

Greater Swiss Mountain Dog Club of America Breed Health Survey 2000 & 2001

GSMDCA Health Committee
October 2002

Table 8: Orthopedic Conditions						
Condition		Total	1-24 mos	25-43 mos	44-64 mos	65-157 mos
		n = 846	n = 213	n = 203	n = 215	n = 215
Ortho: Hip Dysplasia ^a	Frequency	77	4	12	25	36
	Percent	9.1	1.9	5.9	11.6	16.7
Ortho: Osteochondritis Dissecans ^b	Frequency	46	11	16	10	9
	Percent	5.4	5.2	7.9	4.7	4.2
Ortho: Panosteitis	Frequency	40	10	11	11	8
	Percent	4.7	4.7	5.4	5.1	3.7
Ortho: Anterior Cruciate Ligament Tear	Frequency	19	0	4	7	8
	Percent	2.2	0.0	2.0	3.3	3.7
Ortho: Patellar Luxation	Frequency	16	1.0	4	5	6
	Percent	1.9	0.5	2.0	2.3	2.8
Ortho: Elbow Dysplasia ^c	Frequency	37	3	12	12	10
	Percent	4.4	1.4	5.9	5.6	4.7
Ortho: Spinal Myelopathy	Frequency	4	0	0	0	4
	Percent	0.5	0.0	0.0	0.0	1.9
Ortho: Cervical Vertebral Instability	Frequency	9	0	1	3	5
	Percent	1.1	0.0	0.5	1.4	2.3
Ortho: Luxating Tarsus	Frequency	9	0	0	2	7
	Percent	1.1	0.0	0.0	0.9	3.3
Ortho: Intervertebral Disc Disease	Frequency	5	0	1	1	3
	Percent	0.6	0.0	0.5	0.5	1.4
Ortho: Crooked Tail	Frequency	31	9	8	5	9
	Percent	3.7	4.2	3.9	2.3	4.2
Ortho: Hypertrophic Osteodystrophy	Frequency	1	0	1	0	0
	Percent	0.1	0.0	0.5	0.0	0.0
^a Swissys with Hip Radiographs		n = 466	n = 37	n = 107	n = 149	n = 173
Ortho: Hip Dysplasia	Frequency	73	4	12	23	34
	Percent	15.7	10.8	11.2	15.4	19.7
^b Swissys with Shoulder Radiographs		n = 236	n = 23	n = 60	n = 82	n = 71
Ortho: Osteochondritis Dissecans	Frequency	36	11	11	7	7
	Percent	15.3	47.8	18.3	8.5	9.9
^c Swissys with Elbow Radiographs		n = 375	n = 24	n = 86	n = 126	n = 139
Ortho: Elbow Dysplasia	Frequency	36	3	12	12	9
	Percent	9.6	12.5	14.0	9.5	6.5

Condition		Total	1-24 mos	25-43 mos	44-64 mos	65-157 mos
		n = 846	n = 213	n = 203	n = 215	n = 215
Neuro: Bacterial Meningitis	Frequency	1	0	0	0	1
	Percent	0.1	0.0	0.0	0.0	0.5
Neuro: Hydrocephalus	Frequency	1	1	0	0	0
	Percent	0.1	0.5	0.0	0.0	0.0
Neuro: Seizures of Known Cause	Frequency	8	0	1	4	3
	Percent	0.9	0.0	0.5	1.9	1.4
Neuro: Seizures without a Cause (Idiopathic Epilepsy)	Frequency	39	2	8	18	11
	Percent	4.6	0.9	3.9	8.4	5.1
Neuro: Fly-Snapping Behavior	Frequency	16	0	5	5	6
	Percent	1.9	0.0	2.5	2.3	2.8
Eye: Entropion	Frequency	24	2	7	7	8
	Percent	2.8	0.9	3.4	3.3	3.7
Eye: Ectropion	Frequency	2	0	0	0	2
	Percent	0.2	0.0	0.0	0.0	0.9
Eye: Distichiasis	Frequency	164	35	35	41	53
	Percent	19.4	16.4	17.2	19.1	24.7
Eye: Cataracts	Frequency	36	0	5	13	18
	Percent	4.3	0.0	2.5	6.0	8.4
Eye: Progressive Retinal Atrophy	Frequency	1	0	0	1	0
	Percent	0.1	0.0	0.0	0.5	0.0
Ear: Hematomas	Frequency	4	0	0	2	2
	Percent	0.5	0.0	0.0	0.9	0.9
Ear: Chronic Ear Infections	Frequency	28	2	5	11	10
	Percent	3.3	0.9	2.5	5.1	4.7

Skin Conditions and Allergies

Table 10 shows the prevalence of skin conditions and allergies. Food and skin allergies were identified for about 5% of Swissys and nasal allergies for almost 2%. The prevalence of skin allergies varied across age groups ($p = .023$). Sixteen other skin conditions and allergies were identified: flea allergies (5), drug allergy (2), sebaceous cyst (2), calcinosis cutis, discoid lupus, ear allergy, fatty cysts, folliculitis, mange (undetermined type), and papilloma.

Cancers

Table 11 shows the prevalence of cancers. Mast cell tumors were the most common form of cancer, reported in almost 2% of Swissys in the survey. Most of the cancers appeared to show age-related patterns, with almost no reports in younger Swissys and almost all of the reports in the oldest quarter of the sample. Mast cell tumors, for example, were not reported in Swissys 64 months of age or younger, but were present in 7% of Swissys aged 65 months and older. The cancer data did not, however, meet the mathematical assumptions necessary to test statistically the association between cancer and age. For 20 Swissys who had had cancer, the median age of death was 114 months (9 years, 6 months). Eight other cancers were reported: thyroid (2), unspecified (2) and one each of hemangiopericytoma, renal, stomach mass, and testicular cancer.

Blood Disorders

Table 11 shows the prevalence of blood disorders. None were reported in more than 0.6% of Swissys. The causes of the 5 cases of anemia were reported as post splenic torsion (2), and one each of internal bleeding, old age, and reaction to prednisone. Only one other blood disorder was reported, a severe bloody nose.

Condition		Total n = 846	1-24 mos n = 213	25-43 mos n = 203	44-64 mos n = 215	65-157 mos n = 215
Skin: Chronic Hot Spots	Frequency	13	1	4	3	5
	Percent	1.5	0.5	2.0	1.4	2.3
Skin: Seborrhea	Frequency	3	1	1	1	0
	Percent	0.4	0.5	0.5	0.5	0.0
Skin: Demodectic Mange	Frequency	11	5	2	2	2
	Percent	1.3	2.3	1.0	0.9	0.9
Skin: Sarcoptic Mange	Frequency	1	0	0	0	1
	Percent	0.1	0.0	0.0	0.0	0.5
Skin: Pyoderma	Frequency	4	2.0	0	2	0
	Percent	0.5	0.9	0.0	0.9	0.0
Allergies: Food Allergies	Frequency	46	8	14	15	9
	Percent	5.4	3.8	6.9	7.0	4.2
Allergies: Skin Allergies	Frequency	39	5	17	9	8
	Percent	4.6	2.3	8.4	4.2	3.7
Allergies: Nasal Allergies	Frequency	16	2	7	4	3
	Percent	1.9	0.9	3.4	1.9	1.4
Skin: Calcinosis Circumscripta	Frequency	1	0	0	1	0
	Percent	0.1	0.0	0.0	0.5	0.0
Skin: Systemic Lupus Erythematosus	Frequency	1	0	0	1	0
	Percent	0.1	0.0	0.0	0.5	0.0

Endocrine and Liver Conditions

Table 12 shows the prevalence of endocrine conditions. Only one condition, hypothyroidism was reported in more than 1% of Swissys. The only other reported endocrine condition was one case of diabetes insipidus. Neither of the listed liver conditions was reported. Only 2 other liver conditions were noted, one each of hepatic torsion and liver failure of undetermined origin.

Kidney and Urinary Conditions

Table 12 shows the prevalence of kidney and urinary conditions. Cystitis and urinary incontinence were both common, reported for 8% and 11% of Swissys, respectively. The reports of urinary incontinence may be slightly exaggerated by 7 cases of what owners referred to as “puppy incontinence.” These may represent difficulty housebreaking rather than a health condition. However, because most of the cases were reported in older Swissys, this possible over-reporting has very little impact on the prevalence rate.

Because both cystitis and urinary incontinence are thought to occur more often in females than males, we also ran these analyses separately for the sexes. Our findings support this conventional wisdom, as cystitis was reported in 13.1% of females compared to 2.5% of males ($p = .000$) and urinary incontinence in 20.0% of females and 1.0% of males ($p = .000$). There was an age-related pattern of urinary incontinence in the females, reported in 34.7% of the oldest group of female Swissys ($p = .000$). As with other differences across age groups, interpretation is

difficult because age at onset of incontinence was not collected. Nine other kidney and urinary conditions were noted: kidney failure (2), and one each of ectopic ureter, pelvic bladder, scarred kidney, underdeveloped kidney, unspecified renal disease, urate crystals, and membranoproliferative glomerulonephritis.

Heart Conditions

Table 12 shows the prevalence of heart conditions. There was only one reported case each of subaortic stenosis and heart murmur.

Condition		Total	1-24 mos	25-43 mos	44-64 mos	65-157 mos
		n = 846	n = 213	n = 203	n = 215	n = 215
Cancer: Mammary Gland	Frequency	5	0	0	0	5
	Percent	0.6	0.0	0.0	0.0	2.3
Cancer: Skin and Subcutaneous	Frequency	7	0	0	0	7
	Percent	0.8	0.0	0.0	0.0	3.3
Cancer: Mouth (Viral Papillomas)	Frequency	4	0	0	0	4
	Percent	0.5	0.0	0.0	0.0	1.9
Cancer: Osteosarcoma	Frequency	1	1	0	0	0
	Percent	0.1	0.5	0.0	0.0	0.0
Cancer: Leukemia	Frequency	1	0	0	1	0
	Percent	0.1	0.0	0.0	0.5	0.0
Cancer: Lymphoma	Frequency	1	0	0	0	1
	Percent	0.1	0.0	0.0	0.0	0.5
Cancer: Hemangiosarcoma	Frequency	3	0	0	0	3
	Percent	0.4	0.0	0.0	0.0	1.4
Cancer: Cutaneous Histiocytosis	Frequency	1	1	0	0	0
	Percent	0.1	0.5	0.0	0.0	0.0
Cancer: Malignant Histiocytosis	Frequency	1	0	0	0	1
	Percent	0.1	0.0	0.0	0.0	0.5
Cancer: Mast Cell Tumor(s)	Frequency	15	0	0	0	15
	Percent	1.8	0.0	0.0	0.0	7.0
Blood: Anemia	Frequency	5	0	0	1	4
	Percent	0.6	0.0	0.0	0.5	1.9
Blood: von Willebrand's disease	Frequency	3	1	0	1	1
	Percent	0.4	0.5	0.0	0.5	0.5
Blood: Idiopathic thrombocytopenia purpura	Frequency	1	0	0	1	0
	Percent	0.1	0.0	0.0	0.5	0.0

Female Reproductive Conditions

Table 13 shows the prevalence of female reproductive conditions. Depending on the condition, it was analyzed for either all of the females or just for those who had been bred. Almost 20% of females who had been bred were reported to have failure to conceive or difficulty whelping. Almost 40% of females who had been bred required a Caesarean section. Note that this is simply a proportion of females who had been bred and does not, therefore, provide precise information about the proportion of litters carried to term that required a Caesarean section for delivery. There were 6 other conditions noted: false pregnancy (3), hormone-releasing cyst, infection from retained puppy, and uterine inertia.

Male Reproductive Conditions

Table 13 shows the prevalence of male reproductive conditions. Depending on the condition, it was analyzed for either all of the males or just for those who had been bred. Prostatitis was reported in more of the older than younger male Swissys ($p = .000$). About 9 percent of the males were reported to be sterile, but this sterility was only noted in the oldest quarter of Swissys in the survey. Three other male reproductive conditions were noted: torsed testicle during breeding, scrotal hernia, and epididimitis.