Lynn Carta
ARS
USDA/ARS/PSI/NL Bldg 011A Room 165B
10300 Baltimore Ave BARC-West
Beltsville, MD 20705

ATIN: SUBMITTED:
PHONE (301) 504-8787 PRINTED: 2004-06-09 09:36:52
FAX: REQUEST NOREG-10222900
E-MAIL SENT VIA: Manual

REG Regular Copy Journal

DELIVERY: E-mail: cartal@ba.ars.usda.gov
REPLY: Mail:

THIS IS NOT A BILL.

NOTICE: THIS MATERIAL MAY BE PROTECTED BY COPYRIGHT LAW

----National-Agricultural-Library/-Document-Deliver-------
Citation Requested:

June 6 NAL  

Lynn Carta  
ARS, USDA, BARC-W  
Bldg. 011A, Rm 165B  
Beltsville, MD 20705

Date Not Needed After: 12/1/04


NAL Call Number: 41.8 V641  

I have read the warning on copyright restrictions and accept full responsibility for compliance.  
Maximum Cost: n/a

Lynn Carta  
Email: cartal@ba.ars.usda.gov

Phone: (301) 504-8787
Oral nematode infection of tarantulas

SIR. - We would like to report an oral nematode infection of Theraphosidae spiders, that is, tarantulas, recently identified from several collections in the UK and on mainland Europe.

Veterinary interest and involvement in captive spiders is not new (Frye 1986, Cooper 1987). Female spiders may live for over 20 years and be expensive to acquire. Theraphosids are also increasingly kept in zoological collections and involved in captive breeding programmes (Pizzi 2001). Brachypelma species (such as the popular Mexican redknee tarantula) are currently listed in CITES appendix II, and Poecilotheria species (Asian ornamental tarantulas) are likely to be added soon.

The problem described may adversely affect captive breeding programmes and any future efforts at reintroductions.

The infection initially manifests with anorexia, gradually increased lethargy, progressing to a huddled posture. Eventually death occurs several weeks, or even months, after signs are first noted. Macroscopically, a white discharge between the mouth and chelicerae may be noted, particularly during the later stages of infection (Fig 1). Microscopically, this consists of a mass of extremely small, motile male and female nematodes, less than 0.5 to 3 mm in length.

The disease has been noted in numerous captive-bred and wild-caught terrestrial and arboreal species from the Americas, Asia and Africa. The source of infection and mode of transmission are so far unknown, but collections with infections have reported spread of the infection between separate enclosures in the same room, once the infection is first noted. The nematodes have so far been classified as belonging to the Panagrolaimidae family (Phylum Nematoda). Histopathology has demonstrated secondaries, or possibly symbiotic, bacterial invasion as a complication. Attempts at treatment with different combinations of benzimidazoles and fluoroquinolone antibiotics have not appeared to prolong survival.

Other nematode species belonging to the family Panagrolaimidae have zoonotic potential, with human cases occurring as infections through deep wounds (Gardiner and others 1988, Geraert and others 1988). Large spiders, such as the Goliath bird-eater (Theraphosa blondi), may have fangs up to 2 cm long, and this makes secondary infection of bites a possibility.

We advise that, until the mode of transmission has been elucidated, veterinarians dealing with Theraphosid spiders in zoological collections institute a minimum quarantine period for newly acquired spiders, in a separate room, of at least 30 days. This should be prolonged in anoxic spider species, approaching ecdisis (molting), until resumption of normal feeding behaviour after ecdisis. Practitioners dealing with these species as pets should also be aware of this infection. Due to the zoonotic risk and unsuccessful therapies, euthanasia of all affected spiders is strongly advised. As described by Pizzi and others (2002), humane euthanasia is best performed with isoflurane in an airtight container, followed by immersion in 70% per cent ethanol to enable later histology if required. Euthanasia by direct immersion in alcohol, as commonly used by many entomologists, is not regarded as humane. P has observed sustained motility in tarantula spiderlings for over five minutes. Spider preservation in buffered formalin is not recommended, as cuticular hardening makes histological sectioning very difficult, even after softening in acid. However, preservation of nematodes is best done in 4 per cent formalin.

We are keen to hear of any occurrences of this infection, and the spider species involved, to further elucidate the transmission of this emerging problem.

Romain Pizzi, Department of Veterinary Clinical Studies, Royal (Dick) School of Veterinary Studies, University of Edinburgh, Easter Bush Veterinary Centre, Roslin, Midlothian EH25 9RG

Lynn Carta, Nematology Laboratory, Room 165B, Building 01A, USDA-ARS, Beltsville, MD 20705, USA

Susan George, North Western Laboratories, Lacefield House, 23 Mans Lane, Little Singleton, Poulton-le-Fylde (VJ 7L)

References


American Journal of Tropical Medicine and Hygiene 30, 586-589


FIG 1: Oral Panagrolaimidae nematode infection in a king baboon tarantula (Citharischus crawshayi)

Supply of POMs

SIR. - Since the publication of the recommendations of the Competition Commission and the Office of Fair Trading (OFT) (VR, April 19, pp 462-484, May 10, p 574), we are at last seeing the profession awaken and begin to respond. However, notwithstanding a legal challenge or an appeal to the European Court of Human Rights, it would appear that the recommendations will become law in the near future. We have all become somewhat accustomed over the years to the Government's attitude to the agricultural industry - which has all but brought it to its knees - and it would appear that the veterinary profession is next on the agenda. In fact, if truth were known, it is really a continuation of a process of deregulation of the professions that started in the late 1970s with the Monopolies Commission inquiry into professional advertising.

There are inherent problems with the recommendations submitted to the OFT. One aspect has been highlighted by Brian Arbuckle in his letter (VR, May 24, pp 667-668): that of animal welfare on bank holidays and at weekends. I have received comments from those who believe that the recommendations will have little impact on the profession, as clients will not be bothered to accept the offer of a prescription and pharmacies will not stock a significant amount of veterinary medicines. To a certain extent that may be true. However, the advent of supermarket 'in-store' pharmacies may have a greater impact in our 'one-stop shop' society. If a trickle becomes a flood, when will we all be in a decade? I personally do not want to see a profession where those with limited incomes are terrified of consulting a veterinary surgeon because the consultation charge is equivalent to the weekly state pension. Where will animal welfare be there? There may be some who think that I am dramatising, but, there again, a decade ago I did not think that I would see a healthy six-month-old cat being given a pre-op blood test before castration - all in the name of quality medicine.

The Veterinary Record, May 31, 2003
Coming this Summer...

The National Agricultural Library (NAL) will implement a web-based document request generation system. With this new system you will be able to:

- Create and submit requests directly from an AGRICOLA book or article citation record. Your contact information and the item citation information will automatically transfer to the request form.

- Create and submit requests for items not found in AGRICOLA via a web form. Again, your contact information will transfer to the form. You supply the citation information.

- Check the status of requests online.

This new system will significantly streamline NAL’s processing of your requests and enhance your ability to manage your document delivery needs. When the new system is implemented, NAL will stop accepting requests submitted via e-mail, mail, fax, or ARIEL.

Additional information will be mailed to you closer to the implementation date. If you have any questions, contact the Document Delivery Services Branch at: 301-504-5717 or access@nal.usda.gov.

June 2004