Outline

As a clinical department, the division of dental anesthesiology has three duties: clinical services, student education, and research. Clinical services include general anesthesia, sedation, and pain clinic. It is a unique feature of Japanese MOH policy that dentists are allowed to perform general anesthesia to whom require dental surgery or dental treatment. Our patients’ age ranges from infant to octogenarian, and various procedures are performed under general anesthesia, such as dental treatment, orthognathic surgeries, and major surgeries for oral cancer requiring immediate reconstruction using flaps. Sedation is also actively performed daily using nitrous oxide inhalation, benzodiazepine or intravenous anesthetic agents. Sedation is not only to provide sedative agents but also to secure patients’ safety by closely monitoring vital parameters. We are feeling that there is a growing need for sedation for dentistry, as Japanese population is rapidly aging and number of compromised patients is increasing. The main purpose of pain clinic is to treat pain and numbness in maxillofacial area by nerve blocks and analgesics/supplementary drugs. In performing nerve block procedures, we routinely utilize diagnostic imaging equipment to facilitate efficacy and safety. Complying with the progress in modern anesthesiology, we are consistently pursuing best anesthesia, sedation, and pain clinic practices.

Faculty members

Professor; Yoshihide Miura, M.D., Ph.D.
Assistant professor/full-time lecturer; Masaru Kudo, D.D.S., Ph.D.
Assistant professor/full-time lecturer; Hiroyo Yoshimoto, D.D.S., Ph.D.
Assistant professor/research associate; Hanako Ohke, D.D.S.
Assistant professor/research associate; Kaoru Kanazawa, D.D.S., Ph.D.

Postgraduate students

Main research in progress
1) Effects of anesthetics on ischemic brain (basic research)
2) Developing intelligent local anesthetic injection simulator
3) Educational usefulness of the intelligent local anesthetic injection simulator
4) Usefulness of dexmedetomidine for sedation in dentistry
5) Effects of different anesthesia regimen on outcome of orthognathic surgeries

Current publications
* Miura Y, Kanazawa K, Nasu I. Presichemic administration of sevoflurane does not exert dose-dependent effects on the outcome of severe forebrain ischemia in rats. J Neurosurg Anesthesiol. 2014; (epub, PMID 25390656)