Pre-Anesthetic Considerations in Senior and Geriatric Dogs

Senior and geriatric dogs may require general anesthesia for diagnostics, surgical, and nonsurgical procedures to diagnose and treat underlying diseases, which can lead to improvements in their health and overall quality of life. Senior and geriatric dogs are often considered “higher risk” anesthetic patients, which may influence a pet owner’s decision to pursue necessary diagnostics and/or treatments for disease. However, age *itself* should not be considered a contraindication for general anesthesia. Many senior and geriatric patients can safely undergo general anesthesia with specific considerations to this patient population. Communication by the veterinarian and veterinary team is essential to help guide pet owners through this decision-making process.

Each dog should be evaluated on an *individual basis* to determine the risk vs benefit of potential anesthesia. At a minimum, pre-anesthetic evaluation should include a complete physical examination, blood pressure assessment and baseline laboratory testing (CBC, chemistry and urinalysis). Values such as hematocrit, serum creatinine, liver enzymes, and serum proteins should be carefully considered. Ideally, three-view thoracic radiographs should also be performed in senior pets for general screening (metastasis, pulmonary disease, cardiac abnormalities etc). If any abnormalities are found on cardiothoracic auscultation (i.e. heart murmur, arrhythmia, abnormal lung sounds) thoracic radiographs should be more strongly recommended prior to general anesthesia. Other cardiac function tests to consider may include laboratory function tests (NT-pro BNP), echocardiogram and/or ECG depending on exam findings, test results and owner’s wishes. Ideally, cardiac work-up should be pursued prior to general anesthesia for non-emergent issues. Additional imaging such as abdominal ultrasound may also be considered prior to anesthesia to assess for abdominal pathology that may correlate with abnormal bloodwork or physical exam findings. Abdominal ultrasound is also considered a standard staging procedure.

Based on the pre-anesthetic work-up, an ASA (American Society of Anesthesiologists) score should be assigned to the patient, which is indicative of the overall anesthetic risk for that particular patient. The risk assessment for general anesthesia should be discussed with the owner so that an informed decision can be made regarding pursuit of diagnostic and/or surgical intervention involving general anesthesia. If an owner declines some or all of the minimum pre-anesthetic work-up as discussed above and still wishes to pursue anesthesia, the risks of doing so should be discussed and documented in the medical record.