

Stump Pyometra

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What is it?

A true *stump pyometra* is an uncommon problem which refers to a hormone (progesterone) mediated infection of a remnant of the uterus. The term *stump pyometra* is often misused for a more common condition, a *stump granuloma*, which is focal inflammation of remnant uterine tissue, often caused by a reaction to suture material and which may or may not have bacterial infection at the same time.

Why does my dog have it?

Progesterone is a hormone which causes the uterus to become glandular and thickened, making it susceptible to secondary bacterial invasion. Bacteria commonly arise from the vagina where they are normally found. Progesterone can come from residual ovarian tissue or from medical hormone treatments. Thus, a stump pyometra requires that residual ovarian and uterine tissue are present. A stump granuloma can occur if residual uterine tissue reacts to suture material normally left in place when a dog is spayed, and may be secondarily infected. Ovarian tissue and progesterone are not normally involved.

How do you diagnose it?

Ultrasonography is the most definitive non-invasive tool for diagnosing these disorders. Abdominal x-ray, vaginal cytology, and laboratory abnormalities including increased hormone levels can also be helpful for the diagnoses and assessment of severity of illness. Vaginal cytology will also help determine if there is estrogen circulating in the blood, indicating the presence of functional ovarian tissue. Clinical signs may include any of the following: foul smelling vaginal discharge, loss of appetite, fever, lethargy, weight loss, vomiting and diarrhea, or excessive thirst and urination.

How do you treat it?

Stump pyometra should be treated with both antibiotics and surgery. Surgery should be performed to remove infected uterine tissue and any remaining ovarian material (this will prevent future occurrences). A stump granuloma should be removed surgically, antibiotics are indicated if infection is present.

How do you prevent it?

A spayed dog with no remaining ovarian tissue should not be at any appreciable risk of developing *stump pyometra*, however it could get a *stump granuloma*. The use of absorbable suture material which eventually disappears, and minimizing residual uterine tissue in the abdomen post spay, are also advised.

