A case of multiple primary malignancies within head and neck region treated by cisplatin intra-arterial infusion concurrent radiotherapy without neutralization

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Background
Multiple primary malignancies within the head and neck region is not rare. However, combination of primary site and advancement of each cancer is so various that standard treatment has not been decided.

Object
A 64-year-old woman presented multiple primary neoplasms within head and neck region. Primary sites were right lateral wall in epipharynx and left maxillary sinus. Pathological findings were poorly to moderately differentiated squamous cell carcinoma in epipharynx and moderately differentiated squamous cell carcinoma in maxillary sinus. And we found multiple neck lymph nodes metastasis in right side neck.

Method
Firstly we administered three course induction chemotherapy (DOC 60mg/m² in day 1, CDDP 60mg/m² in day 1, 5FU 700mg/m² day 1-5, half dose in day 1). Secondary we performed cisplatin intra-arterial infusion concurrent radiation therapy without thio sulfate neutralization (CIA CRT without neutralization). Cisplatin was administered super-selectively to intra maxillary artery via micro catheter inserted from superficial temporal artery with pre-auricular incision. Cisplatin dose was 25mg/m² per week. And radiation therapy 60Gy/30fr/6weeks was performed to whole neck range concurrently.

Results
We found that anti-hematological toxicities were grade 2 mucositis and grade 2, and hematological toxicity was grade 2 in induction chemotherapy and grade 1 in CIA CRT without neutralization. Six months after treatment, both of epipharyngeal cancer and maxillary sinus cancer were extremely reduced in MR image, and PET-CT presented no abnormal accumulation in primary sites and neck region. We evaluated that both of multiple cancer had complete response (CR).

Conclusion
CIA CRT without neutralization was well tolerated with a manageable toxicity and was considered to be an effective treatment for multiple primary cancers within head and neck region.