[Keywords] Stomatognathic function, occlusion, mastication, aging, prosthodontic treatment for edentulous patients, complete denture

[Academics] Hisashi Koshino, Hideki Aita, Yoshifumi Toyoshita

[Course aims]

This course deals with prosthodontic treatment for edentulous patients who have lost teeth because of aging and pathologic factors. Students will learn about examination, diagnosis, planning, treatment and aftercare for prosthodontic treatment to improve oral function, esthetics and quality of life. Because most edentulous patients are elderly, students are expected to understand the mechanism of aging and the change in stomatognathic function with aging, in addition to having knowledge of general prosthodontics such as teeth, muscles, the temporomandibular joint, the peripheral and central nervous systems, and occlusion. Occlusion is a basic principle in dentistry, so knowledge about mandibular position and movement is also needed.

[Course objectives]

The goal of this course are for students to be able to:

- (1) Explain the relationship between quality of life and stomatognathic function.
- (2) Explain prosthodontic treatment guidelines for edentulous patients.
- (3) Analyze stomatognathic function using a mandibular movement measurement device.
- (4) Explain normal occlusion and malocclusion.
- (5) Explain the various direct and indirect methods used to evaluate masticatory ability.
- (6) Explain changes in the stomatognathic system and characteristics of aging.
- (7) Explain the functional occlusal system.

[Course content]

Class	Theme	Content	Academics
1	The interrelationship between whole body function and masticatory function.		Hisashi Koshino Hideki Aita Yoshifumi Toyoshita
2	Examination and treatment planning guidelines for an incompatible prosthesis, disorders involving muscle, the temporomandibular joint and occlusion, missing teeth, and diseases of the surrounding tissue.		Hisashi Koshino Hideki Aita Yoshifumi Toyoshita
3	Recording and analysis of mandibular position, mandibular movement, tongue motion, and deglutition movement using ultrasonic diagnostic equipment with a heart sound microphone and a device for measuring mandibular movement.		Hisashi Koshino Hideki Aita Yoshifumi Toyoshita
4	Evaluation of the various direct and indirect methods used to examine masticatory ability.		Hisashi Koshino Hideki Aita Yoshifumi Toyoshita
5	Evaluation of the various methods of arrangement of artificial teeth on a complete denture.		Hisashi Koshino Hideki Aita Yoshifumi Toyoshita
6	Evaluation of the various impression techniques used in prosthodontic treatment for edentulous patients.		Hisashi Koshino Hideki Aita Yoshifumi Toyoshita

[Grading policies] Your overall grade in class will be decided based on class attendance and reports.

[Textbook]

Students will be informed of which textbook to use.

[Reference book] Students will be informed which reference book to use.

[Preparation for course]

Students must understand the clinical guidelines published by the Japanese Society of Gerodontology and Japan Prosthodontic Society.