

Short Communication

PROMINENT PRESCAPULAR CASEOUS LYMPHADENITIS ABSCESS IN AN ADULT FEMALE DROMEDARY CAMEL: A CASE REPORT

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Caseous lymphadenitis (CLA) or pseudotuberculosis caused by *Corynebacterium (C.) pseudotuberculosis* is one of the most important bacterial infectious diseases in livestock. It can affect sheep, goat, cattle, camelids and equids and is characterised by abscessation of one or more superficial lymph nodes and sometimes also causes severe alterations in internal organs including mammary gland (Wernery and Kinne, 2016). It is wide spread in Old World camels (OWCs) and has been reported from all camel rearing countries including in the Australian feral dromedary population. The pathogen has also been isolated from abscesses of New World camels (NWCs, Wernery *et al*, 2014), the two South American tame camel species, the llama and guanaco in their countries of origin, but also in the USA and especially in Europe, in which they were introduced as companion animals. The infection is spread by inhalation, ingestion or directly through wounds.

Morbidity of CLA may reach more than 90% in dromedaries in East African countries, whereas

mortality in Bactrian camels was reported to be 28% (Chen *et al*, 1984). The mortality rate in dromedaries is unknown. Both, young and adult camels are affected by the disease.

A 14-year-old pregnant dromedary camel in poor condition weighing only 270 kg was necropsied at CVRL after it was euthanised on human grounds. It displayed a 20 cm in diameter large abscess in front of the right shoulder area (Fig 1). Multiple abscess fistulations (Fig 2) were observed which were connected to one large abscess containing necrotic material. This large abscess was most probably the primary abscess starting from the prescapular lymph node. Often different bacterial species are isolated from such multiple abscesses (Wernery *et al*, 2014). From the present case *Trueperella pyogenes*, *Streptococcus equi* sp. *zooepidemicus* and *C. pseudo tuberculosis* serotype 1 were cultured in high numbers from the abscesses. There were no internal lesions of CLA found.

The virulence of the pathogen is attributed to its exotoxin phospholipase D (PLD) which is produced



Fig 1. Large CLA abscess of the prescapular lymph node.



Fig 2. CLA prescapular lymph node abscess displaying multiple abscess fistulation.

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by all *C. pseudotuberculosis* strains. Two biotypes exist: ovine/caprine (serotype 1 or biotype ovis) and equine/bovine (serotype 2 or biotype bovis) and both have been identified in dromedaries using the nitrate reduction test. Hence, CLA vaccines, which were developed at CVRL (Berlin *et al*, 2015) should include both serotypes.

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