

Generalized Tetanus in A Dog After Ovariohysterectomy (Bir Köpekte Ovariohisterektomi Sonrası Generalize Tetanoz)

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Dear Editor,

We would like to report a rare case of tetanus infection following ovariohysterectomy operation in a dog.

Tetanus toxemia is caused by a specific neurotoxin produced by *Clostridium tetani* in necrotic tissue. Almost all mammals are susceptible to tetanus, although dogs are relatively resistant. *C. tetani*, an anaerobe microorganism is found in soil and intestinal tracts of mammals ¹. Previously, localised tetanus was diagnosed in two cats 14 and 21 days after ovariohysterectomy by a left flank surgical approach. The diagnosis in each case was based on their history, clinical signs and diagnostic investigations which excluded other possible diagnoses. Both cats showed scoliosis of the lumbar spine and left hind limb spasticity ². And also ovariohysterectomy related tetanus was reported in dogs ^{3,4}.

A five-year old mix breed dog was referred to the Internal Medicine Clinic, with anorexia and unexpected and frequent muscular spasms in entire body.

According to the owner's information, the spasms were seen two days after ovariohysterectomy operation.

On clinical examination; generalized tonic spasms at both front and hind limb's muscles, photophobia and voice hypersensitivity and chin and pharynx spasms were also observed (Fig.1). Abscessation and pus leakage was not detected from the wound. In haematological examination; AST, ALT and ALP levels were mildly increased, whereas CPK level was significantly increased. WBC count was found to be $17.4 \times 10^3 \text{ mm}^3$. Then, it was decided that the condition was pathognomonic for the signs of tetanus originating from the surgical site.

For treatment, crystallize penicillin (50.000 IU/kg, QID, IV), tetanus antitoxin (1.000 IU/kg, IV), Lactated Ringer's solution + 5% dextrose solution (IV), spasmolytics and neuroleptics (IV) were administered. Clinical signs were regressed two days after the initial therapy and the appetite improved after six days, all clinical signs were disappeared within 10 days (Fig. 2).

We strongly suggest that in all surgical interventions necessary aseptic cautions should be taken into account despite the successful treatment of tetanus infection.



Fig 1. Before treatment

Şekil 1. Sağaltım öncesi



Fig 2. After treatment

Şekil 2. Sağaltım sonrası

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