What’s New in Liver Disease?

Royal College of Physicians Regional Update Day
June 2019

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Overview

• #BASLjwatch
• Cases which illustrate some of the issues at the forefront of hepatology

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Twitter

• Do you have a Twitter account (yes/no)?
• Do you regularly use Twitter (yes/no)?
#BASLjwatch

- Concept similar to NEJM Journal Watch
- Use of Twitter @BASLedu

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• HCV elimination
• TIPSS for variceal haemorrhage
• Biliary endoscopic techniques
• Non-invasive cirrhosis assessment
• Expanding liver transplant donor pool

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Case 1: Hepatitis C in a “Chaotic Patient”

- 34 y o man
- Attending CUH for assessment in 2016 then lost to follow up
- G1a with no evidence of significant fibrosis
- DNA x 5 appointments
- Then invited to attend Huntingdon outreach at CGL in 2018
- NFA in a tent with police having to check on him daily
- Active IVDU, smoking, lager/cider at weekends

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Case 1: Hepatitis C in a “Chaotic Patient”

• Would you treat this patient with:
  1. Interferon based therapy?
  2. Tablet based therapy?
  3. Or wait until he is in a “better place” for treatment?

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Case 1: Hepatitis C in a “Chaotic Patient”

- Received sofosbuvir and ledipasvir for eight weeks
- Cleared virus long term
- Attends follow up visits
- Lives in stable accommodation and volunteering in a charity shop

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Focus of Treatment

2014: Morbidity and mortality based

2018: Case finding and prevention of complications and transmission

2025 UK and 2030 globally: Elimination*

* 90% reduction in incidence, 90% diagnosed, 80% eligible treated

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Eastern Hepatitis Operational Delivery Network

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Case 2: Variceal Haemorrhage

• 48 y o man presented with upper GI bleed on background of ArLD cirrhosis
• Supportive measures: blood, terlipressin, abx, coag correction
• OGD: active variceal haemorrhage
• Glue injected
• Rebled and became unstable with active upper GI haemorrhage

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Case 2: Variceal Haemorrhage

• What would you do next?
  1. Stabilise, rescope
  2. Stabilise, intubate, rescope
  3. Stabilise, balloon tamponade, TIPSS
  4. Stabilise, intubate, balloon tamponade, TIPSS

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Case 2: Variceal Haemorrhage

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Case 2: Variceal Haemorrhage

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Movement Towards TIPSS for CPB/C cirrhosis


Early TIPS with covered stents versus standard treatment for acute variceal bleeding in patients with advanced cirrhosis: a randomised controlled trial.

Lv Y1, Yang Z1, Liu L1, Li K1, He C1, Wang Z1, Bei W1, Gua W1, Xu T1, Yuan X1, Zhang H2, Xie H2, Yao L2, Wang J2, Li T3, Wang Q1, Chen H1, Wang E1, Xia Q1, Luo R1, Li X1, Yuan J1, Han N1, Zhu Y1, Niu J1, Cai H1, Xia J1, Yin Z1, Wu B6, Fan D6, Han G7, AIVB-TIPS Study Group

Preemptive-TIPS Improves Outcome in High-Risk Variceal Bleeding: An Observational Study

Virginia Hernández-Gea1, Bogdan Procopet, Álvaro Giráldez, Ludo Amitrano, Candid Villanueva, Dominique Thabut, Luis Ibañez-Samaniego, Gilberto Silva-Junior, Javier Martinez... See all authors


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Movement towards TIPSS for CPB/C cirrhosis

Fig. 2. Actuarial survival in the 326 patients eligible for early-TIPS according to early-TIPS placement. The actuarial probability of survival at one year was significantly increased in the patients who underwent TIPS (85.7 ± 0.07%, vs. 58.9 ± 0.03%, $p = 0.04$). TIPS, transjugular intra-hepatic porto-systemic shunt. Statistical tests: Kaplan-Meier method. (This figure appears in colour on the web.)
Case 3: Jaundice

- 74 y o lady admitted with jaundice and cholangitis
- Dilated ducts at ultrasound scan
- Cross sectional imaging
Case 3: Jaundice

- What is the diagnosis?
  1. Biliary malignancy
  2. Biliary stones

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Case 3: Jaundice

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Case 3: Jaundice

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Case 3: Jaundice

SpyGlass and SpyBite

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Case 3: Jaundice

• Currently cholangiocarcinoma is being staged to determine operability

Bilirubin (umol/L)

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Advances in Biliary Endoscopy

- SpyGlass (stones and strictures)
- EUS guided biliary drainage

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Case 4: Likely NAFLD

- 54 y o patient with an uncomplicated fatty liver at ultrasound scan on a background of obesity, type 2 diabetes mellitus, 10 unit weekly alcohol consumption and a normal liver screen
- Dx: likely non-alcohol related fatty liver disease (NAFLD)
- Do you:
  1. Refer to hepatology clinic
  2. Undertake a FIB4 test or ELF assessment and refer to clinic if elevated?
  3. Undertake a FIB4 test or ELF assessment and refer for FibroScan if elevated?

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Cambridge GP Referral Guidelines

Hepatology referral pathways for GPs

1. **Scope**
   For use within hepatology

**Contents**

2. Liver blood tests and what they mean
   p2
   Acute and chronic liver screen
   p2

Common reasons for referral

3. Raised ALT +/- GGT
   p3
4. Non alcoholic fatty liver disease (NAFLD) pathway
   p4
5. Alcohol-related liver disease (ALD) pathway
   p5
6. Isolated asymptomatic raised bilirubin
   p6
7. Raised ALP and normal ALT
   p6
8. Combination of LFT abnormalities
   p7
9. Raised ferritin
   p7
10. Abnormal liver imaging
    p8
11. Hepatitis B
    p9
12. Hepatitis C
    p9
13. Referral pathways
    p10

4. **Non Alcoholic Fatty liver Disease (NAFLD) pathway**

   From **Pathway 3 (raised ALT +/- GGT)**
   OR
   Type 2 diabetic or morbid obesity with BMI >35 kg/m² (often with isolated elevated GGT)

   Age 35 to 75
   Risk stratification with FIB-4 to assess risk of significant fibrosis (available on T-QUEST)
   Low Risk ≤1.3 (age 35-64)
   Intermediate Risk Intermediate values
   High Risk >2.67

   Intermediate Risk Intermediate values
   Lifestyle advice Re-stratify in 2 years
   ND
   Score ≤7 kPa
   YES
   Hepatology will arrange a clinic appointment

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Fibroscan
Case 4: Chronic Liver Failure

• 49 yo lady with NASH cirrhosis
• UKELD 56, ascites, encephalopathy
• Bipolar disorder, T2DM
• Discussed and listed Feb 16
• Transplanted June 16
• Developed graft failure due to accelerated NASH and listed August 18

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Indications for Liver Transplantation

- Acute liver failure
- Chronic liver failure
- Liver cancer
- Variant indications

https://easternliver.net/guidelines
Liver Offering System

• Donation after brain stem death (DBD)
  – National allocation scheme
• Donation after cardiac death (DCD)
  – Additional warm ischaemia time

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Organ Offer

- 58 yo DCD donor
- Spontaneous intracranial haemorrhage
- Normothermic reperfusion

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Improving Outcome for DCDs

In situ normothermic perfusion of livers in controlled circulatory death donation may prevent ischemic cholangiopathy and improve graft survival

Christopher J. E. Watson, Fiona Hunt, Simon Messer, Ian Currie, Stephen Large, Andrew Sutherland, Keziah Crick, Stephen J. Wigmore, Corrina Fear, Sorina Comateanu, Lucy V. Randle, John D. Terrace, Sara Upponi, Rhiannon Taylor, Elisa Allen, Andrew J. Butler, Gabriel C. Oniscu

First published: 27 December 2018 | https://doi.org/10.1111/ajt.15241 | Cited by: 4

A randomized trial of normothermic preservation in liver transplantation

David Nasralla, Constantin C. Coussios, […] for the Consortium for Organ Preservation in Europe

Nature 557, 50–56 (2018) | Download Citation

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#BASLjwatch  HCV elimination  Variceal haemorrhage  Biliary endoscopy  Liver fibrosis assessment  Liver transplantation

OrganOx
Normothermic Preservation

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Take Home Messages

- Cases which illustrate some of the issues at the forefront of hepatology
  - HCV elimination with excellent treatments *(please test and treat)*
  - Evolving variceal bleed management *(happy to discuss cases)*
  - Evolving biliary endoscopic techniques
  - Non invasive liver fibrosis assessment allows streamlining of referrals
  - Expansion of the donor pool seems to be having a beneficial effect on the liver transplant waiting list *(please think transplantation for acute and chronic liver failure and primary liver cancer)*

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