

2024 Akita University Faculty of Medicine Syllabus

Category : 臨床医学 IV (CC1)
Course Title : 消化器内科学 (内科学 1) 臨床実習 (Gastroenterology)
Eligible Students : grade 4 Related Course
Code : 71643002-01

1. Lead Instructor

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2. Instructors

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3. Course Description Outline(Course Objectives)

1. 診療参加型臨床実習 CC1 の概要・ねらい

チームの一員として病棟や外来患者さんへの診療を通して、将来、どのような分野の医師にも必要な内科領域、特に消化器内科を中心とした症候や病態の臨床推論、鑑別診断、検査・治療方針決定等の実践力を習得する。プロフェッショナルリズム、倫理、医療行動学、医療安全、医療法（制度）、EBM について実践的に学ぶ。(1-1,1-2,2-1,2-2,2-3,2-4,2-5,2-6,4-1,4-2,4-3,4-4,4-5,4-6,4-7)

1) 病棟診療

各学生は各診療チームに2週間配属され、指導医のもと数名の病棟患者さんを担当する。指導医の監督のもとに、日々、病棟担当患者さんの回診を行い、医療面接、身体診察による課題抽出・文献検索による臨床推論、検査・治療方針の提案、日々の診療内容や他科頼診券、ウィークリーサマリー、紹介状などカルテへの記載（指導医の確認必須）、カンファレンス時の各種プレゼンテーション、患者・家族への説明への参加など、チームの一員として EBM に基づいた基本的な診療を実践的に学ぶ。

2) 外来診療、各種検査、治療への参加

このような病棟の担当患者診療の合間には、外来の新患、再来患者さんの診療や各種検査、治療に参加しながら、診療チームの一員として臨床推論・検査・治療の過程を実践的に学ぶ。

2. 学修目標

上記1の概要・ねらいを中心に実習を進めるが、本診療科で特に経験保証する症候、病態、各種手技等の内容を下記に示す。

1) 症候・病態 臨床推論 (3-5,4-1,4-2,4-3,4-4,4-5,4-6)

(1) 黄疸 (2) 腹痛 (3) 悪心・嘔吐 (4) 食思不振 (5) 便秘・下痢・血便 (6) 吐血・下血 (7) 腹部膨隆（腹水を含む）・膨満・腫瘤

2) 基本的臨床手技 (3-1,3-2,3-3,4-1,4-2,4-3,4-4,4-5,4-6,4-7)

(1) 体位交換、移送ができる (2) 皮膚消毒ができる (3) 静脈採血を実施できる (4) 胃管の挿入と抜去ができる (5) 尿道カテーテルの挿入と抜去を実施できる (6) 注射（皮内、皮下、筋肉、静脈内）を実施できる (7) 末梢静脈の血管確保を実施できる (8) 診療録（カルテ）を作成する。

3) 検査手技 (3-1,3-2,3-3,4-1,4-2,4-3)

- (1) 腹部の超音波検査を実施できる。
- (2) 経皮的酸素飽和度を測定できる。
- (3) エックス線撮影、コンピュータ断層撮影 (CT)、磁気共鳴画像法 (MRI)、核医学検査、内視鏡検査を見学し、介助する。

4) シミュレーション教育 (2-1,2-2,2-3,2-4,2-5,2-6,2-7,4-1,4-2,4-3,4-4,4-5,4-6,4-7)

- (1) 腹部エコーシミュレータを用いて反復練習をすることで、臨床技能を磨く。
- (2) 腹部内視鏡シミュレータを用いて反復練習をすることで、臨床技能を磨く。

5) 医学行動科学、医療倫理、医療安全、医療法 (医療制度)、EBMI について (1-1,1-2,3-1,3-2,3-3,3-4,3-5,3-6,3-7,4-1,4-2,4-3,4-4,4-5,4-6,5-1,5-2,5-3,5-4,5-5)

- (1) 各種検査・治療のインフォームドコンセント
- (2) 困難な患者 急変患者・家族への説明
- (3) 各種侵襲的な検査・治療時の安全性への配慮

本科目は実務経験のある教員による授業科目です。

1. Outline and aim of clinical training CC1

As a member of the team, through medical treatment to wards and outpatients, clinical reasoning, differential diagnosis, examination and treatment of symptoms and pathological conditions centered on internal medicine, especially gastroenterology, students will acquire necessary practical skills such as policy making, practical learning about professionalism, ethics, medical ethology, medical safety, medical law (system), and EBM. (1-1,1-2,2-1,2-2,2-3,2-4,2-5,2-6,4-1,4-2,4-3,4-4,4-5,4-6,4-7)

1) Ward medical treatment

Each student will be assigned to each medical team for two weeks and will be in charge of several ward patients under the supervision of an instructor. Under the supervision of the instructor, the patient is visited daily, and students will conduct medical interviews, problem extraction by physical examination, clinical reasoning by literature search, proposal of examination / treatment policy, daily medical treatment contents and requests from other departments basic medical treatment based on EBM as a member of the team, such as medical records, weekly summaries, referral letters, etc. (confirmation by the instructor required), various presentations at the conference, participation in explanations to patients and families learn practically.

2) Participation in outpatient clinics, various tests, and treatments

In between the medical treatments of new outpatients and returning patients, as a member of the medical care team, the process of clinical reasoning, examinations, and treatments can be practiced.

2. Learning goals

We will proceed with the practical training focusing on the outline and aim of 1 above, but the contents of the symptoms, pathological conditions, various procedures, etc. that are guaranteed experience in this clinical department are shown below.

1) Symptomatology / pathology clinical reasoning (3-5,4-1,4-2,4-3,4-4,4-5,4-6)

- (1) Jaundice (2) Abdominal pain (3) Nausea / vomiting (4) Loss of appetite (5) Constipation / diarrhea / bloody stool (6) Hematemesis / melena (7) Abdominal swelling (including ascites) / distension / mass

2) Basic clinical procedure (3-1,3-2,3-3,4-1,4-2,4-3,4-4,4-5,4-6,4-7)

- (1) Repositioning and transfer are possible (2) Skin disinfection is possible (3) Venous blood sampling can be performed (4) Gastric tube can be inserted and removed (5) Urinary catheter can be inserted and removed (6) Injections (intradermal, subcutaneous, muscle, intravenous) can be performed (7) Peripheral vein blood vessels can be secured (8) Medical records (medical records) are

created.

3) Inspection procedure(3-1,3-2,3-3,4-1,4-2,4-3)

(1) Ultrasonography of the abdomen can be performed.

(2) Percutaneous oxygen saturation can be measured.

(3) Visit and assist with X-ray photography, computed tomography (CT), magnetic resonance imaging (MRI), nuclear medicine examination, and endoscopy.

4) Simulation education(2-1,2-2,2-3,2-4,2-5,2-6,2-7,4-1,4-2,4-3,4-4,4-5,4-6,4-7)

(1) Improve clinical skills by repeating exercises using an abdominal echo simulator.

(2) Improve clinical skills by repeating exercises using an abdominal endoscopy simulator.

5) About medical behavioral science, medical ethics, medical safety, medical law (medical system), EBMI(1-1,1-2,3-1,3-2,3-3,3-4,3-5,3-6,3-7,4-1,4-2,4-3,4-4,4-5,4-6,5-1,5-2,5-3,5-4,5-5)

(1) Informed consent for various tests and treatments

(2) Difficult patients: Explanations to patients with sudden changes and their families

(3) Consideration for safety during various invasive examinations and treatments

This subject is a lesson subject by a teacher with practical experience.

4. **Textbook/Reference Books**

内科学（朝倉書店） 内科学（西村書店） 標準消化器病学（医学書院）

5. **Assessment**

実習中の学習態度、CC-EPOC、口頭試問、miniCEX（実際の患者さんへの診療を評価）、レポート発表、レポート提出、セミナーへの出席状況に基づいて総合的に評価する

Attitude, CC-EPOC, oral examination, mini-CEX（mini-Clinical Evaluation Exercise）, report, participation

6. **Out of Class Study/Message**

- ・ 授業プリントを中心に十分復習してから実習に臨むこと
- ・ 経験記録、手帳の記載を行うこと
- ・ 若干のスケジュールの可能性があるので医局で確認すること

- ・ Be sure to thoroughly review the lesson prints before starting the training.
- ・ Record your experience and record your notebook
- ・ There is a possibility of a slight schedule change, so check with the medical office.

消化器内科学（内科学１）臨床実習

Schedule		Contents of Class
1 Mon [9:00-18:00]	Subtitle Instructor	9:00-12:00 オリエンテーション/セミナー 肝臓 / 腹部超音波実習 13:00-16:00 入院報告・総回診 16:00-17:00 病棟実習 17:00-18:00 内視鏡カンファレンス 9:00-12:00 Orientation / Seminar Liver disease/ Abdominal Ultrasonography 13:00-16:00 Hospitalization report / total rounds 16:00-17:00 Ward training 17:00-18:00 Endoscope conference
2 Tue [9:00-17:00]	Subtitle Instructor	9:00-12:00 病棟実習 13:00-17:00 病棟実習 9:00-12:00 Ward training 13:00-17:00 Ward training
3 Wed [9:00-17:00]	Subtitle Instructor	9:00-12:00 A 班:超音波検査見学 B 班:病棟実習 13:30-15:00 セミナー 画像診断 15:00-17:00 病棟実習 9:00-12:00 A group: Abdominal ultrasonography tour B group: Ward training 13:30-15:00 Seminar image diagnosis 15:00-17:00 Ward training
4 Thu [9:00-17:00]	Subtitle Instructor	9:00-12:00 A 班：外来実習 B 班：病棟実習 13:00-14:30 胆・膵セミナー 14:30-17:00 病棟実習 9:30-12:00 A group：Outpatient training B group：Ward training 13:00-14:30 Biliary and pancreas seminar 14:30-17:00 Ward training
5 Fri [9:00-17:10]	Subtitle Instructor	9:00-11:30 A 班:病棟実習 B 班:超音波検査見学 13:00-14:20 病棟実習 14:20-17:10 医学医療総合講義 9:00-11:30 A group: Ward training B group: Abdominal ultrasonography tour 13:00-14:20 Ward training 14:20-17:10 Medical Comprehensive Lecture
6 Mon [9:00-18:00]	Subtitle Instructor	9:00-11:30 上部消化管内視鏡モデル実習 13:00-16:00 入院報告・総回診 16:00-17:00 下部消化管セミナー 17:00- 内視鏡カンファレンス 9:00-11:30 Upper gastrointestinal endoscopy model training 13:00-16:00 Hospitalization report/ total rounds 16:00-17:00 Lower gastrointestinal seminar 17:00- Endoscope conference
7 Tue [9:00-17:00]	Subtitle Instructor	9:00-12:00 病棟実習 13:30-14:30 病棟実習 14:30-17:00 内視鏡的粘膜下層剥離術見学 9:00-12:00 Ward training 13:00-14:30 Ward training 14:30-17:00 Tour of endoscopic submucosal dissection

消化器内科学（内科学 1）臨床実習

Schedule		Contents of Class
8 Wed [9:00-17:00]		9:00-12:00 下部消化管内視鏡モデル実習
	Subtitle	13:30-15:00 消化管セミナー
	Instructor	15:00-17:00 病棟実習
9 Thu [9:00-17:00]		9:00-12:00 Lower gastrointestinal endoscopy model training
	Subtitle	13:30-15:00 Gastrointestinal seminar
	Instructor	15:00-17:00 Ward training
9 Thu [9:00-17:00]		9:00-12:00 A 班：病棟実習 B 班：外来実習
	Subtitle	13:00-14:00 病棟実習
	Instructor	14:00-16:00 発表会
10 Fri [9:00-17:10]		9:30-12:00 A group : Ward training B group : Outpatient training
	Subtitle	13:00-14:00 Ward training
	Instructor	14:00-16:00 Presentation
10 Fri [9:00-17:10]		9:00-11:00 消化管造影検査見学
	Subtitle	13:00-14:20 病棟実習
	Instructor	14:20-17:10 医学医療総合講義
10 Fri [9:00-17:10]		9:00-11:00 Gastrointestinal contrast examination tour
	Subtitle	13:00-14:20 Ward training
	Instructor	14:20-17:10 Medical Comprehensive Lecture