

botulinum intoxication was made.

There is no known effective treatment for botulism, supportive care being the main provision. Attempts were made to reduce the amount of toxin that could be absorbed from the gastrointestinal tract by intubating the horse orally and administering a mixture of mineral oil, magnesium sulphate, and activated charcoal.

The mare deteriorated and progressively spent more time recumbent. After eight hours she could no longer rise. Inability to rise in horses with botulism is invariably associated with a grave prognosis, and the mare was euthanized. At post-mortem there were no gross nor microscopic lesions, which is consistent with botulinum intoxication. Mouse inoculation and protection tests on gastric contents (collected ante-mortem) and large bowel contents (collected post-mortem) confirmed the presence of significant amounts of botulinum toxin Type C.

Recommendations were made to stop feeding silage, since this was suspected to be the source of the toxin,

and the owner promptly did this. Nine days after changing the feed, however, another horse developed clinical signs of botulism, and concerns were raised as to whether the silage had been the source of the toxin. This horse recovered over a three week period.

A search for the alternative sources of the toxin revealed the likely source to be the sand and dust in the bottom of the feed trough, from which only hay had ever been fed to the horses. We do not know whether this is a common source of botulinum toxin, as it has never been recorded before. A toxicological and microbiological survey is currently underway of feed troughs in the area. A full report will follow as soon as these results are available.

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Alberta

Mycoplasma arthritis in feedlot cattle

Arthritis due to *Mycoplasma bovis* continues to be a cause of lameness in feedlot cattle. In one commercial feedlot in Alberta with a capacity of several thousand head, there was, in the fall of 1987, an unusually high incidence of animals affected with lameness associated with swollen joints clinically and fibrinous synovitis at necropsy. *M. bovis* was isolated from a high percentage of affected joints and the respiratory tracts of some of the affected cattle.

The disease is characterized clinically by a progressively worsening fibrinous synovitis and arthritis involving usually the large joints such as stifle, carpal, and elbow. The disease does not respond to antibiotic therapy and appears to be associated with the occurrence of respiratory tract disease in affected animals several weeks previous to the onset of lameness. Most animals with obviously swollen joints and severe lameness due to this infection develop secondary complications associated with prolonged recumbency. They also lose considerable body weight because they are reluctant to walk to the feed and water supplies on a regular basis. It is possible that *M. bovis* is associated with acute undifferentiated respiratory tract disease in feedlot cattle and that subsequently the *M. bovis* spreads from the lung hematogenously to the synovial membranes, causing a severe fibrinous synovitis. The disease can be reproduced experimentally by inoculating *M. bovis* intravenously into calves. Calves vaccinated with an experimental *M. bovis* vaccine are

protected against experimental challenge with the pathogen (1,2). Thus, an effective vaccine could potentially reduce the incidence of both respiratory tract disease and arthritis due to mycoplasma infection.

- References: 1. Chima JC, Wilkie BN, Ruhnke HL, Truscott RB, Curtis RA. Immunoprophylaxis of experimental *Mycoplasma bovis* arthritis in calves. Protective efficacy of live organisms and formalized vaccines. *Vet Microbiol* 1980; 5: 113-122.
2. Chima JC, Wilkie BN, Nielsen KH, Ruhnke HL, Truscott RB, Maxie G, Chick B. Synovial immunoglobulin and antibody in vaccinated and nonvaccinated calves challenged with *Mycoplasma bovis*. *Can J Comp Med* 1981; 45: 92-96.

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Therapy:

This disorder causes no significant hemodynamic alteration in these individuals. One should attempt to identify and remove an underlying cause if possible.

References: 1. Tilley LP. Essentials of canine and feline electrocardiography. 2nd ed. Philadelphia: Lea & Febiger, 1985: 168-169.

2. Branch CE, Robertson BT, Williams JC. Frequency of second-degree atrioventricular heart block in dogs. Am J Vet Res 1975; 36: 925-929.

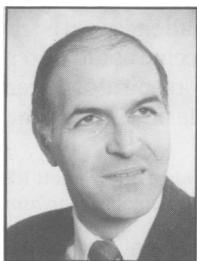
LEGALLY SPEAKING

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Professional Discipline and the Veterinarian's Rights

Lorne E. Rozovsky, Q.C.

Three Legal Threats



There are three potential legal threats against veterinarians.

The first is the civil suit. This action is brought against the veterinarian by a client who alleges either negligence, or breach of contract. It could also be brought by anyone with whom the veterinarian has contact, a supplier for unpaid accounts, or a neighbor for property damage.

The second legal threat is a criminal prosecution for a breach of the Criminal Code, or for one of the many federal or provincial statutes or regulations, or municipal by-laws which affect veterinary practice. The allegations may be as serious as an offence under the Narcotic Control Act or breach of a municipal health ordinance.

The third threat is that of disciplinary action by the provincial veterinary discipline body. It is this legal threat that is most often ignored, since it is frequently regarded not as a legal proceeding but as an inside meeting of peers.

In fact, it is this third possibility which is likely to assume greater importance over the next few years. There has been a growing trend for the public to demand that the self-governing professions take a more active role in the discipline of their own members.

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Clients with complaints against veterinarians frequently have no grounds upon which to sue, do not have the money to sue or are not interested in suing. They do, however, want to complain. The provincial discipline body is their only recourse.

Even though an appearance before a veterinarian discipline board or committee may evoke less concern than an appearance before a court, the consequences may be far more serious. A simple reprimand may affect reputation and job opportunities. The removal of a licence to practice will end a career.

Complaints, therefore, to a discipline body must be taken very seriously. Great care and caution must be taken in obtaining legal counsel immediately in order to ascertain that every conceivable right of the veterinarian to self-defence is assured.

Prevention

There are two aspects to professional discipline. The first is that of prevention. Professionals are often not aware of the grounds upon which they can be disciplined. They often therefore, stumble into situations which may be regarded as unprofessional conduct. In many provinces it is not always clear as to what offences may bring professional sanctions. Nonetheless there are a number of sources to which the veterinarian should be referred.

The first source is the provincial act and regulations governing the profession. Any breach of this legislation may subject the veterinarian to both prosecution in the courts as well as disciplinary action.

The second, and in many ways, more important, is a provincial veterinary code of ethics. This code often requires interpretation. To obtain this in advance and at short notice is frequently difficult to obtain.