

XV. Diseases of the Cardiovascular System



Pericarditis may be

1. Primary (idiopathic).

This includes:

- (a) Acute pericarditis and
- (b) Chronic pericarditis.

The supposed to-be primary are:

1. Pick's disease and
2. Concato's disease.

The exact cause may be

- Unknown or may be
- Tuberculosis,
- Toxins,
- Repeated local injury,
- Hypersensitivity,
- Unknown's virus etc.

2. Secondary.

This is common and is secondary to :

(a) Collagen diseases such as

- a. Rheumatic fever (common),
- b. rheumatoid arthritis,
- c. Disseminated lupus erythematosus and
- d. Periarteritis "nodosa (polyarteritis).

(b) Infections such as

- a. Pyogenic micro-organisms,
- b. Tuberculosis,
- c. Mycosis,
- d. Syphilis or
- e. Parasites.

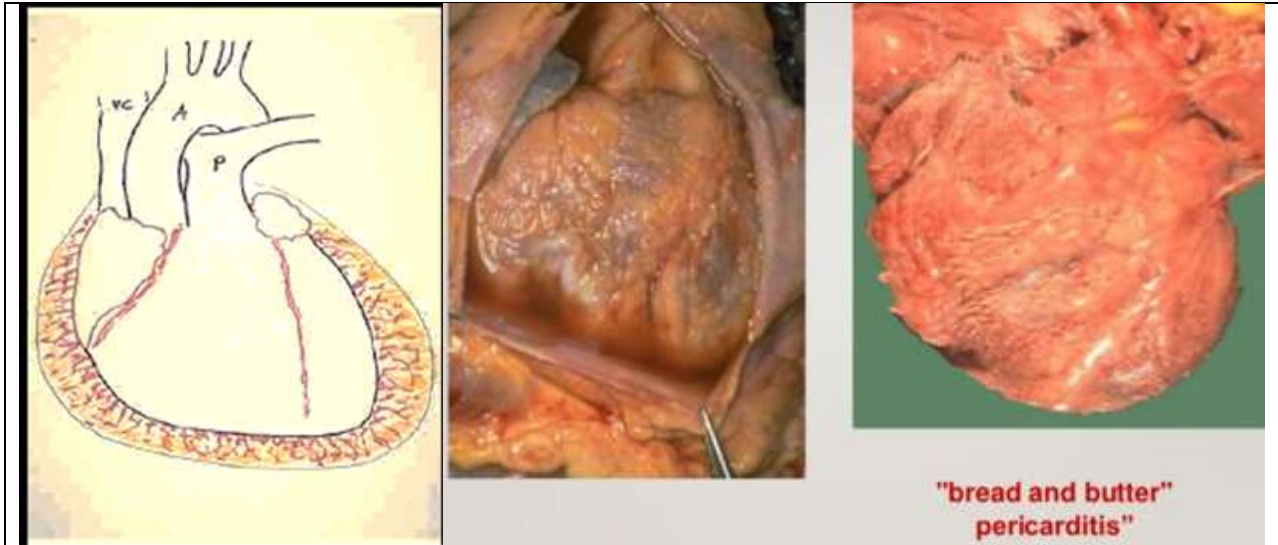
(c) Myocardial infarct.

(d) Long-standing fatal diseases (hence the term "terminal pericarditis") such as

- a. Diabetes,
- b. Bright's disease,

(Bright's disease is a historical classification of kidney diseases that would be described in modern medicine as acute or chronic nephritis. It was characterized by swelling and the presence of albumin in the urine, and was frequently accompanied by high blood pressure and heart disease)

- c. Uremia,
- d. Chronic wasting diseases,
- e. Malignant neoplasms or
- f. Infectious fevers.



Pericarditis may be **dry or with effusion**.

In the dry type, there are

- Pain,
- Friction (fremitus on palpation and rub on auscultation) and
- Some electro-cardiographic changes (when the pericarditis is so severe as to affect the subjacent myocardium).

In pericarditis with effusion, the effects depend upon

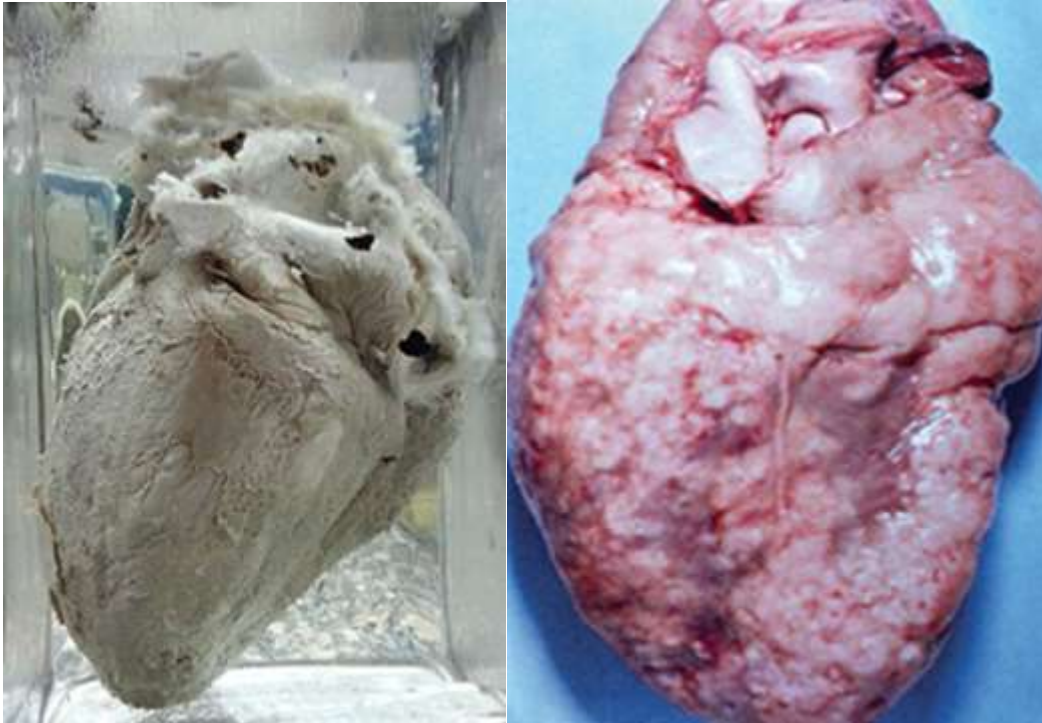
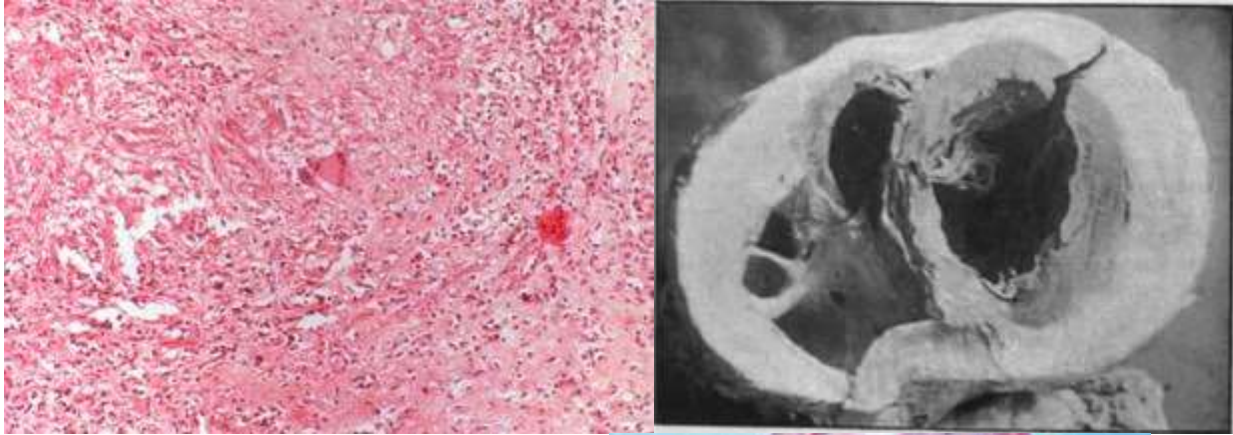
- (a) **the nature of the fluid** (transudate; exudate; inflammatory),
- (b) **its quantity, and**
- (c) **nature of etiology**
 - ***Creamy pus*** due to pyogenic infection
 - ***Red haemorrhagic*** effusion in
 - Tuberculosis.
 - Terminal pericarditis (due to malignancy, chronic nephritis, scurvy etc...) And
 - Acute non-specific pericarditis.
 - ***Milky*** (chylo-pericardial effusion)-->obstruction or inflammation of thoracic duct.

The effects are:

- 1. Cardiac embarrassment,**
- 2. Pressure-symptoms and**
- 3. Cardio-vascular changes.**



6.a) Tuberculous Pericarditis		T.1.3311		
	Pericardial layers :	<ul style="list-style-type: none"> • <u>Adherent to each other</u> • Irregular (surface) • Show tubercles • <i>Soft (in parts), soft-firm (in other parts)</i> 		
	Tubercles	<ul style="list-style-type: none"> • Are easily detected (by naked-eye examination) • Numerous • Small (and moderate) in size • Caseating 		
	Heart	<ul style="list-style-type: none"> • Small in size (that of a child) • Surface is rather nodular 		
N.B.:				
<ul style="list-style-type: none"> • This is the dry type of tuberculous pericarditis (nodular). • There was no accompanying effusion. 				
6.b) Tuberculous Pericarditis		I - 1.3312		
	Visceral pericardium:	<ul style="list-style-type: none"> • Covered by a fibrinous exudate 		
	The exudate	<ul style="list-style-type: none"> • Moderate in amount • Mantle-like • Yellowish-greyish red • Haemorrhagic in some parts 		
	Heart	<ul style="list-style-type: none"> • Normal in size (or slightly enlarged) • Coated by the exudate 		
	Lymph nodes (mediastinal):	<ul style="list-style-type: none"> • Enlarged • Caseated • Matted together • Anthracotic 		



Tuberculous pericarditis

N.B.:

- This is the **wet type of tuberculous pericarditis (exudative)**.
- The **source of infection** is **the tuberculous mediastinal lymph nodes**.
- The excessive haemorrhagic fibrinous exudate obscures the minute tubercles which can be detected by microscopic examination.
- ***The exudate in exudative tuberculous pericarditis may be***
 - *Serofibrinous,*
 - *Caseous,*
 - *Haemorrhagic or*
 - *Purulent (secondary infection).*