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Abstract (oral session)

Recreational and residential risk factors for autochthonous leptospirosis in Austria: a cohort study

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Objectives: In contrast to Germany and other European countries autochthonous leptospirosis occurs frequently in Austria. In particular high rates are found in south-east Austria, the reasons for that as well as associated risk factors, however, have not been identified yet. The objective of this cohort study was to evaluate risk factors for leptospirosis in South-East Austria. **Methods:** We retrospectively analyzed risk factors for leptospirosis in South- East Austria. Patients admitted to hospitals in South-East Austria that had been tested positive for leptospirosis by point of care test for *Leptospira* IgM / serology within a 8 year period (2004-2011) were included. Data concerning course of disease as well as recreational or residential risk factors (within 2 weeks before onset of infection) were collected via telephone questionnaires and/ or electronic databases. **Results:** 103 adult patients (38 female, 65 male, median age 43.1 years) were included. 87/103 (84.5%) of patients had acquired leptospirosis within Austria and 16 (15.5%) had imported infections. Symptoms reported most frequently included fever (68/ 103; 66%), myalgia/ arthralgia (37%), abdominal pain/ diarrhea (31%), general weakness (26%), jaundice (24.3%) and headache (21.4%). Lab results at admission revealed that 23.3% had thrombocytopenia. Elevated liver transaminases (>2 times normal value) were found in 42.7%, and serum creatinine (≥ 1.5) in 32%. L. Sejroe, L. Bratislava and L. Ballum were the serotypes identified most frequently. Risk factors were evaluated in cases that completed the telephone questionnaire (n=70, all autochthonous). Concerning recreational risk factors, activities in woods/ wet areas were reported by 40.8%, followed by gardening/ hunting (30%), and cleaning up basement/ hut/ attic (22.3%). Rodents in surroundings (48.5%), followed by contact to pets (34%) and farm/- animals (18.4%) were the most residential risk factors. **Conclusion:** The vast majority of cases in South- East Austria are autochthonously acquired The main risk factors for acquiring leptospirosis were activities in woods and wet areas as well as pets and rodents living in the surroundings.