German Shepherd: VetScan Helps out an Old Vet

Contributing Author: Craig Tockman, DVM

Chang, a 9 year old neuter male German shepherd presented for acute onset vomiting. Chang, a retired military dog, had a history of degenerative joint disease in the coxofemoral joints and multiple other injuries, all having resolved. The patient had been evaluated one week earlier for an area of moist dermatitis at another veterinary facility. Chang was somewhat aggressive to that veterinarian and he was not fully evaluated. He was placed on carprofen and released with instructions to keep the area clean and to use antihistamines along with the carprofen.

Physical exam was not difficult and revealed a somewhat thin patient (BCS 4/9). The area of moist dermatitis was resolving with now only mild alopecia in the area. The owner indicated a rawhide had been given several days earlier and they were still giving the carprofen. The CBC showed a mild eosinophilia consistent with an allergic condition causing the moist dermatitis as well as a mild relative monocytosis. Chemistry results indicated significant elevation in ALT and ALP indicating some hepatic issue.

WBC	8.59		ALB	2.9
LYM	1.40	17.3%	ALP	559
MON	0.34	4.1%	ALT	1073
NEU	5.31	65.6%	AMY	502
EOS	0.92	11.4%	TBIL	0.5
BAS	0.12	1.5%	BUN	14
			CA++	10.7
RBC	6.3		PHOS	5.8
HGB	16.2		CRE	0.8
HCT	41.88		GLU	88
MCV	72		NA+	144
MCH	23.3		K+	4.8
MCHC	32.5		TP	6.7
RDWc	15.8%		GLOB	3.8
PLT	207			

Initial rule-outs included a reaction to the NSAID, non-specific hepatopothy or neoplasia. Paired bile acids, radiology and ultrasound were recommended but due to limited funds, only bile acids were accepted. This was the most logical choice based on the recent history of NSAID administration and no previous history of liver enzyme elevations (a panel had been performed 6 months earlier with no abnormalities noted). Since the patient had been fed that morning, a paired bile acid study was scheduled for the following day.

Bile acid results were within normal limits both pre- and post-prandial (Pre-prandial 9, post-prandial <1, normal 0-25 for both). GGT was also fond to be significantly elevated (31, normal 0-7). These results indicated adequate hepatocellular perfusion, no shunting of any sort and adequate hepatic bile flow. A presumptive diagnosis of acute hepatic necrosis or hepatopa thy secondary to NSAID administration was made. The NSAIDs were removed and the patient placed on Amoxicillin triydrate/clavulanate potassium at 375mg b.i.d., Denamarin s.i.d. and a hepatic diet.A recheck at 12 days indicated normal bile acids, ALP and GGT. ALT was slightly high at 122 (normal 10-118) but was also considered resolved. All CBC values also returned to normal. At 3 months post-incident, all values remained completely normal.

There are several important lessons from this case. First, we had no idea as to the internal status of the patient prior to the administration of the NSAID. Since the values returned to normal quickly after withdrawal of the medication, we can assume the liver was normal prior to giving the drug, but the lack of that information made diagnosis far more difficult. It is vital to have pre-medication blood values for any medication, but especially those with a known ability to cause idiosyncratic or other type reactions. Lack of blood tests also created liability for the original veterinarian as the NSAID could have been prescribed to a patient with a pre-existing condition.

The ability to perform bile acid analysis in the office rather than waiting for commercial lab results allowed a detailed discussion with the client in the exam room. This greatly improved client communication in a potentially litigious situation. ■