

EASL CLINICAL SCHOOL: ABDOMINAL SONOGRAPHY

7-8 SEPTEMBER 2018

ERASMUS MC UNIVERSITY MEDICAL CENTER, ROTTERDAM, NETHERLANDS

COURSE DIRECTORS

Robert De Knegt, *Rotterdam*

Michael Gebel, *Hannover*

FACULTY

Robert De Knegt, *Netherlands*

Michael Gebel, *Germany*

Sarwa Darwish Murad, *Netherlands*

Carolien Den Hoed, *Netherlands*

Andrej Potthoff, *Germany*

Jeffrey Schouten, *Belgium*

Dave Sprengers, *Netherlands*

Pavel Taimr, *Netherlands*

Christoph Terkamp, *Germany*

Francesco Tovoli, *Italy*

The sonography clinical school is intended for physicians with no or minimal experience in abdominal sonography. The major aim is to learn the basics: how to perform abdominal sonography in a patient with liver disease. The first part is on anatomy, i.e. the recognition of the large abdominal organs and structures with emphasis on the liver. The second part will be on pathology, i.e. the most frequent hepatic abnormalities will be studied on a sonography-simulator which acts as a real sonography machine. At the end, complete abdominal ultrasound will be performed on patients. After the course, you will not only be able to recognize the abdominal organs (e.g. liver, kidneys, spleen), but will also be able to find the major liver vessels (portal vein, hepatic artery, liver veins), gallbladder, and the biliary tree. Important signs of liver cirrhosis will be learnt, and you will be able to recognize the major liver abnormalities.

LEARNING OBJECTIVES:

- how to handle a probe and a sonography machine
- learning anatomy: how to find the liver, the large liver vessels, and other important structures, by ultrasound on healthy volunteers
- identification of pathology most frequently seen: cirrhosis, hepatocellular carcinoma, ascites, portal hypertension, biliary abnormalities, by using ultrasound simulators
- testing what you have learnt: complete abdominal ultrasound in patients

FRIDAY 7 SEPTEMBER 2018

- 09:00-09:10 Welcome and introduction,
Robert de Knegt, *Netherlands*
- 09:10-09:35 Physics of ultrasound, including artifacts
Michael Gebel, *Germany*
- 09:35-09:55 How to handle an ultrasound machine, concise explanation/short overview, what do you see, what is left what is right, the most important buttons etc.
Jeffrey Schouten, *Belgium*
- 09:55-10:20 Ultrasound of the liver: normal anatomy, liver cirrhosis, portal, parenchymatous disease
Michael Gebel, *Germany*
- 10:20-10:45 *Coffee break*
- 10:45-11:05 Ultrasound of the liver: benign focal liver lesions, role of ultrasound vs. CT and MRI
Pavel Taimr, *Netherlands*
- 11:05-11:30 Ultrasound of the liver: gallbladder, biliary tree, malignant liver lesions, including some words on contrast enhanced ultrasound
Andrej Potthoff, *Germany*
- 11:30-11:55 Ultrasound outside the liver: extra hepatic liver vessels, portal hypertension, Doppler, spleen, kidneys
Francesco Tovoli, *Italy*
- 11:55-12:15 Role of ultrasound in hepatology including other ultrasound techniques (ultrasound vs. CT and MRI, liver elasticity and fat-content measurement)
Robert de Knegt, *Netherlands*
- 12:15-13:00 *Lunch*
- 13:00-17:30 Practical ultrasound, on healthy volunteers
- 18:30-22:30 School dinner

SATURDAY 8 SEPTEMBER 2018

- 09:00-09:15 Introduction to ultrasound simulators
Christoph Terkamp, *Germany*
- 09:15-12:00 Most important liver pathology, on ultrasound simulators
- 09:15-12:15 Parallel program: ultrasound on 'real' patients, in groups of 4 participants
- 12:15-13:15 *Lunch*
- 13:15-13:30 Farewell