



Multiple eschars including primary eschar (top right) on right leg 10 days after admission.

**Conclusion:** Purpuric rash is previously described in rickettsia conorii infection in two immunodeficient patients. To our knowledge we are the first to present an ATBF case with multiple eschars on three limbs presenting more than 12 days after leaving the endemic area. The eschars seemed to develop metastatic rather than from multiple tick bites. Awareness of late developing eschars in immunosuppressed patients may be important in order to alert physicians to initiate early treatment on clinical suspicion of rickettsial infection in patients with relevant exposure.

<http://dx.doi.org/10.1016/j.ijid.2014.03.813>

#### Type: Poster Presentation

Final Abstract Number: 47.027

Session: Zoonoses and Infections in Animals

Date: Thursday, April 3, 2014

Time: 12:45-14:15

Room: Ballroom

#### Q fever: The importance of surveillance in the Autonomous Province of Bolzano (Italy)



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**Background:** Q fever caused by *Coxiella burnetii* is mainly an occupational disease in agriculture, cattle, sheep, and goats, being the primary reservoirs. Usually animal hosts are asymptomatic. The zoonosis is transmitted primarily through inhalation of aerosols or contact with specific tissues and fluids of shedding animals; rarely by tick bites, ingestion of unpasteurized milk or dairy products, and from person-to-person. Only half of the infections develop in acute Q fever with self-limited, influenza-like febrile symptoms, at times complicated by pneumonia and hepatitis. Chronic Q fever patients mainly show endocarditis with negative culture findings and seropositivity. Animal cases, routinely seen in the Autonomous Province of Bolzano (APB), supported the hypothesis of local disease transmission to people. However, no national data concerning human cases were available, as Q fever only recently requires compulsory, official notification in Italy.

**Methods & Materials:** Between 2008 and 2012 active veterinary surveillance was implemented. This consisted in the use of

ing, at health district level, was carried out. Criteria for including cases: compatible clinical symptoms and laboratory confirmation by immunofluorescent assay (IFA).

**Results:** In APB, for the 5-year period considered, Q fever's annual diagnostic rate in humans was 1/100.000 inhabitants. A total of 5 cases were identified, 4 of them autochthonous. Four patients with complications had been hospitalised and three of the autochthonous cases were exposed to livestock.

9700 blood samples in total, gave an overall prevalence of 13,6% for cattle; 11,7% for sheep and 7,9% for goats. For confirmation, PCR was carried out on organ tissues and swabs. Overall, PCR-Test on milk from shedding animals contributed to the timely prevention of zoonosis transmission.

**Conclusion:** At present, in Italy, Q fever is not considered a major health problem, however this disease may have an unexpected impact at local level, especially in areas with intense animal production and countryside tourism activities. More research is needed to understand the epidemiology of Q fever in APB. The interdisciplinary approach is essential and will be pursued in future in order to fill the knowledge gaps.

<http://dx.doi.org/10.1016/j.ijid.2014.03.814>

#### Type: Poster Presentation

Final Abstract Number: 47.028

Session: Zoonoses and Infections in Animals

Date: Thursday, April 3, 2014

Time: 12:45-14:15

Room: Ballroom

#### Surveillance for arboviruses in ticks sampled from wildlife in Ijara District, Kenya



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**Background:** Tick-borne viruses cause significant morbidity, economic loss and mortality to both human and animals in the world. Tick vectors have been implicated as important routes for virus transmission and dissemination where one host may act as a reservoir of infection, pass this infection via the tick to a more vulnerable host which then suffers disease and reduced survival. This study aimed at determining the prevalence of arboviruses among ticks sampled from wildlife in Ijara district, Kenya.

**Methods & Materials:** A total of 504 ticks were sampled from wildlife: warthogs (*Phacochoerus delamerei*), lesser Kudu (*Ammelaphus imberbis*), common zebra (*Equus quagga*) and giraffe (*Giraffa camelopardalis*). The sampled ticks were processed in 151 pools of up to 8 ticks per pool and classified to species using morphological keys. Virus screening was performed by a combination of virus isolation, RT-PCR and amplicon sequencing.

**Results:** The tick species sampled included: *Rhipicephalus pulchellus*, *Hyalomma truncatum*, *Amblyomma gemma*, *Amblyomma lepidum*, *Amblyomma hebraeum* and *Boophilus annulatus*. Bunyamwera- (2), Ndumu- (1), Semliki forest- (2), Thogoto- (1), and West Nile (WNV)- (2) virus strains were identified.

**Conclusion:** The highest prevalence of virus-positive ticks was recorded in warthogs. Viruses were only isolated from giraffe (Bun-