Promoting the Well-Being of Small Animals

Gastro-intestinal Disorders

The rabbit digestive system is complex and sensitive. Due to this anything that disrupts motility, pH, microflora and hydration of the ingesta can lead to some type of disorder. An inability to chew fibrous food, or diets lacking in fibre often cause gastrointestinal disorders in rabbits.

Clinical signs

- Faeces – absence, abnormal type, size, condition, colour, quantity
- Behaviour and demeanour – altered, depressed, reluctance to move or be handled
- Appetite – reduced or totally suppressed, acute or chronic weight loss
- Abdominal distension – bloated, gastric tympany, tucked appearance
- Indication of pain – teeth grinding, rate and regularity of nose twitching
- Gut sounds – absence, reduced, borborygmus

Gastrointestinal disorders

- Gastric stasis/ intestinal ileus
- Gastric/ intestinal obstruction
- Chronic soft stools
- Enteritis
- Bacteria and Viral Infections – salmonellosis, e-coli
- Diarrhoea
- Viral Haemorrhagic Disorder
- Tyzzer's disease
- Enterotoxaemia – antibiotic induced
- Parasites – coccidiosis, flagellates, flukes, worms etc
- Mucoid enteropathy
- Trichobezoars

Factors affecting Gastrointestinal Function

- Dietary – low fibre, high starch, protein, fat, laxative agents, sudden change
- Reduced food intake
- Inadequate water intake
- Inactivity / immobility
- Stress (injury, weaning, transportation, predation)
- Disease / parasites
- Genetic predisposition
- Inappropriate antibiotic use – see later

Treatment

- Contrast radiography to aid diagnosis.
- Analgesia to enhance patients comfort – useful in dental, skeletal and intestinal disorders.
- GI motility agents – promote gut peristalsis. Do not use for obstructions. Commonly used agents are Metoclopramide for upper tract and Cisapride for hindgut problems.
- Histamine blockers.

Nutritional Management

- Nutritional support and rehydration are essential during diagnostic phase to alleviate hepatic lipidosis, acidosis and ketosis and re-establish gut motility.
- Fluid therapy to rehydrate gut contents.
- Endeavour to keep rabbits interest for food - small quantities of wide variety of suitable foodstuffs.
- Nutrients to address energy and electrolyte balance.
- Highly digestible fibre to encourage peristalsis.
- Vitamin supplementation – particularly vitamin B and K, lost through non-ingestion of caecotrophs. Vitamin C also requires a boost.
- Pre- and Probiotics – may assist re-colonisation of gut.

Treatment for Specific Disorders

- Enteritis – can be alleviated by Increasing the quantity of fibre in the diet
- Enterotoxaemia - most commonly seen in newly weaned rabbits (3-6 wks old) where gut microflora undeveloped, unstable and susceptible to infection. In adults stress can leave them open to invasion as can inappropriate use of antibiotics. This condition is extremely difficult to treat so prevention through healthy diet, low stress and avoidance of certain antibiotics including Lincomycin, Clindamycin, antibiotics from the penicillin group particularly Ampicillin and macrolides. Well-tolerated antibiotics are Chloramphenicol preparations and Tetracyclines.
- Mucoid Enteritis - can be prevented from occurring by providing a diet high in fibre and low in both simple carbohydrates and starch.
- Trichobezoars - usually require medical not surgical treatment including aggressive fluid therapy, force feeding (syringe or nasogastic tube) and a high fibre diet. Surgery may need to be considered if treatment is ineffective.
- Caecal impaction - aggressive fluid therapy, but may require immediate surgery.