### Otorhinolaryngology

**Director** NAKASHIMA, Tsutomu (Professor)

We perform advanced treatment based on a high level of expertise even for common diseases.

Of the five senses, our department deals with hearing, smell, taste, and touch and is involved in communication by vocalization and hearing.

**Medical Care System**

Our inpatient department consists of Group A (in charge of endoscopic paranasal sinus surgery, ear surgery, sleep apnea, inflammatory disease, inner ear disease including sudden deafness and Meniere’s disease, etc.) and Group B (in charge of head and neck tumor, dysphagia, etc.).

**Target Disease**

We are deeply involved in diseases related to tumors, inflammation, malformation, and injury of ear, nose, and throat, dysphagia, and skull base tumors. Otolaryngologic vertigo is also within our field, and we are involved in the differentiation of vertigo. We also perform hearing aid fittings.

**Strong Fields**

We perform differential diagnosis of deafness (especially, measurement of endolymphatic and perilymphatic space sizes and identification of the blood-labyrinth barrier by diagnostic imaging using three-Tesla MRI) and treatment of inner ear disease with intratympanic medication. We have confidence in performing treatment of head and neck cancer aiming at functional preservation.

**Clinical Results**

Our clinical results of inner ear disease such as sudden deafness and large vestibular aqueduct syndrome are published in many journals. For treatment of head and neck tumors aiming at functional preservation and treatment of sleep apnea as well, we make achievements examining data from various viewpoints.

**Specialized Outpatient Clinic**

We provide medical care in specialized outpatient clinics including: tumor outpatient clinic, ultrasonography outpatient clinic, sudden deafness outpatient clinic, noise outpatient clinic, sleep apnea outpatient clinic, dizziness outpatient clinic, hearing aid outpatient clinic, and dexamethasone infusion outpatient clinic (intratympanic dexamethasone infusion for inner ear disease).

**Advanced Medicine and Research**

We perform advanced treatment such as imaging study of the inner ear using three-Tesla MRI, measurement of cochlear blood flow during cochlear implant surgery, and endoscopic sinus surgery with navigation. We will make an application for approval of inner ear MRI after intratympanic gadolinium administration as advanced medicine.

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### Radiology

**Director** NAGANAWA, Shinji (Professor)

Our department provides medical imaging and radiation therapy for various diseases.

We are responsible for diagnostic imaging, interventional radiology (IVR) and radiation therapy for cancer.

**Medical Care System**

Our department consists of the diagnostic imaging group and the radiation therapy group. In the diagnostic imaging group, each specialist interprets radiological images CT, MRI, angiography, ultrasonography, and radioisotope (RI) examination and prepares diagnostic reports. In the radiation therapy group, each specialist plans and performs irradiation mainly for malignant tumors.

**Target Disease**

CT, MRI, RI (including PET), and IVR are performed for various diseases of the entire body such as inflammation, tumor, and congenital anomaly. In our hospital, ultrasonography is performed mainly for breast and thyroid disease. Radiation therapy is performed for many malignant tumors and a few benign diseases.

**Strong Fields**

MRI diagnosis of inner ear diseases, CT diagnosis of biliary tract and pancreas, diagnostic imaging of the breast, PET diagnosis (including methionine), radiodiode therapy for thyroid cancer and hyperthyroidism, endovascular therapy of visceral artery aneurysm, diagnostic imaging of mammary glands, and high-precision radiation therapy.

**Clinical Results**

The numbers of diagnostic imaging testing performed in 2011 are as follows: CT: 38,000; MRI: 17,000; ultrasonography: 3,800; RI / PET: 5,600; IVR: 550. We performed radiotherapy for 860 patients.

**Specialized Outpatient Clinic**

We provide medical care in the IVR outpatient clinic on Monday, Wednesday, and Friday morning, the outpatient clinic of radioiodine therapy for thyroid cancer on Tuesday morning, and the outpatient clinic of radiodiode therapy for hyperthyroidism on Thursday afternoon. Radiation therapy is performed by specialists every day in the outpatient clinic.

**Advanced Medicine and Research**

High-resolution MRI of the inner ear, virtual bronchoscopy, sentinel lymph node scintigraphy, PET using nuclides other than FDG, stereotactic lung irradiation in ultrasonography for nonpalpable mammary gland lesions, and prostate cancer IMRT.