

Gastritis

Definition

- Inflammation of the stomach causes abnormal motility and it is manifested clinically by vomiting.
- This might be acute or chronic & is commonly associated with enteritis in the syndrome of gastro-enteritis

Etiology

❖ The inflammation may be caused by:

1- Physical agents:

- Grass over-feeding causing gastric dilation and is usually accompanied by secondary gastritis. Ingestion of coarse fibrous feeds as straw bedding or bad teeth leading to faulty mastication has the same effect.
- Foreign bodies may lacerate the mucosa as in reticuloperitonitis in cattle.
- Damaged feeds, mould & fermented hay cause moderate gastritis.

2-Chemical agents:

- Caustics, irritant poisons (arsenic, lead, copper, mercury and phosphorus nitrate) cause severe gastro-enteritis.
- Excess production of lactic acid in the rumen after grain engorgement causes ruminates & gastroenteritis.

3-Bacterial agents:

- Examples: oral necrobacillosis, hemorrhagic enterotoxaemia, colibacillosis in calves, salmonellosis etc.

4-Viral agents:

- Rinderpest and mucosal diseases in ruminants causes abomasal and Ruminant lesions.

5- Fungal agents:

- Fungi cause ulcerative gastritis in newly born animals.
- Exam: Moniliasis.

6- Metazoan agents:

- Cattle: nematodes may cause abomasitis in cattle & sheep. Exam: Trichostrongylus axei, Ostertagia spp. Haemonchus spp. and Larvae of paramphistomum migrating to the rumen.
- Horses: Larvae of Habronema megastomum cause ulcerative lesions of the stomach which lead to perforation and

Pathogenesis

❖ Inflammation of the stomach may be either:

1. Acute reaction where increased motility causes pain (increase peristalsis) with rapid emptying of the stomach by vomiting or via the pylorus in animals which do not vomit.
2. Chronic reaction causes increased secretion with delayed food indigestion which permits putrefaction and leads to further inflammation to the intestine.

Clinical findings:

Acute gastritis:

- Vomiting: The vomitus contains much mucous, may be tinged with blood. Repeated vomiting is accompanied by retching movements.
- The appetite is always reduced or absent.
- Excessive thirst.
- Breath has a rank smell.
- Diarrhoea is present then there is gastro-enteritis.
- Faeces are pasty and soft.
- Signs of the primary disease.
- Dehydration & alkalosis with tetany & rapid breathing may develop if vomiting is excessive.

Chronic gastritis

- ❖ Signs are less severe with depraved appetite.
- ❖ Vomiting occurs sporadically (after feeding)
the vomitus contains viscid mucous

Diagnosis

- ❖ Gastritis & gastric dilation have some similarities. In the latter the vomitus is more profuse and more projectile.
- ❖ Oesophageal obstruction: vomitus is not acid or rancid.
- ❖ Intestinal obstruction: always contain bile and alkaline in reaction.

Lab. diagnosis

- ❖ Exam, of the vomitus.
- ❖ Estimation of gastric acidity. Faecal examination

Treatment

- ❖ Treat the primary cause.
- ❖ Many preparations could be prescribed. in the market there are lot of patent preparations.

I - Gastric sedatives: Preparation of:

Magnesium hydroxide.

Magnesium carbonate

Kaolin-Pectin-charcoal.

Bismuth submitrate or carbonate.

2- Gastric astringents Preparation of Tannic acid and catechu.

3- Fluid therapy:

- To replace the electrolytes lost by vomiting. (These electrolytes are Na, K, Ca, Mg.). These are given by I/v. and orally when vomiting stops.

- 4 - Some chemotherapeutic drugs and antibiotics are also prescribed as guanirnycin and sulphaguanidine.
- 5 -If purgatives are used to empty the alimentary tract use mineral oil to avoid further irritation by other purgatives.
- 6 - During convalescence, give the animal soft, highly nutritional feed.
- 7 - Alimentary tract stimulants as strychnine preparations ammonium carbonate to hasten the return of gastric motility.
- 8 - Vitamin LB6 in a dose of 50-100 mg every other day.
- 9 - Glutamic acid (capsules) one capsule with each meal.