



Oral Presentation

The role of the systemic inflammatory response in canine mammary tumors

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Objective: Inflammation plays a central role in cancer development and progression. Cancer-related inflammatory response can be demonstrated by some hematological and biochemical parameters. The aim of this study is to show whether inflammation plays a role in the etiopathogenesis of canine mammary tumors. **Materials and methods:** For this purpose, in 31 dogs with malignant mammary tumors Neutrophil/Lymphocyte Ratio (NLR), Lymphocyte/Monocyte Ratio (LMR), Platelet/Lymphocyte Ratio (PLR), WBC/Lymphocyte Ratio (WLR), Albumin/Globulin ratio (AGR), Systemic Immune-Inflammatory Index ($SII = T \times N/L$) and Prognostic Nutritional Index ($PNI = 10 \times ALB + 0.005 \times \text{lymphocyte}/\text{mm}^3$) values were evaluated by comparing with 12 healthy dogs as potential biomarkers of cancer-related systemic inflammatory response. **Findings:** As a result of the statistics, NLR, TLR, WLO, SII and PNI values showed statistically significant differences between the groups. LMO and AGO values were not statistically significant, although there was a difference between the groups. **Results:** Biomarkers that show systemic inflammatory response in human breast cancers are widely used as a diagnostic, treatment management and prognostic factors. The literature data that show the systemic inflammatory response in canine mammary tumors is still quite limited. Based on the data of this study, inflammation was thought to play a role in the etiopathogenesis of canine mammary tumors.

Keywords: canine, mammary tumor, inflammation, biomarkers

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