TISSUE MYIASIS IN SHEEP CAUSED BY LARVAE OF FLIES LUCILIA CAESAR (L.) (DIPTERA, CALLIPHORIDAE)

The described cases are the first finds of tissue myiasis in domestic animals caused by mass infestation with the larvae of flies of the family Calliphoridae in Czechoslovakia. They are also the first cases of primary myiasis in sheep caused by the species Lucilia caesar in Central Europe.

During the period of August and September 1973 tissue myiasis were found in two merino sheep at two small farms situated in south Bohemia in the foothills of Šumava at the altitude of 500—600 m. The disease occurred in very well-fed sheep (live weight 80 kg) with cropped tail.

According to anamnestic data the afflicted sheep stopped feeding, avoided other animals and lay down in the shade of leas-to. In the first case the animal ran a high temperature (41.5 °C), its pulse was quickened and showed a marked dyspnea, depression and torpidity. By general clinical examination a large number of larvae of different size was found in the vicinity of the anal aperture and vulva. A score of larvae was found in the vestibule of vagina, whose mucus membrane was reddish and very moist. Likewise the afflicted skin around anus was blood-shot, moistened and secretion had a typically putrid odour. Larvae were found in clusters or singly. Due to deteriorating clinical condition the sheep was slaughtered and its meat was disposed of as fodder. Macroscopically the interior organs showed no marked changes indicating another affliction.

In the second case the disease had similar symptoms, but was also accompanied by a mild colic. Larvae were found around anus and vulva and in the wool of glutal region, especially in places where the wool was contaminated by faeces and kept moist. Larvae formed clusters on the skin and burrowed deeper into epidermis producing round lesions with swelled edges. The whole inflammatory process was accompanied by exudation from injured areas and by putrid odour. After the wool was removed from afflicted areas the skin was cleaned by a tampon moistened with a mixture of alcohol and benzin and when dry treated by Chlorocin-spray preparation. The Chlorocin treatment was repeated several times and within 4 days both the local and general symptoms of the disease disappeared.


Cutaneous myiasis may originate in exposed ulcerous wounds of human beings, in animals they occur also in skin or hair contaminated by urine and faeces. In lambs and ewes they occur around vulva, anus and tail region, in rams they are to be found around foreskin. Decomposing processes take place in contaminated moist skin areas which attract flies of this genus to lay eggs in them, or larvae may also migrate over the skin from the contaminated lesion.

In our case the animals invaded were in a very well-fed condition, they were not weak as often reported in literature. The affliction was accompanied by such serious clinical symptoms that in the first case the sheep had to be slaughtered. In both cases described myiasis occurred only in sheep with cropped tail. We assume that due to this operation the animals were deprived of natural protection of anus and vulva against attacks of flies for which developmental conditions were exceptionally favourable in the hot summer 1973.

J. MINÁŘ, D. ZAJÍČEK, L. DVOŘÁKOVÁ and J. MALÁŠEK

Institute of Parasitology, Czechoslovak Academy of Sciences, Prague; State Veterinary Institute, České Budějovice; District Veterinary Station, České Budějovice