

Myocardial disease (Cardiomyopathy)

Etiology

1- Bacterial myocarditis

- ☑ *Staphylococcus aureus* & tick pyemia in lamb.
- ☑ *Clostridium chauvie* & T.B.
- ☑ Following bacteremia in strangles or from navel ill.
- ☑ Extension from pericarditis or Endocarditis.

2- Viral myocarditis

- ☑ FMD in neonate animals .
- ☑ Equin infectious anaemia .
- ☑ African horse sickness .
- ☑ Equine viral arteritis.

3 - Parasitic myocarditis

- ☑ Migration of larvae of *Strongylus vulgaris* .
- ☑ Cysticercosis .
- ☑ Sarcosporidiosis

4- Nutritional deficiency

- ☑ Vit E and selenium deficiency
- ☑ Chronic copper deficiency in cattle (falling disease)
- ☑ Copper & cobalt deficiency in lamb

5- Metabolic causes – milk fever

6- Poisoning such as selenium, arsenic , mercury , phosphorus and poisonous plnts.

7- Drugs : succinyle choline, xylaxine

8- Tumors: leucosis in cattle

9 - Inherited : malignant hyperthermia, congenital cardiomyopathy

Pathogenesis

The primary effect of any myocardial lesion is to reduce cardiac reserve and restrict compensation in circulatory emergencies.

Clinical findings

In early stage there is decreased exercise tolerance and is usually accompanied by increase heart size and HR.

In the late stages may be sudden death or attacks of cardiac syncope due to acute heart failure or severe dyspnea and generalized edema due to congestive heart failure.

Differential diagnosis

- 1- Endocarditis, congenital defect of the heart or large vessels. Accompanied by audible murmurs & abnormal pulse.
- 2- Pericarditis (presence of pericardial sounds).
- 3- Hydropericardium (Weak or muffling of heart sounds).
- 4- Cardiac rupture (sudden death without clinical signs).

Treatment

- ☒ The primary cause must be treated.
- ☒ Digoxin