Ectopic Ureter

What is it?

Ectopic ureter is a condition present at birth characterized by an abnormality whereby the ureter opens to the skin surface, causing a leakage of urine onto the skin.

What causes it?

The condition is more common in some breeds of dogs, including Newfoundlands, and is thought to be hereditary, even though the genetics is not yet understood.



Signs & Symptoms

A Newfoundland typically has 2 ureters, which essentially are tubes connecting each kidney to the bladder, with no direct connection to the skin. In ectopic ureter, either one or both of the ureters are malformed during embryogenesis, leading to the ureter's abnormal direct connection to the skin.

This abnormal connection causes leakage of urine onto the skin in females; but less commonly in males, due to the difference between male and female anatomy. (Therefore, this condition is more rarely detected in males.) This leakage can be intermittent or continuous. This condition is often suspected when hair around the genital region is moist or stained with urine. There could be a rash due to frequent exposure of skin to urine. This condition is also associated with frequent urinary tract infections.

Testing & Treatment

How is it diagnosed?

The diagnosis is often made by a veterinarian. Besides the findings above, the veterinarian's exam may reveal that the bladder is often small, there may be inflammation and strictures in the vulva-vagina. The diagnostic procedures to confirm the presence of ectopic ureter(s) include abdominal ultrasound, excretory urography, CT scan with contrast, and transurethral cystoscopy.

How is it treated?

Treatment of this condition is often surgical, and the procedure chosen depends on the abnormal anatomy found. In certain instances, laser ablation can also be performed. If there is a urinary tract infection, that must be treated before a repair procedure.

Prognosis:

It is important to note that even with successful surgical repair, in 40-70% of cases, the urinary incontinence persists due to a defective urethral sphincter. Ongoing post-surgical medical management of this complication. Frequent urinary tract infections is also reported as another common post-surgical complications.

Breeding implications/genetics:

A hereditary basis is suspected, but the genetics are not understood. Affected dogs should not be bred.