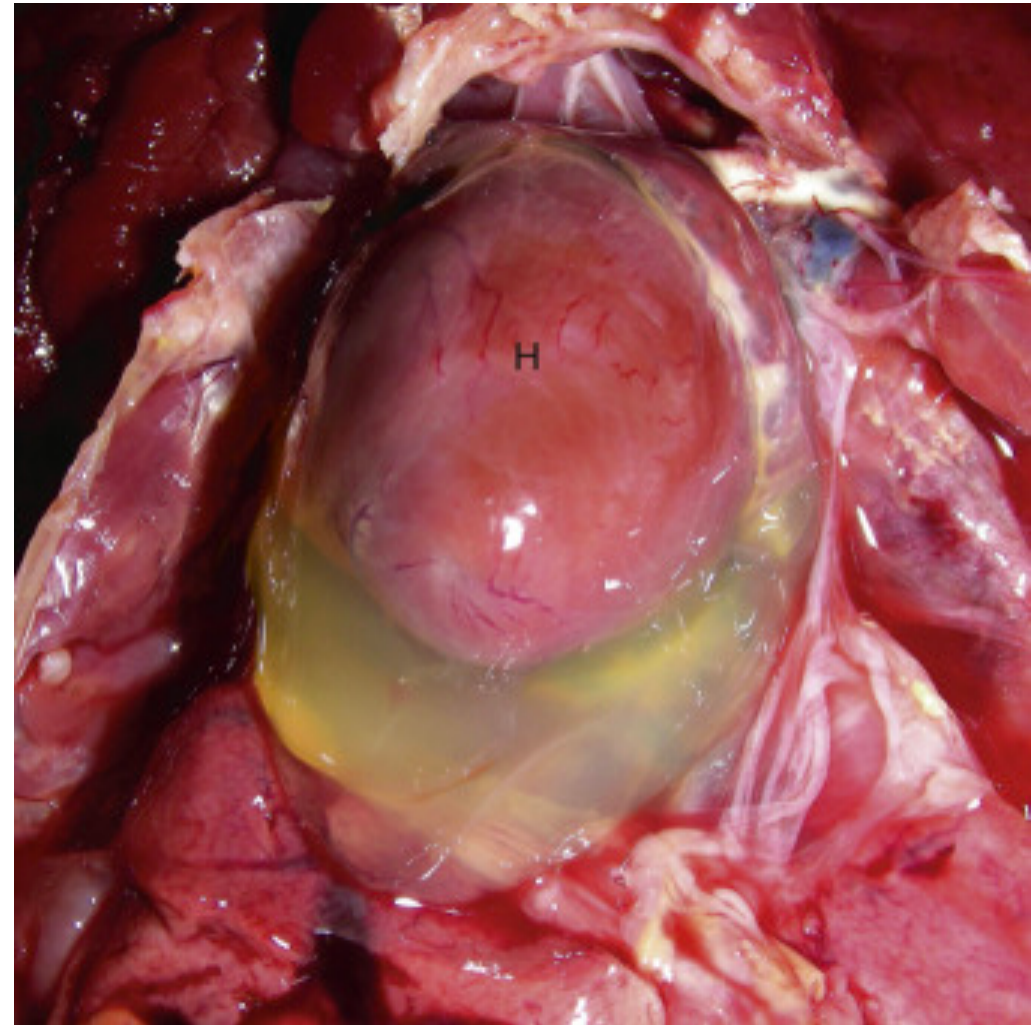
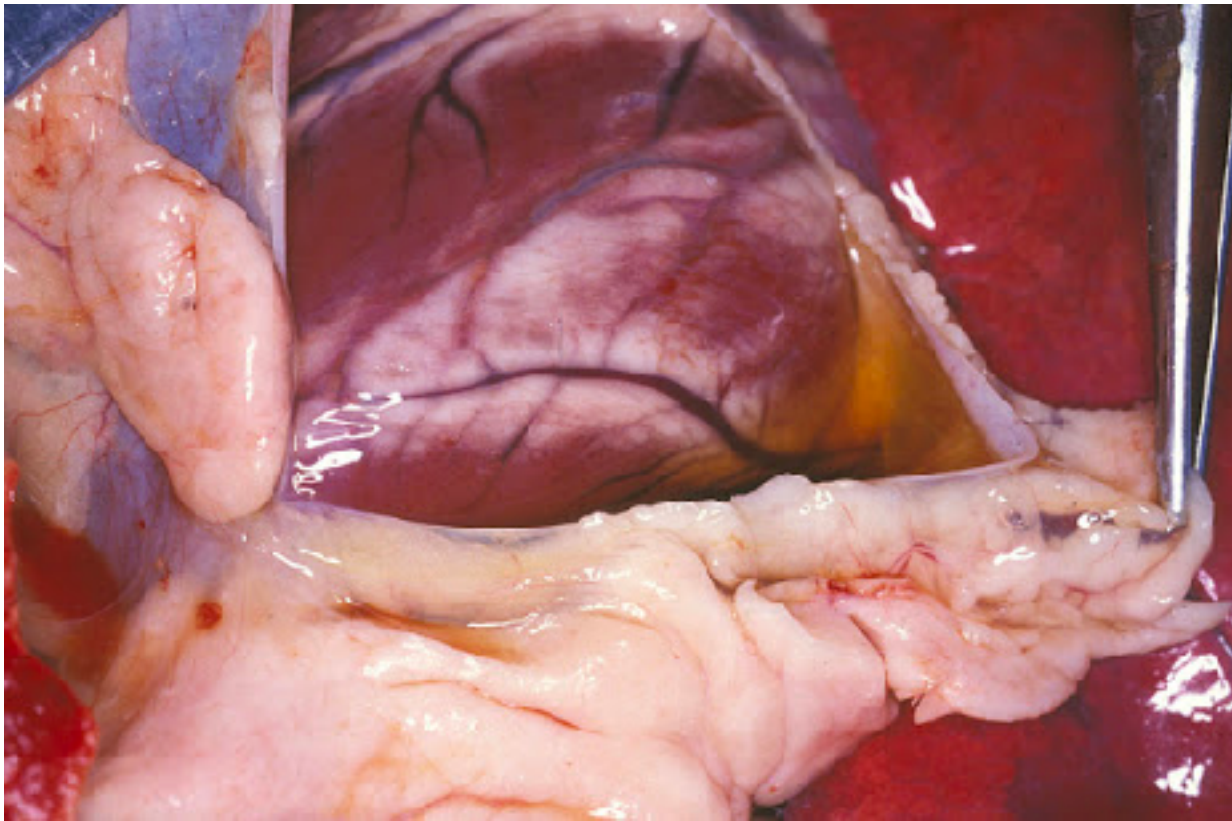


[3] Hydropericardium

Karima Al-Salihi



It is an excessive formation of serous fluid in pericardial sac. It is common in dog & cat. It is a secondary disease usually accompanies:

(1) Chronic disease of heart & lung such as myocardosis & pericarditis as well as ascites & liver fibrosis.

(2) Worm infestation.

(3) Hydremic diseases in chronic nephritis, anemia.

•**Clinical findings**

- (1) Increase in cardiac dullness as in pericarditis.
- (2) Cardiac tone is weak & is not sharply detected with a small rapid pulse
- (3) Dyspnea.
- (4) Cyanosis of mucosa.
- (5) Filling of capillaries with blood.
- (6) There is no fever or cardinal signs.

•**Diagnosis**

- (1) Symptoms.
- (2) Increase area of cardiac dullness without pain.
- (3) Puncture of pericardial sac gives clear yellow transudate.
- (4) Jaundice occurs in liver cirrhosis.

•**Treatment**

- (1) Complete rest, treat the real cause.
- (2) Diet free from salt & restriction of water supply.
- (3) Cardiac stimulant as adropherine & cardiac tonics as digitalis.
- (4) Diuretics & laxative.
- (5) Slowly IV injection of 10% calcium chloride.

[4] Pneumo-pericardium

Causes

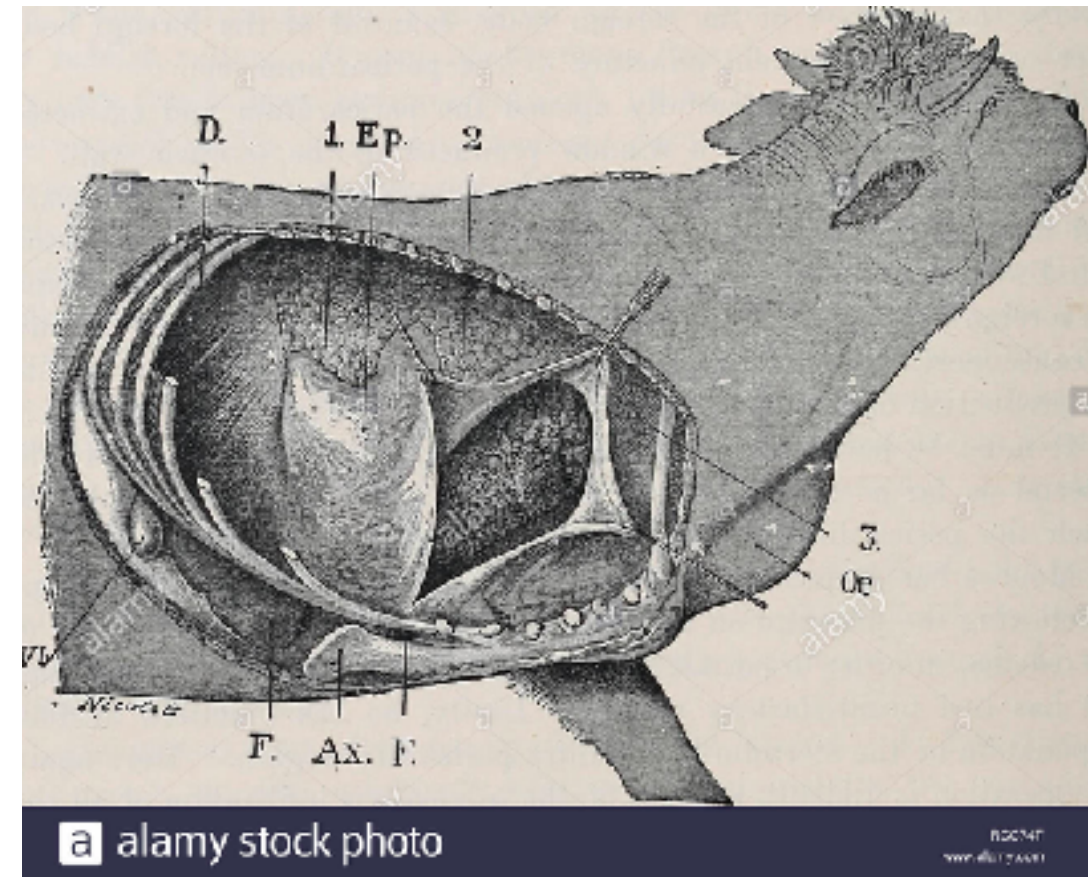
- (1) Stomach gases, following the perforation by foreign bodies.
- (2) As a complication of putrefactive purulent pericarditis.

Clinical findings:

Percussion over heart reveals loud & tympanic sound.

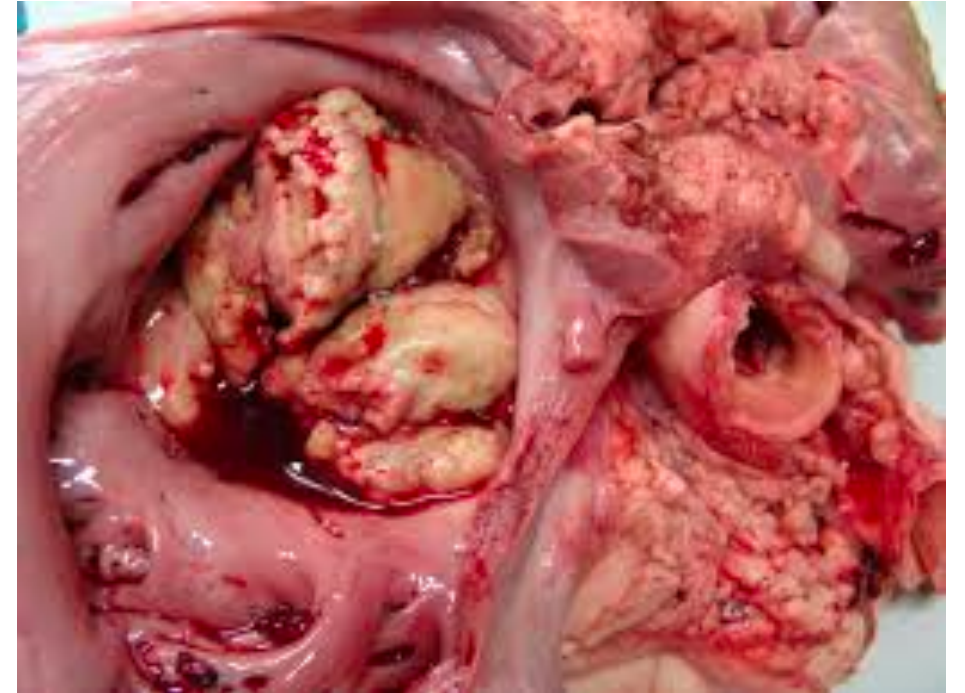
Treatment

As pericarditis and surgical interference.



[5] Endocarditis

It is the Inflammation of the endocardium which may interfere with blood flow from the heart by causing insufficiency or stenosis of the valves, murmurs sounds are clearly audible from heart and if interference with blood flow is sufficiently severe, CHF develops.



Causes

(1) Bacterial infection (whether by direct adhesion to undamaged endothelium or through the valvular surfaces or by hematogenous spread). In cattle, Alpha-hemolytic *Streptococci* & *Corynebacterium pyogenes* may be a cause.

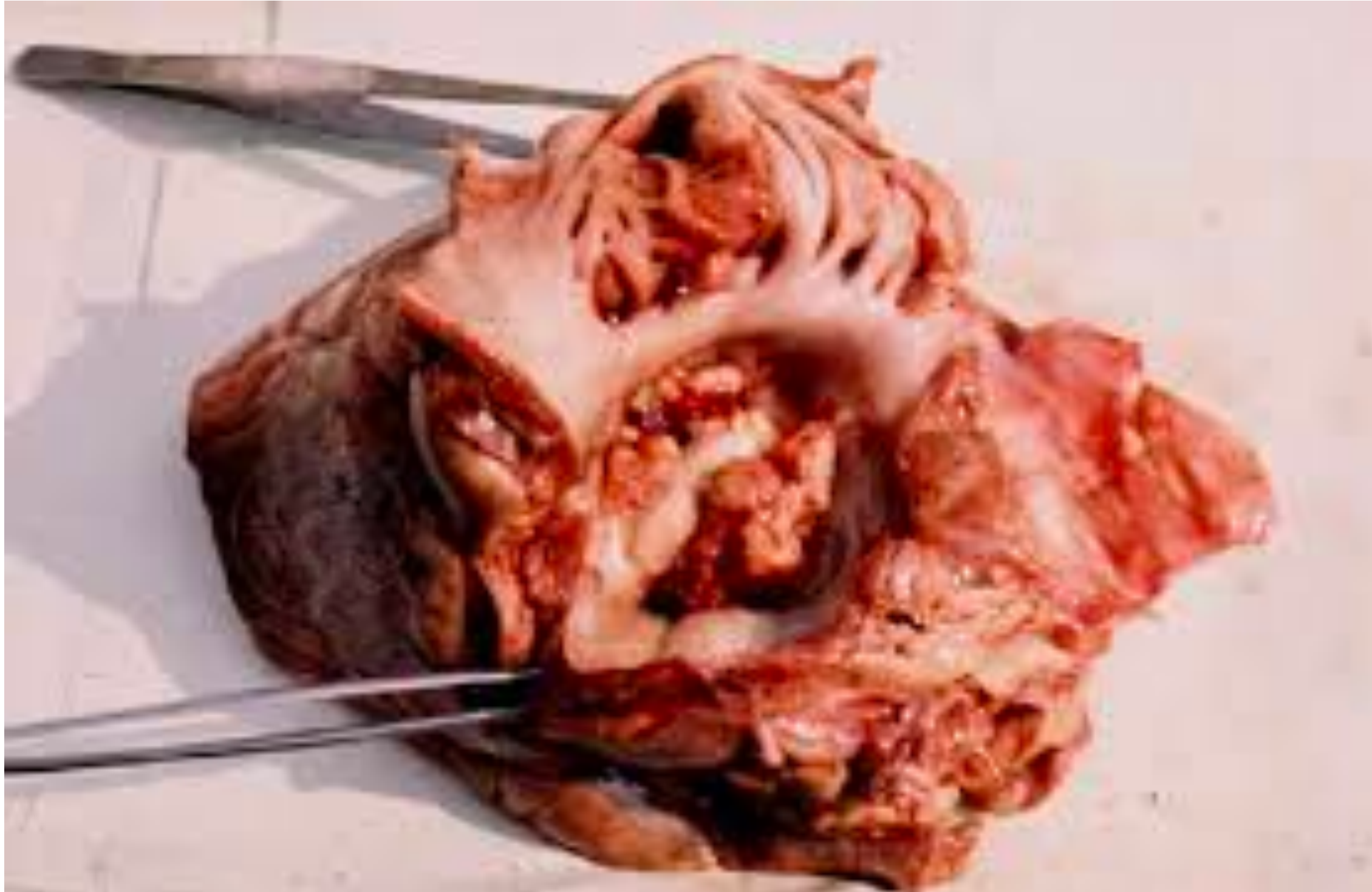
(2) The infection may be emboli from suppurative lesions in other sites especially traumatic reticulitis, metritis and mastitis.

Pathogenesis

1. Vegetative or ulcerative lesions may develop and interfere with the normal passage of blood through the cardiac orifices resulting in CHF.
2. Fragments of vegetative lesions may become detached and cause embolic endocarditis with the production of miliary pulmonary abscesses or abscesses in other organs including myocardium, kidneys and joints.
3. In cattle valvular lesions occur most commonly on the right A. V. valve and venous congestion is most marked in the general systemic vessels.

Vegetative endocarditis

Valvular vegetative endocarditis - cow



Clinical findings

(1) Poor exercise tolerance.

(2) Loss of condition & depression.

(3) Pain, Moderate ruminal tympany,
Scouring or constipation.

(4) Moderate fluctuating fever, Labored
breathing.

(5) Increase in heart rate, & Distension of
the jugular vein, Murmur on auscultation.

(6) Pale MM, anemia, Jaundice, General edema.

(7) Blindness, Facial paralysis, Muscle paralysis, Recumbence.

(8) Secondary involvement of the other organs may cause the appearance of signs of peripheral lymphadenitis, embolic pneumonia, nephritis, arthritis or myocarditis.

(9) Death (sudden, if the sickness is severe).

•Course

May be as several weeks or months.

•Diagnosis

1. Failure to observe a valvular murmur may result in confusion between endocarditis and pericarditis or other causes of CHF.
2. The commonest error in cattle is in differentiation of the disease from lymphomatosis which respond to treatment with penicillin.
3. Blood culture may reveal the causative organism.

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Treatment

(1) Specific antibiotics after sensitivity test.

(2) Penicillin is the antibiotic of choice, effective in large doses, 4-6 million units daily for a 1200 lb cow should be given for 3 days.

(3) Cardiac tonics.