

PROSTATE PATHOLOGY IN DOGS - DIAGNOSTIC PROTOCOL AND STAGING

Crînganu Dan, Crînganu Iuliana, Negreanu Raluca
*University of Agronomic Sciences and Veterinary Medicine,
Faculty of Veterinary Medicine, Bucharest, Romania
E-mail: cringanudan@yahoo.com*

The increase in the incidence of prostatic diseases in dogs is determined, as in men, by exposure to internal risk factors (hormonal disturbances following the repeated administration of synthetic contraceptives, weakening of the immune system, genetic, hereditary causes) and external (viruses, exposure to radiation, pollution, inhalations or ingestions of toxic substances), as well as changing the food (industrial type, with numerous chemical additives) of the dogs.

Studies in dogs have revealed the fact that prostate tumors appear especially in medium and large breeds, aged 8-10 years. Castration at a young age had no effect on tumor development, as it is not dependent on hormonal stimulation. This type of cancer is fundamentally different in dogs compared to humans, where this condition is totally androgen dependent, and the removal of the hormonal stimulus (castration and treatment) or the use of estrogens increases the hope of survival to 60-70%. The study highlighted another aspect: the risk of developing prostate cancer in castrated dogs is higher than in non-castrated ones. The increase in the incidence of prostate cancer is determined by internal factors (weakening of the immune system, hormonal disorders, genetic mutations), external factors (exposure to radiation, pollution, viruses, inhalation or ingestion of toxic substances) and the way of life of the animal.

The clinical symptoms manifested in prostatic diseases are not sufficient to establish a definite diagnosis. Among the clinical examinations, the rectal examination should become a routine examination, in order to establish the existence of a prostatic condition. The diagnosis protocol must include a broad approach: ultrasound, urography, MRI and, above all, blood neoplastic markers (PSA and acid phosphatase), cytological evaluation and radiological examination. All the information collected in the clinical diagnosis stage plays an important role in evaluating the position and size of the prostate gland, and in particular for the identification of lymph nodal, pulmonary or bone metastases.

Therapies for prostate diseases in dogs (castration, pre- and post-operative chemotherapy, hormonal and immunotherapy) were carried out based on a standard protocol decided by the attending physician according to the nature of the disease, the TNM clinical stage, the patient's general state of health. The oncological treatment of prostate cancer in dogs is multimodal, it involves the combination of all means of conventional therapy, established according to the TNM, and the earlier the diagnosis, the greater the effectiveness.

Keywords: diagnosis, oncology, prostate pathology, staging.