



Hardware Disease: Prevention and Treatment

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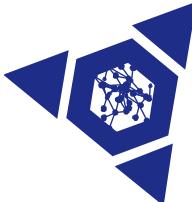
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Hardware Disease

- **Traumatic reticulitis, traumatic reticuloperitonitis, and traumatic reticulopericarditis are all caused by ingestion of a foreign body (mostly metallic) that penetrates the reticulum**
- **Cattle are more likely than sheep or goats to ingest foreign bodies because cattle do not use their lips for prehension**
- **The foreign bodies are typically metallic and are a nail or a piece of wire**
- **Hardware disease often manifests after calving due to the increased abdominal pressure associated with a gravid uterus and labor**





Hardware Disease: Clinical Signs

- **What are the clinical signs of traumatic reticulitis**
- **What are the clinical signs of traumatic reticuloperitonitis?**
- **What are the signs of traumatic reticulopericarditis**





Hardware Disease: Diagnosis

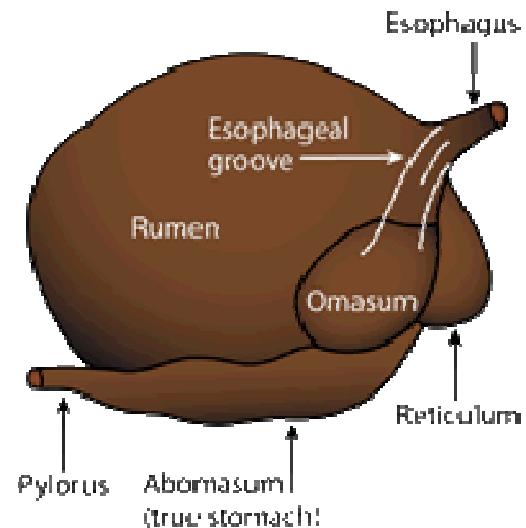
- **Clinical signs**
- **Cranial abdominal pain**
- **No history of magnet administration**
- **Inflammatory leukogram**
 - Elevated total protein
 - Elevated fibrinogen
- **Radiography to observe a metallic foreign body**
- **Exploratory rumenotomy**





Hardware Disease: Treatment

- **Treatment options depend on the pathogenesis of the disease**
 - Traumatic reticulopericarditis is not treatable
 - Traumatic reticulitis yields the best results
- **Treatment includes**
 - Surgery to remove the foreign body from the reticulum
 - Administer a magnet and an appropriate antimicrobial agent like Penicillin G
- **Complications**
 - The foreign body can puncture the liver and create peritonitis and a liver abscess





Hardware Disease: Complications

- **Complications are a result of migration of the foreign body**
 - Penetration of the liver and formation of a liver abscess
 - Penetration of the pericardial sac and development of pericarditis





Hardware Disease: Prevention

- Ensure that feed is free of foreign bodies
- If cattle are fed chopped feed install magnets into the mixing system
- Administer a magnet into the rumen/reticulum to capture metallic foreign body

