

2024 Akita University Faculty of Medicine Syllabus

Category : 臨床医学アドバンストコース
Course Title : Medical Imaging and Anatomy
Eligible Students : grade 4 Elective Course
Code : 71594002
Schedule : week 13 ~ week 13
Credits : 0.5

1. Lead Instructor

Naoko	Mori	(Professor, Department of Radiology, 6179, Office Hour: North Clinical Research conference Room (12:00 13:00))	Building 1F Con-
-------	------	---	------------------

2. Instructors

Naoko	Mori	(Professor, Department of Radiology, 6179, Office Hour: North Clinical Research conference Room (12:00 13:00))	Building 1F Con-
Takahiro	Otani	(Assistant Professor, Department of Radiology, 6179)	
Masazumi	Matsuda	(Assistant Professor, Department of Radiology, 6179)	
Motoko	Konno	(Assistant Professor, Department of Radiology, 6179)	
Kento	Hatakeyama	(Medical Doctor, Department of Radiology, 6179)	

3. Course Description Outline(Course Objectives)

授業の概要

放射線を用いる画像検査の知識の整理

- 1) 核医学 診断と治療 (3-3)
- 2) よく見る疾患の画像診断 (3-3)
- 3) 腹部画像診断 (3-3)
- 4) 法医 CT(3-2)
- 5) 胸部・骨盤の画像診断 (3-3)
- 6) 血管造影 (3-3)
- 7) 脳・頭頸部の画像診断 (3-3)

Course Description Outline

To organize knowledge regarding radiological images

- 1) Nuclear medicine. Diagnosis and treatment (3-3)
- 2) Images on basic diseases (3-3)
- 3) Abdominal imaging (3-3)
- 4) Postmortem CT (3-2)
- 5) Imaging of chest and pelvis (3-3)
- 6) Angiography (3-3)
- 7) Diagnostic imaging of the Head and Neck (3-3)

ねらい

よく見る疾患の画像所見の基本を知る

Course Objectives

To understand typical images on basic diseases

4. Textbook/Reference Books

標準放射線医学（医学書院）、必修放射線医学（南江堂）、新臨床 X 線診断学（医学書院）

5. Assessment

出席、レポートにより評価する

Attendance, Reports

6. Out of Class Study/Message

若干の授業変更の可能性があるので、掲示板で確認すること

Class changes may occur depending on the instructor's schedule. Please refer to the notice board for information on any changes.

指定教科書や事前配布資料などで、予習・復習をしておくこと

Preview and review with designated textbooks and handouts.

Topics and Contents of class, Course Objectives						
	Class Date	Period	Class Format	Topics and Contents of class, Course Objectives	Instructors	Class Room
1	7 / 4 (Thu)	1-2	Lecture	<p>Theme: 核医学 診断と治療 Nuclear Medicine Diagnosis and treatment</p> <p>核医学検査時に FDGPET-CT の目的、原理、方法、放射性医薬品の物理的・科学的性質等を理解し、これから得られる核医学画像について臨床的観点から説明できる</p> <ul style="list-style-type: none"> • Explain the purpose, principles, and methods of FDG PET-CT and the physical and scientific properties of radiopharmaceuticals at the time of nuclear medicine examination and be able to explain from a clinical perspective the nuclear medicine images that will be obtained. 	Masazumi Matsuda	Conference room in central radiology
2	7 / 4 (Thu)	3-4	Lecture	<p>Theme: よく見る疾患の画像診断 Images on basic diseases</p> <p>遭遇頻度が高く、画像診断が臨床的判断決定において重要な救急疾患を理解し、説明できる。</p> <ul style="list-style-type: none"> • Explain the emergency conditions that are frequently encountered and for which diagnostic imaging is important in clinical decision. 	Masazumi Matsuda	Conference room in central radiology
3	7 / 4 (Thu)	5-6	Exercise	<p>Theme: Small test including preparation</p> <ul style="list-style-type: none"> • 核医学 診断と治療 • よく見る疾患の画像診断 • 頭頸部の画像診断 <p>Nuclear medicine diagnosis and treatment, basic diseases, head and neck</p>	Takahiro Otani Masazumi Matsuda	Conference room in central radiology
4	7 / 4 (Thu)	7-8	Lecture	<p>Theme: 腹部画像診断 Abdominal imaging</p> <p>実際の病院の画像読影システムビューアーを用い、CT 画像 MRI 画像の解剖学的構造、病変部を同定できる。</p> <ul style="list-style-type: none"> • Identify anatomical structures and lesions in CT and MRI images using an actual hospital image reading system viewer. 	Motoko Konno	Conference room in central radiology
5	7 / 4 (Thu)	9-10	Lecture	<p>Theme: 法医 CT Postmortem CT</p> <p>死後 CT の死因診断における位置づけ、生体と死体とでは CT 検査の正常・異常の差異を理解できる。</p> <ul style="list-style-type: none"> • Understand the position of postmortem CT in the diagnosis of cases of death and the differences in normal and abnormal CT, examinations between living and cadaveric bodies. 	Naoko Mori	Conference room in central radiology
6	7 / 5 (Fri)	1-2	Lecture	<p>Theme: 胸部・骨盤の画像診断 Chest and pelvic image diagnosis</p> <p>胸部骨盤 特に乳腺と婦人科疾患の画像初見を理解し、説明できる。</p> <ul style="list-style-type: none"> • Chest and pelvic understand and explain imaging findings, especially in breast and gynecological disease. 	Naoko Mori	Conference room in central radiology

Topics and Contents of class, Course Objectives						
	Class Date	Period	Class Format	Topics and Contents of class, Course Objectives	Instructors	Class Room
7	7 / 5 (Fri)	3-4	Lecture	Theme: 血管造影 Angiography 血管造影検査および血管内治療の種類, 手法と頻度の高い具体例について理解できる. ・ Understand the types of angiographies and endovascular treatment, Thier techniques, and the most frequent specific examples.	Kento Hatakeyama	Conference room in central radiology
8	7 / 5 (Fri)	5-6	Exercise	Theme: 小 テ ス ト Small test- Chest/pelvis,angiography ・ 胸部・骨盤部の画像診断 ・ 血管造影 ・ Chest and pelvic image diagnosis ・ Angiography	Naoko Mori Kento Hatakeyama	Conference room in central radiology
9	7 / 5 (Fri)	7-8	Lecture	Theme: 脳・頭頸部の画像診断 Brain , head and neck 脳・頭頸部で頻度の高い疾患の画像所見を説明できる. ・ Understand the types of angiography and endovascular treatment, their techniques, and the most frequent specific examples.	Takahiro Otani	Conference room in central radiology
10	7 / 5 (Fri)	9-10	Exercise	Theme: Small test-Abdomen,postmortem CT ・ 腹部画像診断 ・ 法医 CT ・ Abdomen ・ Postmortem CT	Naoko Mori Motoko Konno	Conference room in central radiology