



Nicole Verhaar, DVM;  
Hanneke Hermans, DVM,  
DECVS;  
Eugene M.A. van Rooij,  
DVM;  
Marianne M. Sloet van  
Oldruitenborgh-  
Oosterbaan, DVM, PhD,  
DECEIM;  
Jos M. Ensink, DVM, PhD,  
DECVS.

Department of Equine  
Sciences, Faculty of  
Veterinary Medicine,  
Utrecht University, Yalelaan  
112, 3584 CM Utrecht,  
The Netherlands

n.verhaar@uu.nl

## FIVE CASES OF (PERI-)OCULAR HABRONEMIASIS IN THE NETHERLANDS

**Introduction:** In tropical and subtropical climates, infection of peri-ocular tissue by *Habronema* larvae is a recognized cause of conjunctivitis or dermatitis<sup>(1,2)</sup>. To the authors' knowledge, only three confirmed cases of habronemiasis have been described in Western Europe<sup>(3,4,5)</sup>, and it has not been documented previously in the Netherlands. The objective of this case series is to describe the occurrence of five cases of (peri-)ocular habronemiasis in the Netherlands, of which four date from the past two summers.

**Material and Methods:** Retrospective study. Case descriptions are based on data from the medical records.

**Results:** The diagnosis was based on the history, clinical signs and histopathologic examination of biopsy specimens. A granulomatous conjunctivitis/dermatitis and sulphur-like granules were present in all cases (figure 1). Histopathology showed an eosinophilic granulomatous inflammation, and three out of five (60%) samples revealed one or more nematodes on section (figure 2). Furthermore, a semi nested PCR assay for *Habronema* spp.<sup>(6)</sup> was performed on tissue samples of two cases. One case tested positive for *Habronema microstoma*. In all cases the treatment consisted of systemic ivermectin or moxidectin. Furthermore, treatment combinations of surgical excision, local corticosteroid and topical anthelmintic drugs were used. Treatment resulted in complete healing in four cases. The fifth case was refractory to treatment, but went into spontaneous remission after the onset of colder weather. Up to date, there has been no recurrence of the condition.

**Conclusions:** This case series suggests an increased incidence of (peri-)ocular habronemiasis in the Netherlands. This diagnosis should therefore be considered by equine practitioners in the Netherlands and in other Western European countries, when being presented with a granulomatous conjunctivitis/dermatitis during the summer months.



Figure 1: 18-year-old warmblood gelding with a habronemiasis lesion of the left eye.

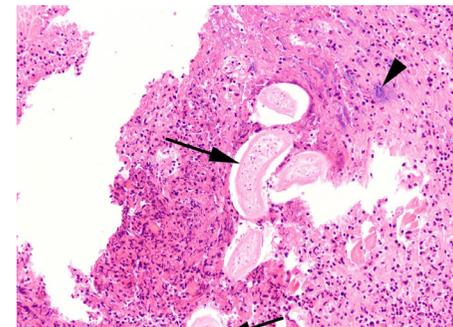


Figure 2: Histologic section of a habronemiasis lesion on the head of a 16-year-old draft horse gelding. Cross sections of nematodes (black arrow) and deposits of coccoid bacteria (black arrowhead), H&E stain.

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