OUTBREAK OF *STREPTOCOCCUS EQUI SSP. ZOOEPIDEMICUS* POLYSEROSITIS IN TWO LLAMAS HOUSED WITH HORSES IN SOUTH TYROL - ITALY

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Introduction: *Streptococcus equi ssp. zooepidemicus* is known as an important pathogen in CAMELIDS in America. It has been associated with bacterial septicaemia in alpacas and llamas and it is reported as a commensal of the flora in the gastrointestinal tract of CAMELIDS in South America. *S. equi ssp. zooepidemicus* is also postulated to be the etiologic agent of alpaca fever leading to a fibrinopurulent polyserositis. Alpaca fever causes anorexia, signs of depression, fever, and low morbidity but high mortality rates. Horses are known to carry *S. equi ssp. zooepidemicus* in the nasopharynx, thus the interspecies transmission of this organism is suspected.

Material and methods: In 2009 two carcasses, one of a 2-month-old male and one of a 6-month-old female llama, were presented for necropsy with a 5-day history of fever as high as 41°C, recumbency, colic, tense abdomen, and anorexia. Death occurred 5-6 days after symptoms had been observed. Importantly, the two foals were used to be housed with other 100 llamas and 20 horses. The pathologic lesions included in both cases significant quantities of fibrinopurulent exudation of the thoracic and abdominal cavities along with fibrinous pleuritis, pericarditis, severe pneumonia, pleuritis, perihepatitis, and petechial hemorrhages of the serosal surfaces of the pleura and the heart. A diagnose of *S. equi ssp. zooepidemicus* polyserositis was provided, based on the aerobic and anaerobic culture of samples obtained from all organs that yielded a pure growth of the mentioned pathogen.

Discussion: Owing to the suspicion of a possible interspecies transmission of *S. equi ssp. zooepidemicus* between horses and CAMELIDS, nasal swabs were collected from 14 horses housed at the same farm. Only one of them was identified as positive for this pathogen. There had been no evidence for an outbreak of a *S. equi ssp. zooepidemicus* infection at the farm during the past few years. The cause of the described outbreak could not be determined. We suspect a transmission of the bacterium from newly acquired animals from South America to the newborn llamas, as a result of a probable recrudescence of a carrier state during transport.

Conclusion: The typical feature of multispecies farming in South Tyrol (Italy) and the relevance of a possible interspecies transmission of this pathogen from horses to llamas justify and require further investigation.

Keywords: llama, CAMELIDS, *Streptococcus equi ssp. zooepidemicus*, polyserositis