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Presentation Title

Canine and Feline Cancer Pathology and Diagnostics

Abstract

Cancer medicine and diagnostics continues to represent a significant challenge to the veterinary medical community. Cancer is a leading cause of serious morbidity and mortality in small animals, and continues to be a significantly expensive disease to treat. The term “cancer” is indicative of malignant neoplasia. Neoplasia is a condition in which there is uncontrolled growth of cells in an organ or tissue that is the result of fixed genetic derangements induced by chemicals, viruses and radiant energy. Furthermore, once the inciting cause of the neoplastic lesion has ceased or has been removed, the lesion generally continues to grow and develop. The etiopathogenesis, clinical features, diagnostics and treatment are all areas of intense clinical and basic science research. In this lecture, we will review the pathophysiology of cancer and will explore major current diagnostic techniques used to diagnose neoplasia in small animals. We will examine the inter-relationships between clinical symptoms and pathologic diagnostic findings, and how this information impacts therapeutic protocols. We will discuss the major groupings of malignant neoplasia in small animals and will discuss grading and staging of cancer. Finally, we will review a few clinical cases of cancer that exemplify the use of current diagnostic methods.