Management of acute alcoholic hepatitis

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Marmara University Hospital, Istanbul/TURKEY 5 th European Young Hepatologists Workshop August, 27-29, 2015 Moulin de Vernègues, France

ALCOHOL CONSUMPTION PER CAPITA IN EUROPE



Etiology of liver disease in a transplant centre in Turkey



Alcohol 33 cases over 606

• A 32 year old man, worker at shipyard

 Admitted to hospital with one week history of nausea, vomiting, mild abdominal pain, and jaundice

• No significant chronic disase

80-100g/day alcohol consumption since
 15 years

Nonsmoker, living alone

 Denies any use of medication or herbal medicine or IV drug or mushroom ingestion

• He has been in prison for 20 months

• Family history irrelevant

 In 2012 he applied to a state hospital with same complaints

- **AST:**583 U/L
- **ALT:**494 U/L
- **ALP:**I43 U/L
- **GGT:**88 U/L

• In 2012;

- Viral serology
 - AntiHbs positive, others negative
- Autoimmune markers were negative
- Hepatobiliary USG: normal
- Upper abdominal MRI:liver paranchyme is heterogenous
- Lost for follow-up



- BMI:21.2
- Fully oriented, alert and cooperated
 - No flapping tremor
- The sclerae are icteric
- No spider anjioma
- No clubbing

• No fever

- Pulse: 80/min BP:110/70 mmHg
- The lung, heart exam unremarkable
- Abdominal exam; soft, mild tenderness on right upper quadrant
- No hepatomegaly or spleenomegaly
- Neurological exam unremarkable



- **AST:**1781 U/L **ALT:**2758 U/L
- **ALP:**I 49 U/L **GGT:**449 U/L (7-49)
- **LDH:**560 U/L
- Total bilirubin: 17.11mg/dl D.
 bil:9.05mg/dl
- Total protein:6.71 g/dl Albumin:4.15 g/dl



- WBC:7100 /µL
- Hb:15.8 g/dL
- MCV:101.1 fL
- Plt:148000 /µL



- Viral serology;
 - HbsAg negative
 - AntiHbs positive
 - AntiHCV negative
 - AntiHAV IgM negative
 - AntiHAV lgG positive
 - Anti HIV negative
 - Anti Hep E ıgG negative
 - Anti Hep E IgM negative



• ANA, ASMA, AMA, LKM are negative

Transferrin saturation is normal



Renal functions N

Hepatobiliary USG : liver total span 14cm
 Paranchyme is homogenous No biliary
 duct dilatation

 Portal Doppler USG: Portal vein and splenic vein diameter N and patent Would you ask for any further investigation?

• Any advice?

• Any question?

• Summary

- Exccesive alcohol use
- Elevated transaminases and GGT
- Jaundice
- No other causes of liver injury

• Our pre-diagnosis was alcoholic hepatitis

Maddrey's Discriminant Function=35.4

Performed liver biopsy

Acute event

- Pericentral necrosis
- Biliary canalicular stasis
- Mild inflammatory infiltration at portal region
- Microsteatosis
- Balooning degeneration
- Chronic damage
 - Periportal fibrosis



Necrosis around central vein and biliary canalicular stasis



Trichrome stain- periportal fibrosis

• What should be the next step?



Started prednisolone 40mg/day

- 7 days later
 - ALT:270 U/L
 - AST:104 U/L
 - GGT:191
 - T. Bil: 4.33 mg/dL
 - PT:12.9 sec INR:1.04
 - Lille score:0.3982 (<0.45)

 He was well and discharged after 2 weeks of treatment

After 4 weeks prednisolone tapered

• Is our management correct??

According EASL and AASLD guideline

•YES



• BUT...



STOPAH STUDY

 Prednisolone and pentoxifylline are both recommended for the treatment of severe alcoholic hepatitis, but uncertainty about their benefit persists

 Thursz MR, Richardson P, Allison M, et al.
 Prednisolone or pentoxifylline for alcoholic hepatitis. N Engl J Med 2015;372:1619-1628

| End Point | Prednisolone | No Prednisolone | Pentoxifylline | No Pentoxifylline | Prednisolone | | Pentoxifylline | |
|---|--------------|-----------------|----------------|-------------------|------------------------|---------|------------------------|---------|
| | | | | | Odds Ratio (95% CI) | P Value | Odds Ratio (95% CI) | P Value |
| 28-Day mortality — no./total no. (%) | 73/526 (14) | 95/527 (18) | 85/518 (16) | 83/535 (16) | 0.72 (0.52–1.01) | 0.06 | 1.07 (0.77–1.49) | 0.69 |
| 90-Day mortality or liver transplantation — no./total no. (%) | 144/484 (30) | 141/484 (29) | 139/478 (29) | 146/490 (30) | 1.02 (0.77–1.35) | 0.87 | 0.97 (0.73–1.28) | 0.81 |
| 1-Year mortality or liver transplantation — no./total no. (%) | 210/371 (57) | 211/376 (56) | 205/365 (56) | 216/382 (57) | 1.01 (0.76–1.35) | 0.94 | 0.99 (0.74–1.33) | 0.97 |

 \ast The interaction between interventions was investigated as a secondary analysis.



• Pentoxifylline did not improve survival in patients with alcoholic hepatitis.

 Prednisolone was associated with a reduction in 28-day mortality that did not reach significance and with no improvement in outcomes at 90 days or 1 year Meta-analysis (including 22 randomized controlled trials)

 Singh S, Murad Mhet al. Comparative Effectiveness of Pharmacological Interventions for Severe Alcoholic Hepatitis: A Systematic Review and Network Meta-analysis. Gastroenterology. 2015 Jun 16.

- In patients with severe AH corticosteroids can reduce short-term mortality.
- The addition of NAC, but not pentoxifylline may be superior to corticosteroids alone for reducing short term mortality
- Low quality evidence showed that pentoxifylline also decreased short-term mortality
- No treatment decreases risk of medium-term mortality.









Thanks for your attention