

# Ectopic Ureter in the Siberian Husky

~ Jessica Breinholt, Kaylenberg Siberian Huskies ~

**NOTE:** As of January 2007, this article is no longer being actively updated.

## What is Ectopic Ureter?

While the Siberian Husky is a relatively natural breed with a low index of hereditary and congenital problems, one issue in particular seems to be affecting the breed with more frequency: Ectopic Ureter. This congenital defect, while relatively rare overall, affects Siberian Huskies more often than any other type of purebred dog. This problem is devastating to the conscientious breeder and can produce a number of secondary ailments in the affected animal.

Ectopic Ureter is an anatomical malformation of the urinary tract, in which the ureters, the tubules which extend from the kidneys to the bladder, do not empty into the bladder as intended. Instead, they often extend past, or through, the bladder, emptying directly into the urethra or vaginal tract. Ectopic Ureter can affect one or both ureters, and typically results in the constant drainage of small amounts of urine. This, as previously stated, often leads to a number of secondary problems, including chronic infection of the urinary tract, urine scalding to the skin, and, over time, possible infection in the kidneys themselves. Treatment of the problem ranges from chemical control with phenylpropanalamine in the lightest cases, to surgical reimplantation of the ureters into the bladder, or even removal of the kidney and ureter in more severe situations.

## A Genetic Disease?

The hereditary nature of Ectopic Ureter has not yet been proven, however there is strong evidence in favor of a genetic link, and the breeding of affected animals is discouraged.

What does this mean for the Siberian Husky? It currently seems that, with the lack of information on this defect as well as its infrequent occurrence, breeders aren't certain how to approach it. Genetic links are denied, cases are not discussed. There exists no database and very little scientific study upon which breeders of the Siberian Husky can draw. Thus, the incidence of Ectopic Ureter is rising, and dedicated breeders, serious about avoiding, reducing, and removing the problem, are left with little information to go on. The solution to this problem -- as well as, perhaps, the near eradication of the affliction itself -- while not simple, is attainable. Siberian breeders need to be aware of Ectopic Ureter and its crippling effect on both the individual dogs and the breeding program itself. It deserves further study and recognition by the Siberian Husky Club of

America, as well as organizations such as the American Kennel Club, which consider themselves dedicated to the welfare of purebred dog. Ectopic Ureter is more dangerous than cataracts, as devastating as hip dysplasia, and requires an equal amount of study for adequate control.

### **Personal Experience With EU**

My experience with Ectopic Ureter began in 1996, with the birth of a "singleton" puppy. This puppy was one of 4 in the litter; unfortunately the C-section that brought her into the world did not happen in time to save the other 3 puppies. The first week with little Tala was tough. She was slow to nurse, and weak. We fed her formula with a dropper in order to give her strength. We would notice, as we held Tala to feed her, that she would always leave a little "wet spot" on our shirts. We didn't think much of this until Tala was several weeks old, and her mother seemed to clean her constantly. Her rear end was always wet, and we noticed that the skin on the insides of her hind legs was an angry red. She was leaking urine. Discussions with our vets, including a Board Certified Veterinary Surgeon, led us to wait until after her first heat cycle to have tests done on her urinary tract. It was not uncommon for some females to leak urine up until their first heat cycle, which tightened the muscles around their urinary tract and seemed to eliminate the problem. In the meantime, we had Tala on doses of phenylpropanalamine to slow the leakage.

Tala's first heat cycle came and went, with no sign of correcting her problem. She went back to the vet, and this time a dye test was done on her urinary tract in order to "map" it on x-ray and pinpoint the problem. The test revealed what we had feared, one of Tala's ureters was ectopic. We had her spayed, and during that surgery, her ureter was repaired as completely as possible. This consisted of the Veterinary Surgeon removing the ureter from the vaginal tract, leaving only that part which emptied into the bladder. This was an expensive procedure, but it was all we felt we could do at the time.

Tala is now a happy, middle-aged girl who still occasionally runs on our smaller teams. Even with the surgery she will still leak, sometimes worse than others, and we use frequently-changed sawdust in her kennel and dog house to help keep things clean (Thus Tala's nickname -- "Hamster Girl" :). Unfortunately, the severity of her condition brought a premature end to her obedience career, and keeps her from being a house dog -- however, she gets along with about anybody and enjoys just being a "part of the gang".

One of the most unfortunate things about Tala's litter was that her littermates didn't survive. We were unable to know if any of the others also had a congenital deformity, which deepened our uncertainty that Ectopic Ureter had a genetic base. Knowing the little that we did, we bred Tala's father again, with our fingers crossed. As with Tala's mother, he was bred to a female who had whelped a previous litter of entirely healthy puppies. The litter of 5 arrived late in March of 1998, 4 females and a single male. We

watched the litter carefully. By the age of 5 weeks, it was painfully clear that 2 of the 4 females were affected with Ectopic Ureter...we saw the same little "wet spots", the same constant cleaning by the mother, the same urine scalding on the puppies' hind legs. We were devastated.

It was recommended that the affected puppies be euthanized, due to the expense of their respective surgeries, as well as the unlikelihood of finding homes who would be willing to care for them -- they, like Tala, would probably leak their entire lives. It was not an easy decision, and not one that I would wish on anyone else. My mother and I never felt so guilty or horrible. We arranged to have Tala's father, our first homebred champion, neutered. We placed the remaining puppies in the litter on spay and neuter contracts.

Here are the facts:

- In 2 litters totaling 6 examined puppies, our male produced 3 affected puppies. That's a rate of 50%, which may have changed if we'd been able to examine Tala's littermates.
- All affected puppies were female.
- The sire's breeding was a total outcross of primarily old lines from two well-established kennels.
- The first breeding (Tala's litter) was a loose linebreeding. The second was another total outcross, to a bitch with a very old pedigree. There appears to be no correlation between lines.
- The sire's littermate (female) was bred once, to another outcross. She produced a litter of 3 puppies, 2 males and a female. The female was unaffected.

We kept a male from the above litter; the other two are spayed/neutered. Although this male is an excellent sled dog, with a wonderful temperament and very standard type, he has been neutered. Ectopic Ureter is unpredictable and devastating. We hope that other breeders will take note of our experiences and discoveries, and that this article might help those with their own experiences, or even just questions about the defect.

If you have any questions or comments about this article or our experiences, please email us. Ectopic Ureter is slowly gaining recognition in the Siberian world; we hope that breeders will soon feel they can discuss it freely, and perhaps unify in order to do something about it.

#### **More Information on EU:**

[Urinary Incontinence](#) -- EU article from Washington State University's Vet School

[EU Lecture Notes](#) -- Taken from a lecture at the University of Pennsylvania's School of Veterinary Medicine

Originally published at [http://www.kaylenbergsiberians.com/ectopic\\_ureter.html](http://www.kaylenbergsiberians.com/ectopic_ureter.html)

[Ectopic Ureter](#) -- Nice article from an animal medical center located in L.A. Discusses the defect, ways to diagnose, and treatment. Includes anatomical illustrations.

[Ectopic Ureter](#) -- A great new article from [vetsurgerycentral.com](http://vetsurgerycentral.com). Includes anatomical illustrations.

[EU Diagnosis Through Excretory Urogram](#) -- Xrays taken of a cat with EU during an excretory urogram. Interesting "real-life" illustration.

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