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Enrico Bigliardi, Carla Bresciani, Anna Maria Cantoni, Francesco Di Ianni, Giorgio Morini, Simone Voccia, Attilio Corradi, Enrico Parmigiani

## ABSTRACT

Prostate cancer is one of the most important malignancies in men. In old men the frequency of prostate cancer at necroscopy has been reported to exceed 40%. Dogs are the only large mammals other than humans with a significant incidence of spontaneous prostate cancer. Adenocarcinoma, transitional cell carcinoma and undifferentiated carcinoma are the most common histological type but the precise cell of origin in dog is not known. The incidence of prostatic carcinoma in dogs is low (0.2% - 0.6%). Prostatic carcinomas occur in sexually intact and neutered dogs and the risk increase in castrated dogs associated to pulmonary and bone metastases. The castration does not initiate the development of prostatic carcinoma in dog but does favour tumour progression. In men the early stage detection of prostate cancer can offer various therapies as radical prostatectomy, radial therapy, thermal ablation, anti-androgen therapy, chemotherapy. In dogs the diagnosis is often in advanced stage of the cancer and the survival time for dogs with prostate cancer is poor. The median time reported is 30 days after diagnosis. In this study we reported three cases of prostatic carcinoma in intact sexually dogs and one in a neutered dog. The sexually intact subjects were older (mean age = 10.5 years) and they had prostatic adenocarcinoma (PCA). The interval between castration and onset of prostatic problems was 3 years. All the dogs showed dysuria, macroscopic hematuria, dyschezia and ataxia. All dogs have been euthanized in order to relieve pain and suffering.

## KEYWORDS

Prostate; Carcinoma; Neutered Dog

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