to patient factors.

Future investigations on quality of life and outcomes following treatment are also needed.

REFERENCES

¹⁾ Douglas E. Peterson et al., ISOO-MASCC-ASCO Guideline. JCO,2024