MG have a favourable prognosis as 50% of dogs respond to therapy. Patients with idiopathic MO and those that fail to respond to medical therapy require supportive and symptomatic treatment.

Broad-spectrum antibiotics should be considered in aspiration pneumonia. Owners should be informed that aspiration pneumonia is a common problem and prompt detection is necessary for treatment success.

It is recommended to feed small, frequent meals from an elevated or upright position to aid passage to the stomach. The patient should be held in the upright position for 15 minutes following the feed. Food consistency can vary, depending on what that patient tolerates best. A gastrostomy tube can be placed in severely malnourished patients or those who have frequent bouts of aspiration pneumonia. A gastrostomy tube can reduce the risk of aspiration pneumonia, but patients may still aspirate saliva or ingesta that have been refluxed.

KEY LEARNING OBJECTIVES

- To understand the causes of megaesophagus
- To be able to advise an owner on correct feeding protocols for a patient with megaesophagus
- How to meet the holistic needs of the patient

MULTIPLE CHOICE QUESTIONS

1. A positive result for the acetylcholine receptor antibody test indicates which disease?
 - (A) Myasthenia gravis
 - (B) Hypoadrenocorticism
 - (C) Hypothyroidism
 - (D) Diabetes mellitus
2. Which would be the feeding tube of choice for a patient with MO?
 - (A) Naso-oesophageal
 - (B) Oesophageal
 - (C) Gastrostomy
 - (D) No feeding tube should be used
3. Pyridostigmine can be used to treat which disease?
 - (A) Myasthenia gravis
 - (B) Hypoadrenocorticism
 - (C) Hypothyroidism
 - (D) Diabetes mellitus

Overview of renal disease

Caroline Boothroyd

The kidneys have many functions:

- Removal of metabolic and nitrogenous waste products (excretion)
- Respond to changes in water levels (osmoregulation)
- Maintain electrolyte balance
- Help to control acid-base balance
- Produce hormones that regulate blood pressure
- Red blood cell production.

Chronic kidney disease (CKD) is a common disorder and is the irreversible and progressive loss of kidney function. Supportive care can slow down progression. CKD covers multiple conditions either congenital or acquired. Patients with CKD have an inability to concentrate urine, increased blood urea and creatinine (with 75% loss of function).

The International Renal Interest Society has a system to better determine the patient's prognosis. <http://iris-kidney.com/pdf/staging-of-ckd.pdf>.

Acute renal failure (ARF) is the rapid loss of kidney function leading to the accumulation of nitrogenous waste. ARF is potentially reversible either by resolution of the injury or by adaptation of the kidney or by both mechanisms.

Azotaemia can be categorized as:

- Prerenal — occurs because of reduced perfusion to the glomeruli of the kidney, preventing adequate

filtering and removal of uraemic toxins. Urea and creatinine will be elevated but the urine tends to be generally very concentrated. Treatment is by replenishing fluid volume and restoring normal blood pressure

- Renal/intrinsic — results from injury to any part of the kidney, and may be due to:
 - Decreased perfusion — as for pre-renal but more severe and with a longer duration
 - Toxins — can damage any part of the kidney. Toxins include ethylene glycol (antifreeze), lilies (cats), grapes and raisins and even some prescribed medications
 - Infections — include pyelonephritis, leptospirosis and Lyme disease
- Postrenal — commonly from a blockage or rupture of the urinary tract. Uroliths or crystalline sludge may obstruct the ureters or urethra. Obstruction causes back pressure on the kidneys, thereby reducing glomerular filtration. If the obstruction is longstanding then direct kidney injury or renal azotaemia may occur. Neoplasia may also lead to obstruction. Rupture of the urinary tract allows leakage of the uraemic toxin into the abdomen and surrounding tissues. Although glomerular filtration continues the uraemic toxins quickly diffuse back into the bloodstream. Treatment involves alleviating the blockage or repairing the rupture.

It is common for prerenal or postrenal azotaemia or active kidney diseases to exist with CKD, and this is described as 'acute-on-chronic' kidney disease.

The holistic needs of patients who are hospitalized for treatment and investigations should be met:

- Padded bedding in a warm, clean stress-free environment

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Guest (guest)

IP: 35.173.137.237

On: Wed, 26 Apr 2023 11:17:25

Canine medicine

- Time to rest and sleep
- Recumbency changed every 4 hours
- Water should be freely available, fresh and easily accessible
- Clinical examination at least twice a day
- Pain scores every 4 hours or as required
- Intravenous catheter care
- Consider a jugular catheter to facilitate fluid therapy and blood sampling
- Frequent toileting opportunity as likely high fluid rates; a urinary catheter would allow monitoring of urine output
- Oral hygiene, patients may develop ulcers on their tongue and oral mucosa, which can be very painful
- Suitable nutrition to meet the patient's resting energy requirement, consider a feeding tube.

KEY LEARNING OBJECTIVES

- To understand the difference between acute and chronic renal disease
- Learn how to formulate a nutrition plan for a patient with renal disease
- Learn how to meet the holistic needs of the patient whilst hospitalized

MULTIPLE CHOICE QUESTIONS

1. A patient with chronic kidney disease will have which of the following?
(A) Low urine specific gravity and normal blood urea and creatinine
(B) Low urine specific gravity and high blood urea and creatinine
(C) High urine specific gravity and normal blood urea and creatinine
(D) High urine specific gravity and low blood urea and creatinine
2. Which of the following can cause chronic kidney disease?
(A) Infection (C) Medications
(B) Toxins (D) Renal dysplasia
3. Why can chronic kidney disease cause anaemia?
(A) A reduction in the production of erythropoietin
(B) An increase in the production of erythropoietin
(C) An increase in the blood levels of urea and creatinine
(D) Hypokalaemia