

## POSTERS

343 (95% CI: 325–375) to 312 (95% CI: 297–326) per 1,000,000 population per year between 2006 and 2011. The prevalence (0.2% of the Danish population) and hospitalization rate (1.2 per ALD patient per year) did not change. The overall 1- and 5-year survival probabilities were 70.2% (95% CI: 69.3–71.1%) and 43.5% (95% CI: 42.1–44.8%).

**Conclusions:** The incidence of alcoholic liver disease in Denmark decreased in 2006–2011. We expect the incidence to decrease further in the future owing to the declining incidence rate in younger citizens.

### P301

#### ASSOCIATION OF SERUM TNF- $\alpha$ AND IL-6 WITH <sup>13</sup>C-METHACETIN BREATH TEST RESULTS IN ALCOHOLIC STEATOHEPATITIS PATIENTS

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**Background and Aims:** Alcoholic liver disease represents several overlapping pathological states, ranging from simple steatosis to alcoholic steatohepatitis (ASH). Hepatic injury and apoptosis that occur in ASH patients are often dysregulated and accompanied by the accumulation of immune cells, which produce cytokines that drive chronic inflammation and may result in fibrosis.

The main aim of the study was identification of the correlation tumor necrosis factor alpha (TNF- $\alpha$ ) and interleukin-6 (IL-6) with the <sup>13</sup>C-methacetin breath test (<sup>13</sup>C-MBT) results in ASH patients.

**Methods:** Serum cytokines levels were determined using an enzyme-linked immunosorbent assay kit in 51 patients with ASH, 26 patients with simple steatosis, and 25 healthy volunteers. In every subject a <sup>13</sup>C-MBT was applied.

**Results:** Patients with ASH had significantly higher serum TNF- $\alpha$  and IL-6 levels than the simple steatosis patients. A significant negative correlation was seen between <sup>13</sup>CO<sub>2</sub> cumulative dose <sup>13</sup>C-MBT and serum TNF- $\alpha$  ( $r = -0.84$ ;  $P = 0.002$ ), IL-6 ( $r = -0.74$ ;  $P = 0.021$ ) in ASH patients.

**Conclusions:** This study shows that circulating TNF- $\alpha$  and IL-6 levels are significantly increased in ASH patients as compared with simple steatosis patients and healthy volunteers. Serum TNF- $\alpha$  and IL-6 are associated with the functioning hepatocyte mass (<sup>13</sup>C-MBT results) in ASH patients.

### P302

#### METADOXINE SIGNIFICANTLY IMPROVES SURVIVAL IN ABIC CLASS B PATIENTS WITH SEVERE ALCOHOLIC HEPATITIS WHEN ADDED TO PENTOXIFYLLINE OR PREDNISONE

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**Background and Aims:** In severe alcoholic hepatitis (SAH) mortality is high despite of therapy with prednisone (PDN)

or pentoxifylline (PTX). Oxidative stress and depletion of mitochondrial glutathione are involved factors in physiopathology. Aim: To evaluate the impact on survival of Metadoxine (MTD), an antioxidant, in patients with SAH.

**Methods:** An open label clinical trial conducted in Mexico's General Hospital. We randomized patients with SAH criteria to 4 different groups: 35 received PDN 40 mg/day, 35 received PDN+MTD 1500 mg/day, 33 received PTX 400 mg thrice in day, 32 received PTX+MTD 1500 mg/day. The duration of treatment in all groups was 30 days. Follow-up was at 90 days or until death. A sub-analysis stratifying patients according to ABIC class was performed.

**Results:** In groups supplemented with MTD survival was longer at 90 days (PTX+MTD 59.4% vs. PTX 33.3%  $P = 0.04$ ; PDN+MTD 68.6% vs. PDN 20%  $P = 0.0001$ ). When patients were stratified according to ABIC class, improvement in survival with MTD supplementation was observed in class B: PTX+MTD 88.2% vs. PTX 40%  $P = 0.006$ ; PDN+MTD 71.4% vs. PDN 16.6%  $P = 0.0001$  Global survival in ABIC class B was 54%. Global survival in ABIC Class A and C was 81.3% and 23% respectively, but no statistical differences between treatment groups were observed.

**Conclusions:** MTD improves survival at 90 days in patients with SAH, the greatest benefit of this complementary treatment was observed in ABIC class B patients (intermediate risk of death).

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### P303

#### ALCOHOL DRINKING FREQUENCY AND RISK OF ALCOHOLIC CIRRHOSIS IN MIDDLE-AGED WOMEN AND MEN: RESULTS FROM A POPULATION-BASED COHORT STUDY

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**Background and Aims:** Alcohol is a strong risk factor for cirrhosis but the influence of drinking frequency is unknown.

**Methods:** We investigated risk of alcoholic cirrhosis relation to drinking frequency in 55,971 participants (50–64 years) of the Danish Cancer, Diet, and Health study (1993–2011). Baseline information on alcohol consumption, drinking frequency, and potential confounders (smoking, education, and waist circumference) was obtained from questionnaire. Follow-up information on alcoholic cirrhosis, death, and emigration came from national registers. We used Cox proportional regression model to calculate hazard risks (HR) for alcoholic cirrhosis by alcohol intake (amount and frequency).

**Results:** We observed 85 and 257 incident cases of alcoholic cirrhosis among women and men, none among never drinkers. In men, the HR for drinking daily was 2.81 (95% CI: 1.4; 5.8) compared to drinking one day per week. No increased HR for other drinking frequencies in men. Among women, the HR were increased when drinking less than one day per month; HR 2.12 (0.7; 7.0), five or six days per week HR 2.72 (1.0; 7.6), and when drinking daily;

Table (abstract P303): HR of alcoholic cirrhosis with drinking frequency

	Never drinkers	Current non-drinkers	<1 day/month	1–3 days/month	1 day/week	2–4 days/week	5–6 days/week	Daily
<b>Men</b>								
Adjusted for age	N/A	7.45 (3.1; 18.0)	1.08 (0.2; 5.1)	0.86 (0.3; 2.5)	1.00 (reference)	0.88 (0.4; 1.9)	2.0 (0.9; 4.4)	7.31 (3.6; 14.9)
Adjusted for age, alcohol and confounders	N/A	5.13 (2.1; 12.6)	0.22 (0.03; 1.6)	0.85 (0.3; 2.5)	1.00 (reference)	0.76 (0.4; 1.7)	1.08 (0.5; 2.4)	2.81 (1.4; 5.8)
<b>Women</b>								
Adjusted for age	N/A	7.77 (2.4; 25.5)	2.42 (0.7; 7.9)	1.02 (0.3; 3.4)	1.00 (reference)	1.37 (0.5; 3.8)	4.70 (1.7; 12.7)	6.84 (2.7; 17.6)
Adjusted for age, alcohol and confounders	N/A	6.53 (2.0; 21.5)	2.12 (0.7; 7.0)	1.01 (0.3; 3.3)	1.00 (reference)	1.22 (0.4; 3.4)	2.72 (1.0; 7.6)	2.02 (0.7; 5.7)