

EASL Clinical School of Hepatology  
Management of Critically Ill Cirrhotic Patients  
Barcelona, October 22 – 23, 2015

Course organizers: P. Gines and Javier Fernández

Location: CEK, Centro Esther Koplowitz, Liver Unit. Hospital Clínic. University of Barcelona.  
Barcelona, Catalonia, Spain.

Other participants: Faculty members of the local Liver, Gastroenterology, Pneumology,  
Nephrology, Anesthesia and General Intensive Care Units and 2/3 European speakers.

**DAY 1, Thursday, 22 October, 2015**

8:00-8:05      **PRESENTATION OF THE COURSE AND WELCOME**

8:05-9:35      Session 1: **ACUTE-ON-CHRONIC LIVER FAILURE**

8:05-8:25      Definition, types and pathogenesis

Dr. Arroyo

8:25-8:45      Prognosis

Dr. Gustot

8:45-9:05      Treatment: role of albumin dialysis and plasma exchange

Dr. Gustot

9:05-9:35      Discussion

9:35-10:00     **COFFEE BREAK**

10:00-11:40   Session 2: **ACUTE VARICEAL BLEEDING**

10:00-10:20   Pathogenesis

Dr. Bosch

10:20-10:40   Pharmacological treatment, balloon tamponade tubes/esophageal stents

Dr. Escorsell

10:40-11:00   Endoscopic treatment

Dr. Cárdenas

11:00-11:20   Indications of TIPS

Dr. García-Pagán

11:20-11:40   Management of coagulopathy

Dr. Hernández



11:40-12:00 Discussion

12:00-14:00 **HANDS ON**

- ICU (group 1: 10-15 attendants)
- Simulation Lab (group 2: 10-15 attendants)
- Hemodynamic Lab (group 3: 10-15 attendants)

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Professors: Dr. Fernández, Dr. Hernandez, Mr. Sanz

14:00-15:30h **LUNCH**

15:30-16:50 Session 3: **SEVERE HEPATIC ENCEPHALOPATHY**

15:30-15:50 Pathogenesis

Dr. Mas

15:50-16:10 Differential diagnosis, medical treatment

Dr. Fernández

16:10-16:30 Albumin dialysis: indications and clinical impact

Dr. Escorsell

16:30-16:50 Discussion

16:50-17:15 **COFFEE BREAK**

17:15-18:15 Session 4: **HEPATOPULMONARY DISEASES AND MECHANICAL VENTILATION**

17:15-17:35 Management of severe hepatopulmonary syndrome and portopulmonary hypertension

Dr. Barberá

17:35-17:55 ARDS

Dr. Torres/Dr. Badía

17:55-18:15 Discussion

18:00-19:00 **CLINICAL CASES**

Presentation and discussion of 3 clinical cases (20 minutes per case)



Speakers: Dr. Prado, Dr. Ruiz, TBD

**DAY 2, Friday, 23 October**

8:00-10:00 Session 5: **SEVERE SEPSIS AND SEPTIC SHOCK**

8:00-8:20 Current epidemiology and prognostic determinants

Dr. J. Fernández

8:20-8:40 Diagnostic approach and therapy

Dr. V. Prado

8:40-9:00 Adrenal dysfunction: to treat or not to treat

Dr. Acevedo

9:00-9:20 Fungal infections: an emergent problem

Dr. Gustot

9:20-9:40 Discussion

9:40-10:10 **COFFEE BREAK**

10:10-12:10 Session 6: **ACUTE KIDNEY FAILURE**

10:10-10:30 Pathogenesis

Dr. Graupera

10:30-10:50 Differential diagnosis

Dr. Solá

10:50-11:10 Renal replacement therapy

Dr. Poch

11:10-11:50 Therapeutic options in type 1 HRS

Dr. Ginès

11:50-12:10 Discussion

12:10-13:10 **HANDS ON**

- ICU (group 3: 10-15 attendants)
- Simulation Lab (group 1: 10-15 attendants)
- Hemodynamic Lab (group 2: 10-15 attendants)

Professors: Dr. Escorsell, Dr. Hernandez, Mr. Sanz



13:10-14:30 **LUNCH**

14:30-15:30 Session 7: **PROGNOSTIC SCORES**

14:30-14:50 Prognostic scores, which and when?

Dr. Wilmer

14:50-15:10 Prognosis of critically-ill cirrhotic patients; potential stopping rules

Dr. Wilmer

15:10-15:30 Discussion

15:30-16:00 **COFFEE BREAK**

16:00-17:20 Session 8: **GENERAL ASPECTS**

16:00-16:20 Nutritional support

Dr. Leyes

16:20-16:40 Sedation and analgesia

Dr. Zavala

16:40-17:00 Prophylactic measures in ICU

Dr. Mas

17:00-17:20 Discussion

17:20-18:00 **CLINICAL CASES**

Presentation and discussion of 2 clinical cases (20 minutes per case)

Speakers: Dr. Prado, Dr. Ruiz

18:00 **ADJOURN**



**TOPICS OF “HANDS ON” SESSIONS:**

**ICU:**

- Renal replacement and MARS therapy in cirrhosis
- Invasive hemodynamics in severe sepsis and shock
- Mechanical ventilation
- Management of Hepatorenal syndrome type-1

**Faculty of Medicine, Simulation Lab:**

- Technical aspects of MARS therapy
- Airway management
- Systems for cardiac output assessment
- Self-expandable metallic esophageal stents
- Sengstaken and Linton tubes: insertion technique

**Hemodynamic Lab:**

- Hepatic-venous pressure measurement
- Transjugular liver biopsy
- TIPS insertion

**• LEARNING OBJECTIVES OF THE COURSE:**

- To consolidate and expand the concepts of the attendees on the pathogenesis of the main clinical decompensations of cirrhosis that require ICU admission.
- To show the attendants a supra-specialized approach in the diagnosis and medical treatment of critical decompensations of patients with cirrhosis.
- To familiarize the audience with several techniques used specifically in critically-ill cirrhotic patients: hepatic-venous pressure measurement, TIPS, Sengstaken and Linton tubes, self-expandable metallic esophageal stents and albumin dialysis (MARS therapy) among others.
- To underline important differences in the management of critically-ill patients with and without cirrhosis: sedation and analgesia, anticoagulation in RRT, coagulation, type of fluid in plasma exchange...
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- To define which scores should be used in the management of cirrhotic patients admitted to the ICU and to establish the red line that defines futility.
- To define specific diagnostic and therapeutic algorithms in patients with ACLF.

**GOALS TO ACHIEVE BY THE ATTENDEES:**

After the attendance of this EASL School physicians should be able to diagnose and treat any critical decompensation of cirrhosis and should be familiarized with the most frequently techniques used in their treatment such as TIPS, albumin dialysis and vasoactive treatment.

