

Facial Nerve Paralysis

Contributed by Myra Ehrman, RN, BA, BS, MScN

Original Article Written by Myra Ehrman, RN, BA, BS, MScN, on behalf of the Health Education Committee, CKCSCC. Originally Published in The Cavalier King Charles Spaniel Club of Canada Newsletter, "Quotes", in May, 1997

A club member's dog developed sudden paralysis of the facial muscles. The medical term for this is Cranial Polyneuropathy - facial/vestibular. The dog was taken to a specialist for assessment.

The report to the CKCSCC Health Education Committee states the most common cause is an acute nerve degeneration from unknown factors. Other possible causes include underactive thyroid function, overactive adrenal glands, infectious and immune reactions, and tumor factors that affect nerve function. The onset of the condition can be quite sudden.

Symptoms include sudden dysfunction of the nerve or receptor - and the actual symptoms will depend on the area that is involved. The owner may observe the dog is unable to close an eyelid or move the lip or ear. If an ear is affected, it is often dropped lower than the one on the other side because of loss of tone to the affected muscles. If an eye is affected, it may tear excessively from constant exposure, although apparently the dog is able to periodically retract the eyeball (draw it further back into the head) to keep it moistened. The nose and cheeks do not move on the afflicted side, and the lip may even be seen to be drooping. It is possible for saliva to drip from the affected side and for food to collect between the teeth and the lips. Taste may be absent, and rarely spasms of the facial muscles may be seen.

Tests recommended to aid with diagnosis include: supportive laboratory testing, such as serum chemistries, complete blood count (CBC), endocrine studies, nerve conduction studies, auditory testing, electromyography (evaluating muscle function), etc.

People may experience one-or two-sided facial nerve paralysis; the disorder is known as Bell's palsy. In dogs, adult dogs, notably Cocker spaniels, may be affected. The facial paralysis is frequently permanent, and no therapy has been identified to alter the disease process. Artificial tears may have to be applied regularly if dry eye is a problem. It is thought the animals can continue to live comfortably despite this disorder.

An Investigation Into The Cause And Most Successful Treatment Of A Group Of Symptoms, Particularly A Stiff Jaw And Swelling Head, In 32 Cases Of C.Kc.S.

© Vera A. Darby 1st November 1995, Reprinted with permission, per letter to Myra Ehrman from V.A. Darby, dated 18th January 1997

This investigation was begun by Anne East and Vera Darby in July 1994 after hearing of this group of symptoms occurring in some puppies. Two puppies out of a litter of eight contracted a serious illness which began with them developing swollen heads and stiff jaws. The information which we have received tells us that this illness can occur in most pure breeds of dog and also cross-breeds. The 32 cases in this report have two things in common. They are all Cavaliers and they all suffered from head swelling and stiff jaw syndrome. Frequently two forms of the illness occur, often in the same litter, suggesting a close link between them. Both forms produce swollen heads and stiff jaws, but other symptoms and, above all, the end results, differ. The more rare form seems to be typical of eosinophilic myositis, leaving the puppy with a gaping jaw which never closes properly. In these puppies the skull remains flat but often the back or leg muscles become affected and the quality of life is greatly reduced. The more common type is similar to the form of cranio mandibular osteoarthropathy known to be prevalent among West Highland White terriers. This leaves the jaw in Cavaliers fully recovered and the mouth usually correct, but causes the head to go domed or pointed on top and very shrunken at the sides. In this latter type, there appears to be no muscle wastage. The ears can be lifted high and the back and leg muscles remain unaffected, but the skull does not grow as normal, being often left small in proportion to the

rest of the body. Usually the eyes remain sore and affected, often bloodshot and prone to ulcers throughout life.

Typically the vet first suspects an allergy or diagnoses 'puppy head gland disease', which often causes problems in the early stages. The vet treats the head gland disease with antibiotics or it goes away on its own, and everyone thinks the problem is over until the symptoms return with renewed vigour. Unfortunately it seems apparent that the underlying problem is a fault in the immune system for which all cases need prednisolone or a similar steroid treatment for immediate survival. It is very important that the owner should be aware that steroids treat auto-immune disease by temporarily suppressing the dog's immune system to prevent it attacking its own cells. This means that dogs on this treatment should be isolated as far as possible from other sources of infection. For example, it is best to keep the dog at home during this period and away from strange dogs. Both types of the illness progress to poor hair growth, poor pigment and blood abnormalities. Typically the dog dies before maturity.

All the information in this report is compiled from the questionnaires, letters and veterinary records as provided by dog owners. Any opinions expressed or notes provided are theirs and not necessarily those of the compiler of this report.

As enquiries came in, it was found that some dogs apparently displayed these symptoms only in adult life. There appear to be two schools of thought among the vets who treat these affected dogs. Some vets believe that all these symptoms are unrelated and should be treated independently as they occur. Some vets believe that all the symptoms are part of one problem, almost certainly an immune system related problem, which causes the dog to display these different symptoms at different times. A careful consideration of the symptoms presented in this report, together with the treatment and response evoked, would seem to indicate that vets who treat according to the latter opinion have the most success.

The possibility has also been investigated that low blood platelet counts in certain dogs may be a causal factor or an indicative factor of this disease. However, it is obvious that blood platelet counting of dogs as a routine exercise before mating would be impossible, as the skill and equipment needed are not generally available and test results are uncertain. We continue to monitor this research, however, and have contributed our information to work going on in Sweden, Finland and the USA. Research is also being carried out in the UK as well as in Vienna and Sweden into a possible link between some forms of heart disease and auto-immune disease. Certainly, we have been able ourselves to identify that those blood lines which appear to have produced dogs sensitive to auto-immune disease have also produced dogs who died very young from heart failure.

It seems possible that the affected puppies in this survey first showed adverse symptoms when their immune systems were strongly challenged. In the usual way, this first challenge may be the stress of moving home and/or the routine vaccination. There is evidence here, however, even in this small sample, that a few puppies meet their first challenge quite independently of vaccinations. An explanation is also needed for why adult dogs which have previously withstood routine vaccinations and other challenges to their immune system suddenly apparently react to a challenge in adult life. Since our last report was published, the response from the major vaccine companies has been helpful and interested. Intervet UK have also given financial support towards this research, for which we are very grateful. Financial support has also been given by the breed clubs and many caring individuals who have raised money by their own efforts.

Our thanks are also due to the great army of veterinary practitioners who have given such devoted hours of caring to these sick Cavaliers, and in so many cases have produced full, clear records on the puppies in their care. A copy of this report has been sent to them in gratitude.

The survey continues. More questionnaires are being requested and received. If anyone has a dog affected like this, they are requested to complete a simple questionnaire in time for the next report. Meanwhile it is hoped that these results may be of use to those who are attempting to help dogs and further the understanding of this group of symptoms. The work is voluntary and unpaid. There is no charge for the survey. The findings are offered in the hope that they will be received with the good will with which they have been compiled. The only aim of the contributors is to help Cavaliers.

Our very best wishes go to all who care for these beautiful dogs.

Note from Myra Ehrman: More detailed findings were not reproduced here for purposes of space..

Mrs. Darby also included a copy of a letter from Virginia Luis Fuentes MA VetMB CertVR DVC MRCVS, RCVS Specialist in Cardiology. Ms. Fuentes is a veterinarian at the Department of Veterinary Clinical Studies, Royal (Dick) School of Veterinary Studies, The University of Edinburgh, Small Animal Clinic, Summerhall, Edinburgh, United Kingdom, EH9 1QH, and has undertaken further research. Based on the information forwarded to her by Mrs. Darby, Ms. Fuentes identified three separate problems in a response dated 6 March 1995:

- * the swollen head/stiff jaw syndrome
- * thrombocytopenia
- * mitral valve disease (MVD).

Swollen head/ stiff jaw syndrome

Ms. Fuentes raised questions for further consideration. She wanted to know if detailed cell examinations from affected puppies were done, as well as head x-rays. She recommended skin scrapings be carried out on all affected dogs with skin lesions to rule out demodectic mange. Eyelid lesions should be photographed or preferably seen by a skin specialist. She wondered whether the head swelling only lasts for a short time, and what does the "domed" head look like. Ms. Fuentes says, "We cannot assume that the onset of the illness is inevitably associated with vaccination, as any disease with an age of onset of 8-16 weeks is likely to coincide with the time of first or second vaccination. In the same way, we cannot discount the possibility that there is a connection between vaccination and this condition, even if there is also an inherited component."

Thrombocytopenia

Thrombocytes are blood platelets; thrombocytopenia refers to having fewer platelets than is normal. Please refer to the November, 1995 "Quotes" article entitled, "Platelet counts in Cavaliers - What's Normal", in which the conclusion is that the Cavalier platelet size is larger than normal for dogs, and therefore is frequently misidentified and undercounted in automated lab analyses. Ms. Fuentes stated the significance of thrombocytopenia in Cavaliers is under dispute.

Mitral Valve Disease

Ms. Fuentes notes that MVD is common in Cavaliers, and that even in unvaccinated dogs, the valve leaflets degenerate over time, and the leaking of the valve leads to heart enlargement, and fluid building up in the lungs. Ms. Fuentes states, "I cannot honestly say that I have noted any connection between vaccination and increased rate of progression of MVD, nor have I ever heard any other cardiologists noting a connectionÖ

I would implore owners of affected puppies to seek referral to Veterinary Schools where there may be specialists in

dermatology, ophthalmology and immune-mediated disease. It would be so helpful to see the actual live animal....Equally, a full post mortem with histopathology should give us many answers. Sometimes this needs to be done by a pathologist at one of the veterinary schools, rather than by the ownersí own vet who performs such post mortems infrequently. This is an unusual condition, and maximum information would be gained if an experienced pathologist carries out the examination."

The Health Education Committee, CKCSCC, would appreciate being advised if we are seeing this syndrome which includes head swelling and stiff jaw in our Canadian dogs. Please contact Myra Ehrman at marcrest@sympatico.ca with details and copies of any medical studies done on your dog to date. Vera Darby also expressly indicated that she would be very interested to hear from anyone in Canada who experiences this syndrome or any other auto-immune disease symptoms in a Cavalier.

Disclaimer: Your veterinarian is the most qualified person to answer all of the questions you have about your pet's health. Nothing in this article should be construed as medical advice regarding any individual animalís condition.

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