



THE 31ST MEETING OF THE
EUROPEAN SOCIETY & COLLEGE
OF VETERINARY PATHOLOGISTS
LONDON 2013

**31st Meeting of the
European Society of Veterinary Pathology**

and the

European College of Veterinary Pathologists

4th – 7th September 2013

Programme

**The Institute of Education
University of London
London, UK**



Oral Presentations

Session H: Inflammatory, Skin & Wildlife Disease

DETECTION OF HEPATITIS E VIRUS (HEV) IN FREE RANGING WILD BOARS (*SUS SCROFA*) IN ITALY

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Introduction: Hepatitis E virus (HEV) is highly prevalent in farmed pigs worldwide and its zoonotic role is known. HEV has also been documented in several domestic and wild species, including the wild boar (*Sus scrofa*), which may act as a reservoir.

Materials and Methods: Sixty-four blood, faecal and liver samples of hunted wild boars (classified by age and gender) were included in the study. Indirect ELISA and PCR were performed on all sera and faeces respectively. Histopathology and immunohistochemistry to HEV were performed on livers of PCR positive subjects. Immunohistochemistry against CD3 and CD79a was performed on liver samples to characterise lymphocytic infiltrates.

Results: Thirty-three (51%) sera resulted positive for HEV antibodies while six (9%) faecal samples showed virological positivity with an expected nested-PCR product of 347bp. A higher prevalence was found in juveniles with both techniques with no differences between genders. Histological lesions were characterised by a very mild multifocal and periportal lympho-plasmacytic infiltration of mainly CD3+ lymphocytes. All six liver samples showed immunohistochemical cytoplasmic positivity for HEV around inflammatory foci.

Conclusions: HEV infection is endemic in Italian wild boar population and further investigation is needed in this species to better characterise its role in the epidemiology.

