

Division of Oral and Maxillofacial Radiology

Department of Human Biology and Pathophysiology

Outline

Oral and Maxillofacial Radiology consists of radiation physics, radiation biology, radiation protection, the principle of medical imaging, and clinical imaging diagnosis. The study of Oral and Maxillofacial Radiology includes the improvement of imaging diagnosis, and quantitative analysis by the image processing for the oral and maxillofacial lesion. The themes of our research are shown below.

Faculty members

Professor; Eiji NAKAYAMA, D.D.S., Ph.D.

Assistant professor/full-time lecturer; Tomoaki SANO, D.D.S., Ph.D.

Assistant professor/research associate; Kazutaka SUGIURA, D.D.S.

Clinical instructor; Masayasu TASHIRO, D.D.S.

Postgraduate students; At the present time, non

Main research in progress

- 1) Image findings analysis of the disease and study on Interventional Radiology in the oral and maxillofacial region
- 2) Research on the free radical development from the irradiated contrast media, and the radioprotection effect of anti-HBs against the free radical development from the irradiated contrast media.
- 3) The application of interventional radiology for oral cancer
- 4) The influences of the photo-induced discharge against the diagnosability of intraoral radiology using the imaging plate

Current publications

*Tsuji T, Kitada H, Abe S, Okita M, Otsuka N, Nakayama E. Clear cell carcinoma of the hard palate: A case report. *Journal of Oral and Maxillofacial Surgery, Medicine, and Pathology*,31(2): 113-117, <https://doi.org/10.1016/j.ajoms.2018.09.002>, March, 2019

*Hayashi T, Arai Y, Chikui T, Hayashi-Sakai S, Honda K, Indo H, Kawai T, Kobayashi K, Murakami S, Nagasawa M, Naitoh M, Nakayama E, Nikkuni Y, Nishiyama H, Shoji N, Suenaga S, Tanaka R. Clinical Guidelines for Dental Cone-beam Computed Tomography *Oral Radiology*, 34(2),89-104, 2018, DOI 10.1007/s11282-018-0314-3 2018/4/9

*Kimura Y, Tomihara K, Tachinami H, Imaue S, Nakamori K, Fujiwara K, Suzuki K, Yasuda T, Miwa, S, Nakayama E, Noguchi M. Conventional osteosarcoma of the mandible successfully treated with radical surgery and adjuvant chemotherapy after responding poorly to neoadjuvant chemotherapy: A case report *Journal of Medical Case Reports*,11: 210-215,2017, DOI 10.1186/s13256-017-1386-0

*Tsuji T, Kitada H, Abe S, Ikeda H, Nakayama E. Epithelial-myoepithelial carcinoma of a minor salivary gland in the buccal mucosa: a case report *Oral Radiology*,32(2): 130-135, DOI 10.1007/s11282-015-0221-9, 2015

- * Minami S, Ohnishi T, Sano T, Sugiura K, Nakayama E. Comparison between cone-beam CT and multidetector-row CT by ROC analysis regarding diagnostic accuracy for artificial alveolar bone defects in the mandibular molar region. *Oral Radiology*, 31:97-104, 2015 DOI 10.1007/s11282-014-0189-x
- * Okita M, Hariya Y, Sekido K, Harada M, Sekiguchi T, Nakayama E, Shinohara T. A case of renal cell carcinoma metastasis to the soft palate. *Journal of Japanese Society of Oral Oncology*, 26:123-129, 2014 DOI <http://doi.org/10.5843/jsot.26.123>
- * Sekido K, Sekiguchi T, Okita M, Hariya Y, Harada M, Nakayama E. A case of peripheral odontogenic fibroma in the posterior mandibular region. *Jpn. J. Oral Maxillofac. Surg.*, 60:474-478, 2014
- * Izumo T, Kirita T, Arijji E, Ozeki S, Okada N, Okabe S, Okazaki Y, Omura K, Kusama M, Sato T, Shinohara M, Shimozato K, Shintani S, Tanaka Y, Nakayama E, Hayashi H, Miyazaki A, Yanagishita H, Yamane M. General Rules for Clinical and Pathological Studies on Oral Cancer: A Synopsis *Jpn J Clin Oncol*. 42:1099-1109, 2012 DOI: 10.1093/jjco/hys141
- * Kami YN, Chikui T, Okamura K, Kubota Y, Oobu K, Yabuuchi H, Nakayama E, Hashimoto K, Yoshiura K. Imaging findings of neurogenic tumors in the head and neck region. *Dentomaxillofacial Radiology* 41:18-23, 2012 DOI:18-23,2012/1 10.1259/dmfr/81000210
- * Nakayama E. Imaging Diagnosis for Bone Invasion by Gingival Carcinoma of the Mandible: The Value and the Limitation. *Japanese Dental Science Review* 45: 23-30, 2009 DOI:10.1016/j.jdsr.2009.03.002