

SAMOYED HEALTH REPORT 2014

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Samoyed Cause of Death /illness forms

The Samoyed has been recognised by the Kennel Club as a Category 1 breed for judges, ie a breed with no health issues which can be identified by a judge in the show ring.

As named collator of the Cause of Death forms over many years, I still receive a trickle of these through the post. In 2011, an online form was also introduced which it was hoped would make it easier for people to report their dogs' problems. This resulted in 8 replies shortly after the form was introduced but none since.

We are fortunate that Samoyeds are considered to be a relatively long – lived breed compared with some breeds, and it is not unusual for them to live to their mid – teens.

We now have Cause of Death information on 77 dogs – not a huge number after all these years, but a good sample nevertheless. These cases can be divided into categories. The most frequent cause of death was cancer, of many different types.

Untreatable cancer: 35 cases

Nasal – 2

Chest - 2

Lung - 2

Mouth - 2

Mammary - 9

Liver - 3

Spleen - 1

Bone - 3

Intestinal - 2

Stomach - 1

Thyroid - 1

Pancreatic - 2

Skin - 1

Unspecified – 3

The average age of death from cancer was 10 years (range 5 – 14). The youngest dogs to die had pancreatic and liver cancers. Both dogs with pancreatic cancer also had diabetes mellitus. In other breeds of dog, certain types of cancer can occur much more frequently than others, suggesting the possibility of an inherited predisposition eg haemangiosarcomas of the spleen in German Shepherd dogs. The wide variety of types of cancer above suggests that the Samoyed is not particularly prone to any one type. The most frequent tumour, mammary carcinoma, is fairly common in most breeds, and is often surgically treatable, although in some Samoyeds it appears to be very aggressive.

Other causes of death were:

- Kidney disease – 4
- Acute cystitis – 1 (linked with diabetes)
- Liver disease (other than cancer) - 6
- Lumbosacral disease (causing hind limb weakness / incontinence) – 10
- Blood disorders – 2
- Diabetes mellitus – 2
- Neurological disease (collapse / stroke) – 3
- Gastric dilatation - 1
- Autoimmune disease (SLE) - 1
- Intestinal obstruction – 1
- Heart disease – 1
- Whelping complications – 3 (2 hydrops)
- Acute pancreatitis – 2
- “Old age” – 2
- Unprovoked aggression – 1

I suspect that many Samoyeds die of “old age” and general debility, and their cause of death is not reported because it is not deemed “interesting”. However it would be nice if people did report it because it would give us an idea what percentage of the breed lives to a ripe old age with few problems. Diabetes mellitus is recognised as a common condition in Samoyeds and this data does support that as it was mentioned on the forms in 10 animals. Although not their actual cause of death, it presumably contributed to a decision to put the dogs to sleep. Fortunately nowadays many owners are prepared to treat the condition, which would otherwise be fatal.

The conditions which are of concern and should be highlighted are kidney and liver disease. All 4 cases of kidney disease in our survey were in young dogs. In 1984 Jansen and co-authors reported a hereditary nephritis in Samoyed dogs in Canada and in 1986 published details of its mode of inheritance which was shown to be X – linked dominant. Males are therefore much more severely affected than females, often dying before 1 year of age. Carrier females may show no signs except that they are likely to have proteinuria. In the UK there have been occasional reports of juvenile nephropathy in Samoyeds but they have not been proven to be the same condition as that reported above. However one recently reported case was fully investigated and the conclusion was that this young male did die of the same condition which was reported in Canada. This leads me to the conclusion that all Samoyed bitches should have a urine test prior to breeding and any which have excessive amounts of protein in their urine should not be bred from until this has been investigated. Chronic hepatitis was reported as a cause of death in 6 dogs and 2 of these were young animals. There are many causes of liver disease and failure, including congenital porto systemic shunts which have been reported in the breed. However the cases above were not typical of congenital shunts, because the dogs developed cirrhosis, which is longstanding scarring of the liver. Chronic breed – related hepatitis has been reported eg in Bedlington

terriers, Doberman Pinschers and West Highland White terriers but so far no specific type of liver disease has been identified in Samoyeds. Identifying a cause is difficult because by the time the dog is ill the changes are usually very advanced, therefore there is little that can be done to prevent or treat early cases unless they are identified as an incidental finding on a routine blood sample. Some cases of chronic liver disease are associated with pancreatitis and diabetes mellitus but these would probably be reported separately.

Corneal ulceration is often reported in older Samoyeds but does not cause death therefore was probably under reported in our survey.

It is interesting to compare these results with the report of the Purebred Dog Health survey published by the Kennel Club (KC). In that report, 223 deaths were reported and the most common cause of death was cancer but this corresponded to 26.5%, compared with 45% in our survey. "Old age" accounted for 21% in the KC survey and this suggests, as stated above, that death from "old age" has been under reported to me. Another major difference is that the KC identified 5% deaths from heart disease and 4% deaths from gastric dilatation / volvulus, which is surprising. Endocrine conditions such as diabetes and Addison's disease accounted for only 2.2 % of reports in the KC survey, but as stated above these diseases are often treated and may not have been reported to the KC. Combinations of diseases were reported in the KC survey at 9%, and 6% were "uncodeable", whatever that means. Liver and kidney failure were both reported at about 3% (7.8% and 5.2% in our survey).

Conclusions

The main cause of death, apart from old age, in Samoyeds is still cancer of many different types, the most common being mammary cancer. Older bitches should be monitored carefully for any unexplained lumps or swelling.

Liver and kidney disease levels should be monitored, especially juvenile nephropathy which is particularly tragic for pet owners. Urine testing is advisable prior to breeding.

Diabetes mellitus is a well-known condition in the breed, especially in older bitches which should be carefully monitored for any signs of the disease.

Pancreatitis may be associated with diabetes and can be avoided to some extent by keeping older dogs at the correct weight and avoiding feeding very fatty meals to older Samoyeds.

Breed Health Co-ordinators Symposium 18 /9/2013

I attended this event as I was working in the area. It was held at the Kennel Club building, Stoneleigh Park. It was not designed for vets but gave an interesting insight into the problems faced by dog breeders.

After registration the first lecture was given by Philippa Robinson, founder of the Karlton Index. She explained that initially she was critical of dog breeders who she felt were not doing enough to promote health. However she explained that after realising that many breed clubs were trying to work towards better health awareness, she created the Karlton Index so that these breeders could be recognised and rewarded for their efforts.

Samoyeds did not feature highly on her list of successful breeds. However during the discussion it was pointed out that the research she had done into breed health schemes was only by searching the internet and did not take into account breed clubs which tended to use newsletters or other non-computer based methods of communication. It did make me realise that communication is very important to allow the general public who may be buying puppies to assess how breeders are tackling health problems eg by breed websites.

The next lecture on Estimated Breeding Values (EBVs) was given by Amy Llewellyn of the Kennel Club. This subject was new to many dog breeders but was not new to me as it is quite widely used in the cattle industry to assess the genetic quality of an animal for different traits which are probably inherited although are likely to be polygenic ie involving multiple genes and not passed on by simple Mendelian genetic principles. Examples in cattle include calving ease, weight gain, meat or milk yield etc. Any trait which can be recorded numerically may be used to create an EBV and therefore it may be useful in dogs in assessing breeding potential for conditions such as hip dysplasia which have a numerical score. It uses a complex computer system which takes into account all the results from an animal's relatives eg a dog with a good hip score but whose littermates / parents or progeny were not so good will probably have a poorer EBV for hip score than a dog with a poorer score but whose relatives all had good scores. Confused? Yes it takes a bit of getting your head round, but in breeds in which a large number of related animals have been recorded it should help breeders to choose their breeding stock with more confidence. I was interested in the possibility of using this approach in dogs with heart disease.

The last lecture before lunch was about the Assured Breeder Scheme by Bill Lambert.

After lunch we were put into groups to discuss the common problems encountered by breed health co-ordinators. The main challenges identified were:

- 1 Admitting problems / confidentiality of results
- 2 Data access and management
- 3 Creating better public awareness of problems
- 4 Apathy
- 5 Breed politics

The next lecture was about Breed Watch updates and improvements given by Charlotte McNamara.

The last session was another group workshop which was aimed at finding some answers to the challenges identified earlier. This resulted in a lot of discussion especially about the use of Facebook eg whether breed pages should be open or closed. In general Facebook and other social media sites eg forums were regarded by most people as useful in passing on breed health information. However the issues that I see are mainly to do with people not discussing problems openly and in many breeds politics, and these will take time and understanding to overcome.

The next BHC Symposium is on 17/9/14.