

PROBLEM-SOLVING EXERCISE: INFLAMMATION & REPAIR

Aim

To derive an understanding of the pathogenesis, manifestations and management of a common inflammatory disorder through discussion of the underlying pathological processes.

Part One

1. Picture A is a macroscopic view of a portion of the stomach viewed from the mucosal surface.
2. Describe the main pathological feature.
3. Pictures B, C, D are microscopic views.
4. From where would these histological sections be taken in relation to picture A?
5. Picture E is a high power view of an area of picture D.
6. What are the components of this tissue?
7. From the above macroscopical and microscopical observations, what do you deduce about the nature of this disease?

Part Two

Discuss the pathogenesis or rationale behind the following statements:

1. Animals with ulcerative gastritis should be given small but frequent meals and non-steroidal anti-inflammatory drugs should be avoided.
2. Dogs with cutaneous mast cell tumours frequently develop gastric ulceration.
3. Animals with ulcerative gastritis can be treated with either a histamine H₂ receptor antagonist or a proton pump inhibitor.
4. Sometimes antibiotics and mucosal protectants (eg: sucralfate) can be used to treat animals with ulcerative gastritis.

Part Three

Sketch out a flow diagram, linking the aetiology and pathogenesis of this disease to its presentation, the subjective symptoms the animal might have felt and the physical signs of disease it might have exhibited.

Part Four

What other disease of the stomach could have a similar appearance?
How would you distinguish between them?