

SUBCONJUNCTIVAL DIROFILARIASIS IN A DOG

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Dirofilaria repens is a mosquito-borne parasite of domestic and wild carnivores such as dogs, cats, and foxes. The microfilaria develop in *Culex*, *Aedes* and *Anopheles* mosquitoes and are found in the blood and lymph spaces in the skin (Soulsby, 2005) Transmission takes place when a potential vector bites dogs or other hosts during a subsequent blood meal. The worms have been detected in the subcutaneous tissues of the body or in the subconjunctival space. A case of subconjunctival dirofilariasis in a seven year old dog is placed on record.

Case history and observation

A seven year old male mongrel dog was presented to the University Veterinary Hospital, Kakkala with subconjunctival swelling, discomfort, conjunctival congestion and lacrimal discharge. Detailed examination revealed the presence of peri-ocular nodule on the subconjunctival palpebral space.

Treatment and discussion

The peri-ocular nodule was extracted surgically under general anaesthesia and was found to contain thread like nematode parasite. On the basis of macroscopic and microscopic characteristics the worm was identified as an immature female *D. repens* and was about 13 cm long (Figure 1). The subconjunctival location, microscopical features of the worm and the epidemiological data supported the finding (Lucy Sabu. et al., 2005)

D. repens infection has been associated with

skin swelling, hyper pigmentation, subcutaneous granuloma containing adult worms and local pruritus or as an incidental haematological finding. Although canids are final host of *D. repens*, it also infect people (Lucy Sabu, et al. 2005) and aberrant migration of worm can cause subcutaneous, conjunctival and pulmonary nodules, which get confused with neoplastic tumor. Dirofilariasis involving *D. repens* in ocular, periocular and bulbar conjunctiva has been reported in human beings (Arvanitis, et al., 1997). Although the surgical removal of the worm is the sole recommended treatment, therapy using Melarsomine and Doramectin has been reported in dog for *D. repens* infections (Baneth, et al. 2002).

Conclusion

A case of subconjunctival dirofilariasis in a dog is reported.

References

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Figure 1: The Dirofilarial worm and microscopical picture of both ends



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