

**Division of Dysphagia Rehabilitation,  
Department of Human Biology and Pathophysiology**

**Outline**

The Division of Dysphagia Rehabilitation was established in April 2023, focusing on clinical and research activities in a new area, namely, dysphagia rehabilitation.

**Research characteristics**

This research is characterized with direct clinically-relevant themes, such as the development of training and evaluation methods, given the dysphagia rehabilitation field has a short history nationwide and its evidence has not yet been fully established. For example, the ‘cough test for silent aspiration’, which I was previously involved with during my graduate studies, is now widely used in Japan, Australia, New Zealand, and other countries. It is also listed as part of the National Dentistry Examination criteria in Japan.

**Clinical characteristics**

The dysphagia rehabilitation field involves performing swallowing videofluorography (VF) and videoendoscopy (VE), as well as observation, assistance, and implementation of dietary guidance. While mastering VF and VE techniques can be challenging, if instrumental assessment via VF and VE is feasible, differentiation from other dental clinics is possible in the home dental care setting. Additionally, a nutrition support team and other professional teams can work on an equal basis with dentists in hospitals. Dentists capable of providing dysphagia rehabilitation practice are in high demand, particularly in communities with limited access to such rehabilitation. Developing strong clinical skills early in one's career can also significantly boost confidence.

※Health Sciences University of Hokkaido Hospital is listed as an accredited training facility for the ‘Japanese Society of Gerodontology-certified special dentists of dysphagia rehabilitation.’ This qualification can be obtained following completion of the required training at our hospital.



VE



VF

Abbreviations: VE, videoendoscopy; VF, videofluorography

### Staff

Professor Takatoshi Iida, DDS, PhD



- Councilor and certifier, Japanese Society of Dysphagia Rehabilitation
- Specialist and educator, Japanese Society of Gerodontology
- Specialized dentist in dysphagia rehabilitation

### Main research themes:

- Development of a meal posture analysis device using gyro sensors
- Development of an oral-phase swallowing disorder simulator for student education
- Development of a speech disorder simulator for student education
- Establishment of a chewing training method using confectionery
- Investigating the relationship between the tablet dosage form and swallowing function