## **Veterinary Information Sheet**



## **HEART**

**Heart Defects** - As a rule of thumb, cardiac defects that are severe, will usually affect the rate of growth early, ie. by 6-8 weeks of age. These individuals usually have to be put down. Cardiac defects that are detected at 6-12 weeks where the growth and weight of the affected puppy is the same as its litter mates, these puppies often will grow with few problems. Generally, where a defect is detected and the puppy is of good size etc; the puppy is checked every 3-4 weeks, preferably until 16 weeks of age. Some defects will correct, others may become more severe (not that commonly).

Overall the incidence of heart defects in the GSD is relatively low. Affected animals should not be bred with.

**Patent Ductus Arteriosis (PDA)** - Most common canine congenital heart defect. This condition is as a result of the persistence of the connection between the aorta and pulmonary artery. This normally closes off after birth once the lungs start being used. Affected dogs should not be used for breeding. Incidence in the GSD is low.

**Subvalvular Aortic Stenosi (SAS)** - Second most common canine congenital heart defect. This is considered inherited with a polygenetic mode of inheritance. Studies show that this develops post natally and can progress with maturity (ie. get worse with age). The stenosis or narrowing can be mild to severe. Mildly affected dogs may have no symptoms, moderately to severely affected dogs may have exercise intolerance or congestive heart failure, severely affected dogs present with either congestive heart failure, sudden collapse or sudden death.

**Atrio-ventricular Valve Dysplasia (AVD)** - Mitral valve defect. Not as common as the other defects seen. Affected dogs should not be bred with.

Persistent Right Aortic Arch Persistent Right Aortic Arch

Discussed under mega-oesophagus (INTESTINAL GROUP).

**Cardiomyopathy** - Affects older dogs, any age, most commonly seen over 5-6 years of age. For those that respond well to treatment, these dogs can have quite good quality of life for several years or longer, depending on other existing conditions. Some dogs (20-30%) do not respond to therapy and require almost immediate euthanasia.

Updated 26/7/14