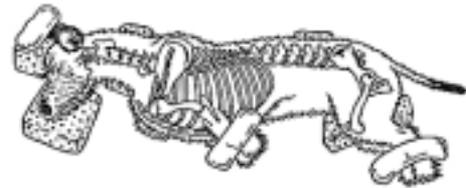
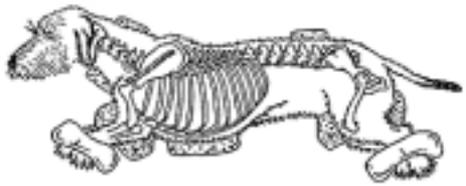
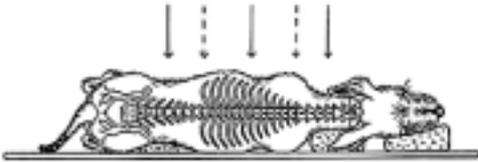
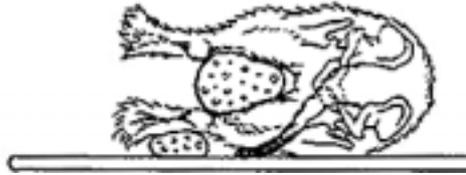


Generally known as Dachshund back, reduce the swelling around the spinal cord)

A Test for Dachshund Back?

Rosemary Sisson
Grendel Miniature Longs



Canine Intervertebral Disk Disease (IVDD) is a commonly misunderstood condition that afflicts dachshunds as well as various other breeds. Misunderstood? By some suburban vets who attribute almost any ailment of a dachshund to 'dachshund back', or who when they do have a genuine incident do not know how to treat it – "We'll have to put your dog down because it has wobbly legs". Misunderstood by animal rights activists who believe that unless the length of the back of the dachshund is reduced that the incidence will not be reduced (For example animal rights activists have forced a change to the FCI standard to reduce the length to height ratio). Even misunderstood by some breeders who are unaware of recent research indicating that it is an hereditary condition.

What is IVDD?

Between the spinal vertebrae are disks that cushion the vertebrae. The disks consist of a fibrous outer layer over a gelatinous interior. The likelihood of a disk rupturing varies from dog to dog, and is a condition not confined to Dachshunds. The upper edge of the disks is only one third the thickness of the lower edge. Therefore, in the event of a rupture, it is more likely to be the upper edge which will give way forcing the interior fluid out and towards the spinal cord. The spinal cord is thus placed under a great deal of pressure from this fluid and serious pain to the dog results. If the pressure is sufficient it can cause paralysis. If the condition is not treated quickly and appropriately, the spinal cord can be permanently damaged with resultant permanent paralysis.

Treatment normally involves the administration of an anti-inflammatory drug (to

and complete crate rest for up to 3 weeks to allow the disk to repair and no further fluid to escape. In more serious cases where the dog has no pain sensation in his rear paws, a myelogram should be performed in the first 24 hours to determine the affected disk/s prior to operating. Intensive Vitamin C therapy is also widely and successfully used in Australia to treat dogs suffering from IVDD.

Is it hereditary?

American researchers Ball et al in 1982 studied the pedigrees of 536 dachshunds. Of 31 progeny to one sire who had succumbed to IVDD, 19 of them (61%) also developed IVDD. Other European studies referred to below support this hereditary factor to the condition. Heritability has been estimated as high as 0.7.

Unfortunately, this can present difficulties for breeders as the average age for presentation of IVDD symptoms is about 5 years of age, by which stage of course, dogs and bitches have both been used in breeding programs.

If its mode of inheritance was simple recessive, it would be reasonably easy for breeder to devise a scheme to eliminate this disease. However it is believed to be polygenic (affected by many genes), and will therefore not occur in every generation and the average breeder will not be able to discern any pattern in its occurrence. This not only makes it difficult to eliminate but also confuses breeders as to whether or not it is hereditary.

When considering the heritability of IVDD, environmental influences must be taken into consideration. If a dog suffers a major trauma such as a car accident or a fall from a height, obviously any ruptured disks resulting from that accident cannot be attributed to inheritance.

European research

Recent research in Europe has focussed on disk calcifications presented in young dogs (from 12 months on). It has been observed that early calcifications provide some sort of indication to the likelihood of a dog developing IVDD.

A Norwegian study in 1992-1996 (Stigen) x-rayed the backs of 327 dachshunds aged between 12 and 18 months. 115 of these dogs returned for new x-rays 5 years later. Those exhibiting calcifications in the earlier x-rays were found to be 4 times more likely to develop IVDD than dogs without calcifications. Stigen also made an important observation that the calcifications often disappeared as the dog aged. This of course demonstrates why the age of the dog at the time of x-ray is critical.

A 1998 Finnish study by Lappalainen & Laitinen involving 221 dachshunds confirmed that calcifications do not increase with age. An as yet unpublished Danish study confirms that calcification in fact decrease with age.

Swiss research in 1980 (Havranek-Balzaretti) showed that if both parents had no calcifications, 30.4% of their progeny had calcifications at 12 months, while if one parent had calcifications the incidence was 56.4%. The worst case is if both parents have calcifications, 83.3% of the progeny will also have calcifications. This study also produced the following results: 49% of dachshunds with calcified disks became paralysed later while only 13% of "calcified disks" did not result in clinical

problems.

V Jensen of Finland in a continuing study has produced figures as high as 91% of progeny having calcifications when both sire and dam also have calcifications and 44% if only parent presented with problems. Jensen found that the heritability rate depends on how many calcifications are present in the x-rays.

Jensen has also found that while calcification can appear as late as 24 months, they can also start disappearing from the age of 18 months. The optimum age for x-rays is therefore around 18 months of age, and preferably before breeding the animal.

None of the research has produced any correlation between length of back and incidence of calcifications.

Where is all this heading?

The Danish and Finnish Dachshund clubs are already co-operating in a scheme to x-ray dachshund backs prior to breeding. If when x-rayed the dog has no or one calcification it is considered to be 'fit for breeding', while if it has 4 or more, the recommendation is that it should not be used for breeding. They use 3 x-rays taken while the dog is under anaesthesia and the spine and neck are as straight as possible.

For us, it means that in the future we may well have a means to reduce the incidence of IVDD in dachshunds. This will relieve us of pressure from animal rights activists, enable us to honestly say to buyers of our dogs that we have done all we can to reduce the likelihood of the dog developing IVDD, but most importantly, our dogs and those we place in homes will be much less likely to suffer this debilitating condition. It is hoped also, that other breeds susceptible to IVDD will also be able to benefit.

(Compiled largely from material supplied by Silja Lindh, Kennel Mokomakin, Finland)

Vitamin C Treatment for Prolapsed Discs

One health problem some Dachshunds seem prone to is prolapsed disc. This is the result of discs in the vertebrae breaking down. The symptoms are that the dog can't stand or walk on it's back legs and drags itself around. The age prolapsed discs seem to occur is between the age of 5 to 7 years. We don't know why some Dachshunds are affected by this problem and others aren't.

In the past the dog may have been put down but since 1983 we have had great success in getting the dog back up and able to lead a happy life for many more years. The late Dr W Hood did years of research and treatment using Vitamin C and presented this information to a Dachshund Club of NSW meeting in 1983. I was the first one to have to use the information given at the meeting, as my dog went down one month later. Using this treatment she recovered within 5 days and lived until she was 13.

Following is part of Dr Hood's letter explaining the treatment. The letter was written on 16.1.1985.

"I first decided to try out this treatment, after reading "Vitamin C and the Common Cold" by Linus Pauling. In the book he talks about how at Baylor College, which is in either Dallas or Houston, they were using large doses of Vitamin C to avoid surgery in quite a number of human patients. I tried it out in conjunction with long acting corticosteroids and cage rest and was amazed at how quickly most of the dogs recovered compared to corticosteroids and cage rest alone. Most of them went from dragging their back legs to up and walking in four to seven days. After these dogs are discharged from hospital I recommend they be given Vitamin C tablets, 500mg morning and night for life. If this maintained we rarely have a relapse.

The use of Vitamin C intravenously (I recommend 1000 mg daily) works best when given as soon as possible after the injury has taken place. In older cases, which have been going on for a few weeks the response is not so dramatic".

The letter concludes.....
"If you are showing this letter to your Vet the dose of Vitamin C I use is 1000 mg intravenously daily for 7 days. It comes as 500mg/ml for intramuscular or subcutaneous injections. Even though it is not recommended for intravenous use I have been doing so now for nine years without any adverse side effects. In conjunction with this I use a long acting corticosteroid (any brand OK) and cage rest."

Since Dr Hood started this treatment we have discovered an alternative to the Vitamin C tablets which is called Ester C. Ester C has no ascorbic acid.

There is an American web site which explains back problems in detail <http://samw.home.attbi.com/dachback/> Some of the information I have given also appears on this site.

If anyone would like a full set of notes on Vitamin C and Ester C e-mail me at rose@eisa.net.au or by phone on 0407 090 105.

Sue Rose

Nasus Dachshunds (Standard Smooth)