The geriatric patient

Claire Roberts

Geriatric patients now comprise approximately one third of the total patient population seen in small animal practice. Whilst age is not a disease in itself, it is a time when more age-related disease will be seen. We know that ageing causes changes in all organ systems which are progressive and irreversible. Due to advances in veterinary anaesthesia, owners are more willing to consent to sedation and anaesthesia in their older pets, so it is important that we are aware of the potential complications and management options available to us.

In small animal practice, anaesthesia for geriatrics is associated with an increased risk. In the 'Confidential enquiry into perioperative small animal fatalities' (CEPSAF) major risk factors for anaesthetic-related death were identified in dogs, cats and rabbits with age being a significant factor. Dogs aged 12 years or older were approximately 10 times more likely to die from an anaesthetic-related event than younger dogs. This may be due to the fact that older dogs are more susceptible to the depressant effects of anaesthetics and are more likely to experience hypothermia, which ultimately increases recovery times. In cats it is thought preanaesthetic health status has a greater effect on the risk of perianaesthetic complications rather than age alone.

For the veterinary profession to be able to reduce the risk associated with anaesthetising the geriatric patient, we need to have a thorough understanding of the physiological changes associated with ageing. As the patient ages they will experience a progressive loss of functional reserve in all the organ systems so evaluation prior to anaesthesia is very important. It should be our aim to support the organs throughout the anaesthetic period and during recovery, this can only be achieved through careful monitoring and support.

Preanaesthetic blood and urine testing is more regularly recommended in this age group and will often help detect subclinical disease such as renal failure. Bloods cannot rule out the probability that some of the organ systems are running on limited reserve. It has been suggested that haematological and biochemical screenings have limited clinical relevance, and the patient should be supported with that in mind. For example, hypertension is a common finding in older patients, but is rarely considered before anaesthesia in our veterinary patients.

References are available on request.

KEY LEARNING OBJECTIVES

- Preoperative assessment and preparation of the geriatric patient
- Maintenance, monitoring and support during anaesthesia
- The importance of nutritional support and mental well-being in the geriatric patient

MULTIPLE CHOICE QUESTIONS

1. Geriatric patients are more susceptible to hypoxia during transition periods. What can we do before anaesthesia to reduce potential respiratory complications?
 - (A) The administration of oxygen via mask or flow by for 5 minutes before induction will significantly reduce the chance of hypoxia between induction and intubation
 - (B) Avoid the use of intubation in geriatric feline patients
 - (C) Avoid drugs which have a sedative effect
 - (D) Perform a masked induction of anaesthesia
2. Geriatric patients can experience various changes to their cardiovascular system that can limit their ability to compensate to cardiovascular changes that may occur during sedation and anaesthesia. Which of the following could increase these negative cardiovascular effects?
 - (A) Reducing stress in the perianaesthetic period
 - (B) Avoidance of premedication
 - (C) Delivery of appropriate fluid therapy
 - (D) Pre-oxygenation prior to induction
3. What is the recommended preanaesthetic fasting for geriatric patients?
 - (A) Midnight the night before anaesthesia, water to be removed in the morning
 - (B) No longer than 8 hours and water should only be removed at time of premedication
 - (C) 8pm the night before anaesthesia, water to be removed in the morning
 - (D) No longer than 2 hours to prevent hypoglycaemia and water should only be removed at time of premedication

The cardiac patient

Trish Farry

Patients with cardiac disease can be challenging for the anaesthesia nurse. An understanding of the disease present, and physiological complications and variations associated with the disease, is essential. Stabilisation of

the patient prior to anaesthesia may also improve patient outcome. The administration of furosemide to a patient with pulmonary oedema, the draining of pleural and abdominal effusions, and the administration of appropriate drugs may assist in the stabilisation of the patient prior to anaesthesia. Planning for anaesthesia is essential with any patient, but is incredibly important in the higher-risk patient. The nurse needs to be able to respond rapidly and, most importantly, appropriately to changes in the patient under anaesthesia. An anaesthesia plan