

Medical and Dental Sciences



# Maxillofacial Surgery

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Graduate Student: Hiroshi KATOU, Katuya HYODOU, Daisuke YAMAMOTO, Eri SHIBATA, Hiroki MASUDA,

(April) Yuu AKAIKE, Kouhi SYU, Noboru MARUTA, Shintarou YAMAZAKI

Social Graduate Student: (April) Takahiko YAMADA, Mari SHIBATA

Student: Tizuko KOMURO, Takahiro KIKUCHI, Soichi ROKUSHIMA, Junya KUMAGAI, Ichirou YOKOMIZO,

Yuuko KATSUKI, Chika MIURA, (April) Mako KUBOTA

Part-time Lecturer: Hiroyuki WAKE, Masashi YAMASHIRO, Jin SATO, Hideo MIYACHI, Akiko KOBAYASHI,

Fumiaki SATO, Tetsuo SUZUKI, Yutaka SATO, Takashi MISHIMAGI, Kazuto KUROHARA,

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## (1) Research

### Research Subjects

- 1) Head and Neck Surgery: Innovation of management patients with benign and malignant tumors and cysts in oral and facial region.
- 2) Reconstructive Surgery: Developing method of correcting jaw, facial bone and facial soft tissue trouble left as the result of removal of disease or previous trauma.
- 3) Correction of Birth Defects: Improving surgically correction of birth defects of the face and skull, including cleft lip and palate.
- 4) Dentofacial Deformities and Orthognathic Surgery: Development of new surgical techniques to improving reconstruct and realign the upper and lower jaws.
- 5) Temporomandibular Joint Disorders: Renewing skills in the diagnosis and treatment due to temporomandibular joint problem.
- 6) Oral Mucosa Disease: Creation new method with light and color for diagnosis of oral mucosa disease, including leukoplakia and cancer.

## (2) Lectures & Courses

Oral and maxillofacial surgery is a surgical specialty involving the diagnosis, surgical treatment and management of defects and injuries related to the function and aesthetics of the face and jaws. In order to practice the full scope of the specialty, oral and maxillofacial surgeons are required education in dentistry, medicine and surgery for regional requirement.

### (3) Clinical Performances

#### Clinical Services

- 1) Diagnosis, removing and reconstruction of jaw, oral or facial tumor or cyst.
- 2) Diagnosis and treatment of cleft lip and palate.
- 3) Treatment of jaw aligned with orthognathic surgery.
- 4) Therapy of temporomandibular disorder with or without temporomandibular joint surgery.
- 5) Diagnosis and treatment of oral mucosa disease.
- 6) Treatment of inflammation in the region jaw and facial trauma.
- 7) Extraction tooth including wisdom tooth.

### (4) Publications

#### [Original Articles]

1. Masahiko Terauchi, Mari Shibata, Akane Wada, Yasuyuki Michi, Satoshi Yamaguchi, Tetsuya Yoda. Second primary squamous cell carcinoma in an oral cavity free flap: a case report and review of the literature *Oral and Maxillofacial Surgery Cases*. 2019;
2. Hyodo K, Arisaka Y, Yamaguchi S, Yoda T, Yui N. Stimulation of Microvascular Networks on Sulfonated Polyrotaxane Surfaces with Immobilized Vascular Endothelial Growth Factor. *Macromolecular bioscience*. 2019.01; e1800346
3. Kai Shibaguchi, Atsushi Tamura, Masahiko Terauchi, Mitsuaki Matsumura, Hiroyuki Miura, Nobuhiko Yui. Mannosylated polyrotaxanes for increasing cellular uptake efficiency in macrophages via receptor-mediated endocytosis. *Molecules*. 2019.01; 24(3); 439
4. Yusoo Kim, Mikihito Hayashi, Takehito Ono, Tetsuya Yoda, Hiroshi Takayanagi, Tomoki Nakashima. Suppression of hematopoietic cell kinase ameliorates the bone destruction associated with inflammation *Modern Rheumatology*. 2019.01;
5. Sone E, Noshiro D, Ikebuchi Y, Nakagawa M, Khan M, Tamura Y, Ikeda M, Oki M, Murali R, Fujimori T, Yoda T, Honma M, Suzuki H, Ando T, Aoki K. The induction of RANKL molecule clustering could stimulate early osteoblast differentiation. *Biochemical and biophysical research communications*. 2019.02; 509(2); 435-440
6. Oshibe N, Marukawa E, Yoda T, Harada H. Degradation and interaction with bone of magnesium alloy WE43 implants: A long-term follow-up in vivo rat tibia study. *Journal of biomaterials applications*. 2019.02; 885328218822050
7. Sato Kiyoshi, Shimamoto Hiroaki, Mochizuki Yumi, Hirai Hideaki, Tomioka Hirofumi, Shimizu Risa, Marukawa Eriko, Fukayama Haruhisa, Yoshimura Ryoichi, Ishida Hiroo, Harada Hiroyuki. Treatment of oral cancers during pregnancy: a case-based discussion *JOURNAL OF OTOLARYNGOLOGY-HEAD & NECK SURGERY*. 2019.02; 48(1); 9
8. A case of nodal marginal zone lymphoma in the submandibular region 2019.02; 65(2); 83-86
9. Masahiko Terauchi, Satoshi Akiya, Junya Kumagai, Yoshio Ohyama, Satoshi Yamaguchi. An Analysis of Dentigerous Cysts Developed around a Mandibular Third Molar by Panoramic Radiographs. *Dent J (Basel)*. 2019.02; 7(1);
10. Minegishi S, Ohtani S, Noritake K, Funakoshi T, Ishii N, Utsuno H, Sakuma A, Saitoh H, Yamaguchi S, Marukawa E, Harada H, Uemura K, Sakurada K. Preparation of dentin standard samples for age estimation based on increased aspartic acid racemization rate by heating. *Legal Medicine*. 2019.03; 38; 25-31
11. Yoshitake Hiroyuki. Development and clinical application of a new mouth-opening exercise device that induces a protrusive sliding movement of the mandibular condyle and increases the hinge mobility of the temporomandibular joint *Journal of Oral and Maxillofacial Surgery, Medicine, and Pathology*. 2019.03; 31(2); 131-134

12. Fukushima Y, Kitamura T, Ikami E, Yumoto M, Sano Y, Sato T, Yoda T. A case of burning mouth syndrome leading to suicide 10 days after self-cutting of tongue. *Psychogeriatrics : the official journal of the Japanese Psychogeriatric Society*. 2019.04;
13. Fukushima Y, Sano Y, Isozaki Y, Endo M, Tomoda T, Kitamura T, Sato T, Kamijo Y, Haga Y, Yoda T. A pilot clinical evaluation of oral mucosal dryness in dehydrated patients using a moisture-checking device. *Clinical and experimental dental research*. 2019.04; 5(2); 116-120
14. Naoki Hayashi — Tsuyoshi Sato — Megumi Yumoto — Shoichiro Kokabu — Yosuke Fukushima — Yumiko Kawata — Takeshi Kajihara — Yumi Mizuno — Yosuke Mizuno — Tetsuji Kawakami ,Tadaaki Kirita , Tadayoshi Hayata , Masaki Noda , Tetsuya Yoda. Cyclic stretch induces decorin expression via yes-associated protein in tenocytes: A possible mechanism for hyperplasia in masticatory muscle tendon-aponeurosis hyperplasia *Journal of Oral and Maxillofacial Surgery, Medicine, and Pathology*. 2019.05; 31; 175-179
15. Tomomatsu N, Kurohara K, Nakakuki K, Yoshitake H, Kanemaru T, Yamaguchi S, Yoda T. Influence of the anatomical form of the posterior maxilla on the reliability of superior maxillary repositioning by Le Fort I osteotomy *Int J Oral Maxillofac Surg*.. 2019.05; 48(5); 612-619
16. Masahiko Terauchi, Mari Shibata, Akane Wada, Yasuyuki Michi,\*, Satoshi Yamaguchi, Tetsuya Yoda . Second primary squamous cell carcinoma in an oral cavity free flap: A case report and review of the literature *Oral and Maxillofacial Surgery Cases* . 2019.05; 5;
17. Samira Bernardino Ramos do Prado, Tânia Misuzu Shiga, Yosuke Harazono, Victor A Hogan, Avraham Raz, Nicholas C Carpita, João Paulo Fabi. Migration and proliferation of cancer cells in culture are differentially affected by molecular size of modified citrus pectin. *Carbohydr Polym*. 2019.05; 211; 141-151
18. Yoshitake H, Kayamori K, Wake S, Sugiyama K, Yoda T. Biomarker expression related to chondromatosis in the temporomandibular joint. *Cranio : the journal of craniomandibular practice*. 2019.06; 1-5
19. Kurohara K, Tomomatsu N, Nakakuki K, Arai N, Yoda T. Skeletal stability after maxillary step osteotomy compared with original Le Fort I osteotomy during one-year of follow-up. *Scientific reports*. 2019.07; 9(1); 9742
20. Nakazato Keiichiro, Mogushi Kaoru, Kayamori Kou, Tsuchiya Maiko, Takahashi Ken-Ichiro, Sumino Jun, Michi Yasuyuki, Yoda Tetsuya, Uzawa Narikazu. Glucose metabolism changes during the development and progression of oral tongue squamous cell carcinomas *ONCOLOGY LETTERS*. 2019.08; 18(2); 1372-1380
21. Masahiko Terauchi, Atsushi Tamura, Asato Tonegawa, Satoshi Yamaguchi, Tetsuya Yoda, Nobuhiko Yui. Polyelectrolyte complexes between polycarboxylates and BMP-2 for enhancing osteogenic differentiation: effect of chemical structure of polycarboxylates *Polymers*. 2019.08; 11(8); 1327
22. Yamamoto D, Kayamori K, Sakamoto K, Tsuchiya M, Ikeda T, Harada H, Yoda T, Watabe T, Hara-Yokoyama M. Intracellular claudin-1 at the invasive front of tongue squamous cell carcinoma is associated with lymph node metastasis. *Cancer science*. 2019.11;
23. Takahara N, Kimura A, Tomomatsu N, Nakakuki K, Yoda T. Does the amount of mandibular setback during bimaxillary surgery correlate with the degree of surgical relapse? *Oral surgery, oral medicine, oral pathology and oral radiology*. 2019.11;
24. Takahiro Abe, Tomoya Sato, Tetsuya Yoda, Kazuto Hoshi. The period circadian clock 2 gene responds to glucocorticoids and regulates osteogenic capacity *Regenerative Therapy*. 2019.12; 11; 199-206
25. Yokokawa M, Morita KI, Oikawa Y, Kayamori K, Sakamoto K, Ikeda T, Harada H. Co-expression of EGFR and MET has a synergistic effect on the prognosis of patients with oral squamous cell carcinoma *J Oral Pathol Med*. 2019.12; 235-242
26. Abe Takahiro, Sato Tomoya, Yoda Tetsuya, Hoshi Kazuto. The period circadian clock 2 gene responds to glucocorticoids and regulates osteogenic capacity(和訳中) *Regenerative Therapy*. 2019.12; 11; 199-206

**[Books etc]**

1. Joe Iwanaga, R.Shane Tubbs, Jingo Kusakawa, Shin, Daniel E., Solomon, Charles S., Tomaszewska, Iwona M., He, Puhun, Soichiro Ibaragi, Katsuichiro Maruo, Tomaszewska, Iwona M., Tatsuo Okui, Yosuke Harazono, Norie Yoshioka, Shogo Kikuta, Koichi Watanabe, Ramdhan, Rebecca C., Tsuyoshi Tanaka, Yasuhiko Kamura, Masayoshi Uezono. Anatomical Variations in Clinical Dentistry . 2019 (ISBN : 978-3-319-97961-8)
2. TCH Management and Rehabilitation Training Methods for TMD. 2019.06

**[Misc]**

1. Yoda T. Masticatory muscle tendon-aponeurosis hyperplasia accompanied by limited mouth opening J Korean Assoc Oral Maxillofac Surg . 2019.08; 45; 174-179

**[Conference Activities & Talks]**

1. Eri ANZAI, Takayuki YAMADA, Ryousuke NAGAOKA, Namiaki TAKAHARA, Keiichi MORITA, Tetsuya YODA. Prediction of the need for orthognathic surgery at age 5 in patients with unilateral cleft lip and palate. The 43rd annual meeting of japanese cleft palate association 2019.05.30
2. Chieko Michikawa, Pedro A. Torres-Saavedra, Natalie L. Silver, Paul M. Harari, Merrill S. Kies, David I. Rosenthal, Quynh-Thu Le, Richard C. Jordan, Dzifa Y. Duose, Saradhi Mallampati, Sanchit Trivedi, Rajyalakshmi Luthra, Ignacio I. Wistuba, Olivier Lichtarge, Robert L. Foote, Upendra Parvathaneni, D. Neil Hayes, Curtis R. Pickering, Jeffrey N. Myers. Evolutionary action score of TP53 analysis in pathologically high-risk HPV-negative head and neck cancer from a phase II clinical trial. Clinical Science Symposium, American Society of Clinical Oncology (ASCO) 2019.05.31 Chicago
3. Yoda T. A new New disease Disease named Named Masticatory Muscle Tendon-Aponeurosis Hyperplasia and outline Outline of Oral Surgery in Tokyo Medical and Dental University . 3rd Culture and Art Festival 2019.07.06 Seoul
4. Chieko Michikawa, Pedro A. Torres-Saavedra, Natalie L. Silver, Paul M. Harari, Merrill S. Kies, David I. Rosenthal, Quynh-Thu Le, Richard C. Jordan, Dzifa Y. Duose, Saradhi Mallampati, Sanchit Trivedi, Rajyalakshmi Luthra, Ignacio I. Wistuba, Olivier Lichtarge, Robert L. Foote, Upendra Parvathaneni, D. Neil Hayes, Curtis R. Pickering, Jeffrey N. Myers. Evolutionary action score of TP53 analysis in pathologically high-risk HPV-negative head and neck cancer from a phase II clinical trial. NRG Oncology July 2019 Semiannual Meeting 2019.07.18 Philadelphia
5. Masahiko Terauchi, Atsushi Tamura Satoshi Yamaguchi, Tetsuya Yoda, Nobuhiko Yui. Bone regeneration with bone morphogenetic protein-2amplified by supramolecular sulfonated polyrotaxane. 日韓若手アワードシンポジウム 2019.11.25 筑波
6. Masahiko Terauchi, Eriko Marukawa, Shintaro Yamazaki, Zhu Hongfei, Narumi Oshibe, Aoi Kaneko, Tranminh Cuomng, Tetsuya Yoda. Comparative evaluation of the various bone substitutes for bone regeneration at peri-implant defects in dogs.. 8th International Conference on Mechanics of Biomaterials and Tissues 2019.12.15 Hawaii
7. Shintaro Yamazaki, Eriko Marukawa, Masahiko Terauchi, Zhu Hongfei, Narumi Oshibe, Aoi Kaneko ,Tranminh Cuomng , Tetsuya Yoda. The effectiveness of various bone substitutes for the alveolar ridge preservation after tooth extraction in canine models. 8th International conference on Mechanics of bio-materials and tissues 2019.12.15 Hawaii, USA