Pseudocowpox



What is pseudocowpox and how is it spread?

Pseudocowpox infection is common in cattle in Australia, although it causes few significant problems in herds. People contacting infected materials, including the teats, contaminated teatcups, udder cloths or suckling calves may develop localised lesions similar to those seen on the teats of cattle (i.e. 'milkers nodules').

Pseudocowpox is a virus of the paravaccinia group (closely related to 'scabby mouth' of sheep). Calves suckling teats of cows with pseudocowpox may develop stomatitis and muzzle lesions (bovine papular stomatitis) (Snowdon 1982).

Acute infection may be most apparent in young cows after calving or cows introduced to a herd that has the virus infection. Spread of infection through the herd can be relatively slow. Immunity to pseudocowpox is short lived, lasting four to six months, so infections can recur in individual animals and be a chronic problem in some herds.

In cattle, early acute lesions are localised, red, oedematous and painful. Affected animals resent being milked. Small, raised, circumscribed lesions (papules) may develop in a couple of days and form rough dark-red centres. In some cases a reside forms in the centre of the papule, although in contrast to bovine herpes mammillitis, this is rare with pseudocowpox. When the crusts fall away they leave a characteristic ring or 'horseshoe' shaped scab that joins with scabs of adjacent lesions. The lesions usually heal without scarring in 3-6 weeks if there is no interference. Healing can be protracted in milking cows if milking removes the scabs leaving reddened bleeding areas on the teats. Bacteria may infect lesions near the teat-end, enter the teat canal and cause mastitis.

Clinical diagnosis is based on the observation of characteristic lesions in or on the hands of people. The cause can be readily confirmed, and differentiated from herpes virus, by submitting biopsy samples for virus isolation.

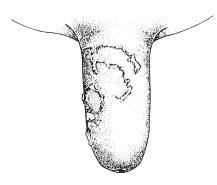
There is no specific treatment. Spread of infection can be minimised by milking infected cattle at the end of the run, wearing gloves in the milking shed, and thoroughly washing teats, udders, hands and milking equipment

Cowpox, which also causes teat lesions and is a member of the same family of viruses, is rarely recognised in Australia and it is likely that many of the early cases were actually pseudocowpox (Stevenson and Hughes 1980).

Key papers

Snowdon WA. Papular stomatitis. In: Post Graduate Foundation in Veterinary Science Proceedings 60, Advances in Veterinary Virology, University of Sydney, 1982:77-80.

Stevenson WJ, Hughes KL. Cowpox. In: Synopsis of zoonoses in Australia, Commonwealth Department of Health, Australian Government Publishing Service, Canberra 1980:24.



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