TRAUMATIC KERATOCONJUNCTIVITIS IN A CAMEL (CAMELUS DROMEDARII) ASSOCIATED WITH ACTINOMYCES PYOGENES

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An adult six-year old female camel was observed at the 01 Maisor farm, Laikipia district in Kenya, with a corneal opacity of the right eye. According to the owner, the animal had had the opacity for about two weeks. Upon examination of the affected eye, a thick greenish pus discharge was emanating from the eye. The animal appeared in pain with profuse lacrimation, blepharospasms, photophobia and squinting. The cornea was cloudy and both the conjunctiva and the cornea were severely inflamed. The lower conjunctiva was found to have a traumatic ulceration near the eyelid measuring 1 cm in length and 0.2 cm in depth. The wound edges were smooth and soft with no evidence of fibrosis but it was filled with the greenish pus. Pus was obtained using a sterile syringe and two organisms Actinomyces pyogenes and Staphylococcus were isolated.

Identification was done by the methods described in Bergey’s manual of Determinative Bacteriology (Buchanan and Gibbons, 1974) and in the Manual for the identification of Medical Bacteria (Cowan and Steel, 1965). Each of the isolate was inoculated subcutaneously into the the hind leg of four mice and four rats. After one week, the mice inoculated with A. pyogenes all developed severe abscesses from which the same organism was re-isolated. The other mice and rats did not develop any abscesses. Disc plate antibiotic sensitivity of A. Pyogenes was performed by inoculating the organism onto the surface of Sheep Blood Agar plates with a wire loop to obtain confluent growth. Mast Eugen S sensitivity discs (Mast lab. U. K.) were placed on each plate and the zones of inhibition were read qualitatively after incubation at 37°C for 24hrs. The organism was sensitive to gentamicin (10ug), tetracycline (25ug), chloramphenical (30ug), minocycline (30ug), erythromycin (15ug), sulphatriad (200ug) and ampicillin (25ug). It was resistant to cotrimoxazole (25ug), nitrofurantoin (200ug) and nalidixic acid (30ug). The wound was cleaned with a mild antiseptic solution and tetracycline ointment was applied for five days. The corneal opacity cleared after two weeks and the wound was almost completely healed.

Discussion

Actinomyces pyogenes is the most frequently recovered pyogenic bacteria of domestic ruminants and has been found as a common inhabitant of normal mucosa of cattle without evidence of clinical disease (Brunner and Gillespie, 1966). It has also been isolated from a variety of pyogenic disease conditions in sheep, goats and pigs (Smith and Reynolds, 1971). Probably it is the first report that the the isolation of A. pyogenes was associated with trauma, as a cause of keratoconjunctivitis in the camel. The Staphylococcus spp. was a likely