

Brief Communication

ISOLATION OF NEISSERIA OVIS AND
A COLESIOTA CONJUNCTIVAE-LIKE ORGANISM
FROM CASES OF KERATO-CONJUNCTIVITIS IN REINDEER
IN NORTHERN NORWAY

Eye inflammation in reindeer seems to be a condition frequently observed in many reindeer herding areas. *Bergmann* (1912) reported outbreaks of the condition in Scandinavia already at the beginning of this century, and it spread like a contagious disease. The aetiology seems to be complex, as *Bergmann* found many different kinds of bacteria in his material. In a recent publication, *Rehbinder* (1970) reported the occurrence of larvae of the reindeer nostril fly (*Cephenomyia trompe*) in affected eyes. In Norway, eye inflammation in reindeer has also been observed, although outbreaks of the disease seem to be rare.

However, in the late fall of 1974 several cases of kerato-conjunctivitis were reported in a reindeer herd in Finnmark. The herd was at the coast and on its way to the winter pastures. About 20 animals, calves and adult reindeer, were affected, on one or both eyes. Animals affected usually got lost in the dark, wet and cold weather of the season, according to the lapps. On visiting the herd on Oct. 22nd two clinical cases were examined. Case No. 1, a calf about five months old, had keratitis with perforation of the cornea, conjunctivitis and purulent discharge from its left eye (Fig. 1). The other eye was normal. Case No. 2, a female with a calf, had acute kerato-conjunctivitis on both eyes. The conjunctivae were swollen and hyperaemic, with beginning diffuse opacity of the cornea, with a few yellow spots in it (pus information). Samples from the affected eyes were taken on cotton swabs, two swabs from each eye. One of the swabs was put into Stuart's transport medium, the other was put in a sterile test tube for making smears. Control samples were taken from four healthy animals in the same herd.

The swabs were cultured on blood agar plates at 37°C for three days (aerobic, anaerobic and in 10 % CO₂), and on brom-

thymolblue lactose agar at 37°C for 20 hrs. Smears were prepared on glass slides and stained with Giemsa stain.

Neisseria ovis was cultured from the samples from the affected eyes. No growth of bacteria was obtained from the unaffected eyes.

In the Giemsa-stained smear from case No. 1 large amounts of a *Colesiota conjunctivae*-like organism were seen (Fig. 2) together with coccoid bacteria. Due to drying of the swabs, the smears prepared from the samples taken from the other animals were largely unsuitable for examination. These smears contained very little organic material, no cells or cell remnants, and *Colesiota conjunctivae*-like organisms were not found.

In late October 1975 several cases of the disease again occurred in the same reindeer herd. Treatment with a combined antibiotic-hydrocortison ointment was effective. At least two applications of the ointment seemed to be necessary (*Haraldstad* 1975). No samples were taken.

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- Rehbinder, C.*: Observations of 1st instar larvae of nostril fly (*Cephenomyia trompe* L.) in the eye of reindeer and their relation to keratitis in this animal. *Acta vet. scand.* 1970, 11, 338—339.

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Figure 1. Eye inflammation in a reindeer calf. Case No. 1.

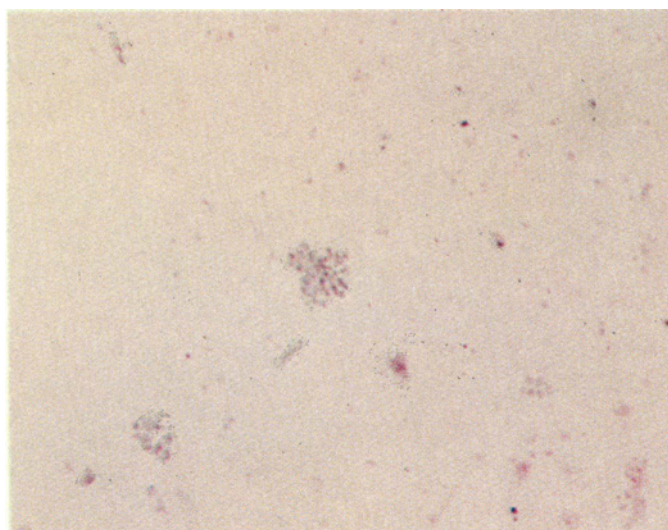


Figure 2. *Colesiota conjunctivae*-like organisms in a Giemsa-stained smear (4000 \times). Case No. 1.

