Veterinary Bioscience: Digestive System



LECTURE 8 CLINICAL EXAMINATION OF THE GASTROINTESTINAL TRACT

LECTURER

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INTENDED LEARNING OUTCOMES

At the end of this lecture, you should be able to:

- Take a thorough history to establish the likelihood of digestive system dysfunction in animals.
- Differentiate normal and abnormal digestive system function based on physical examination findings.
- Apply an understanding of the physiology of the digestive system to localise disease process.
- Describe some of the diagnostic aids that will enable further investigation of the digestive system.

KEY WORDS

Clinical examination; clinical investigation; history taking; auscultation; palpation; endoscopy.

LECTURE OVERVIEW

This lecture will introduce the principles of how a veterinarian can assess the digestive system in animals, when in reality the entire system remains hidden and difficult to evaluate.

Issues with the digestive system can present as an emergency - for example, gastric dilation-volvulus (GDV) in a dog or ruminal tympany ('bloat') in a cow. In those situations, triage and stabilisation will occur before history taking, and diagnostics are generally done to assist in prognostication rather than diagnosis. However, in less acute cases, taking a detailed history will save time in the long run. A holistic (whole animal/whole herd) approach should be taken, since many different factors and systems may be interrelated. A thorough history should include questions about appetite; how well the animal can eat; diet (full); any episodes of vomiting/description of the vomiting and how long after eating it may occur; nature of the faeces; precipitating events; weight loss and many other questions.

The digestive system is always assessed during a routine clinical examination of any animal. This includes examining the mouth, the throat, and palpating the abdomen for any signs of pain, bloating, etc. A stethoscope can be used (auscultation) over the abdomen to listen for sounds associated with intestinal motility (particularly in large animals). A knowledge of anatomy helps to identify structures that are being palpated or auscultated.

More detailed investigations may then be carried out if a problem with this system is suspected. This can include endoscopy and other types of imaging such as radiography and ultrasound (imaging will be covered in another lecture). Examination of the faeces can provide a lot of information but is often overperformed in small animal practice. Blood samples can also be useful to rule out non-GI disease, and if necessary, tissue samples (biopsies) can be obtained from different parts of the gastrointestinal tract.