

Ultrasound Can Locate Dog Liver Shunt

Portosystemic shunts can cause neurological signs, including circling and disorientation.

By Jon Geller, DVM

Q. My 3-year-old female West Highland White Terrier recently had a cystotomy. The bladder stones looked unusual, so they were sent to the University of Minnesota for analysis. The stones were a mixture of struvite and ammonium urate stones. Her bile-acid test was 55, which is high but not high enough to prove that she has a portosystemic shunt. Our next step is an ultrasound. Aside from the stones, she has no clinical symptoms except for possibly head-pressing and some circling. She is presently eating the Royal Canin Urinary SO diet. Her coat looks good, she is playful and she has a great appetite. Please tell me what else we should do for her.

A. Your dog's case sounds a little complex to tackle electronically, but I'm glad to give you my thoughts. If she is in fact head-pressing and circling, she may be showing signs of a portosystemic (liver) shunt. This would correlate with the ammonium urate stones in your dog's bladder as a result of high ammonium levels in the bloodstream due to the fact that toxins are bypassing the liver by way of the shunt. High ammonium levels in the blood can cause neurological signs, such as head-pressing, star-gazing, disorientation, seizures or circling.

I would recommend proceeding with the ultrasound to identify the presence and location of a liver shunt. With successful surgical correction, the signs you're seeing should go away. On the other hand, if the ultrasound doesn't show anything, the stones could just be a coincidence and your dog may not need surgery after all.