

## — Original Article —

### Thermochemoradiotherapy for inoperable metastatic cervical lymph nodes of patients with head and neck cancer: Analysis of clinical outcomes and prognostic variables

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#### 頭頸部癌の切除不能頸部リンパ節転移巣に対する

#### 温熱化学放射線療法：治療成績および予後因子について

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#### Abstract

The aim of this study is to investigate the important prognostic factors in order to improve the outcomes of thermochemoradiotherapy (TCR) for patients with head and neck cancers.

**Materials and methods:** We performed TCR for 15 patients with 20 inoperable metastatic cervical lymph nodes. Hyperthermia was done 8.8 sessions on an average by microwave or radiofrequency heating system. Chemotherapy consisted of a combination of cisplatin and pemetrexed or 5-fluorouracil. Additionally, external irradiation was used as radiotherapy.

**Results:** Among the 20 lesions, 8 (40.0%) had a complete response, 8 (40.0%) had a partial response, and 4 (20.0%) had no change. The total response rate was 80.0%. The overall cumulative local control rate (CLCR) at 5 years was 64.2%. As to the dose of irradiation, the CLCR was 80.2% at 5 years in patients given 50 Gy or more and 0% at 3 months in those given 30 Gy or less. Statistical analysis showed that the total radiation dose was significantly related to the CLCR ( $P < 0.05$ ). There were no significant correlations between the CLCR and any other treatment-related factors (hyperthermia system, number of hyperthermia sessions, total dose of cisplatin, drugs given with cisplatin) or tumor-related factors (recurrence or not, tumor size, WHO classification, mode of invasion).

**Conclusion:** TCR given 50 Gy or more is an effective strategy for inoperable metastatic cervical lymph nodes in patients with head and neck cancer.

#### 抄録：

この研究の目的は頭頸部癌患者に対する温熱化学放射線療法の成績向上のための重要な予後因子について検討することである。

対象および方法：15名の切除不能頸部リンパ節転移20病巣に対して温熱化学放射線療法を行なった。温熱療法はマイクロ波またはRF波加温装置を用いて平均で8.8回実施した。化学療法はシスプラチンにペプレオマイシンまた