







## Ottava Giornata della Ricerca della Svizzera Italiana Venerdì 9 marzo 2018

## Modulo per la sottomissione abstract di ricerca CLINICA

Titolo (massimo 15 parole)

Autoimmune liver disease serology in acute hepatitis E virus infection

Autori (cognome e iniziali, es: Grassi L.)

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**Affiliazioni** (ospedale o istituto, servizio o reparto, indirizzo, es: Ospedale Regionale di Lugano, Servizio di angiologia, Lugano)

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**Testo** (massimo **250 parole**, preferibilmente in italiano (accettato anche in inglese), suddiviso in Introduzione, *Metodi, Risultati, Conclusioni* e *Finanziamento* 

Background and Aims: A higher than expected HEV seroprevalence has been reported in two large cohorts of autoimmune hepatitis (AIH) patients. Autoantibodies are found in > 95% of AIH patients. We aim at investigating whether acute HEV infection is associated with AIH-relevant autoantibodies.

Method: Sera from patients with acute HEV infection (NEUROCAVE study) were analysed for anti-nuclear antibody (ANA), anti-smooth muscle (SMA), anti-liver kidney microsomal1 (LKM1), anti-liver cytosol1 (LC1), anti-mitochondrial antibodies (AMA) and anti-neutrophil cytoplasmatic antibody (ANCA). Sera from the Swiss AIH cohort were used as positive controls.

Results: 55 patients with acute HEV infection were enrolled; 5 were excluded. 66% men, median age: 55 years (IQR, 45-69). ANA were positive in 20% (5 speckled, 1 homogeneous, 2 nucleolar, 3 mixed pattern), SMA in 8%, ANCA in 14%, AMA in one patient. Anti-SLA, anti-LKM1 and anti-LC1 were negative in all patients. ANA positivity was associated with ALT > 200 U/I (OR 2.45), while SMA positivity was not (OR 0.28). However, at indirect immunofluorescence on rat kidney tissue 2/4 SMA positive patients had the VG and VGT patterns, suggestive of AIH. ANCA positivity was not associated with ALT > 200 U/I (OR 0.65). The AMA positive patient had no evidence of primary biliary cholangitis.

Conclusion: Our data show that autoimmune liver serology is frequently positive in acute HEV infection, at times mimicking AIH type 1. For ANA positivity there is an association with biochemical evidence of more severe liver injury.

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Visto superiore (prego indicare Nome e Cognome del superiore)

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