

# **PERICARDIAL DISEASES**

**1- ACUTE PERICARDITIS**

**2- RECURRENT OR RELAPSING PERICARDITIS**

**3- PERICARDIAL EFFUSION**

**4- CARDIAC TAMPONADE**

**5- CONSTRICTIVE PERICARDITIS**

## **Acute pericarditis**

**It is inflammation of the pericardium.**

**It has many causes , the commonest are  
viral infection and myocardial infarction**

### **Clinical features :-**

**- sharp central chest pain,**

**more on movement , respiration and lying down,  
relieved typically by sitting forward**

**-auscultation- friction rub- - the classical physical sign .**

**also there is fever, leucocytosis –**

**features of effusion may be present**

## Causes

### I. Infection

Viral (coxsackie-virus, echovirus, mumps, .influenza, herpes, HIV. )

Bacterial( staphylococcus, streptococcus, pneumococcus, meningococcus, haemophilus influenzae, mycoplasma, chlamedia, TB.)

Fungal ( histoplasma, candida )

## **II. Post-myocardial infarction**

Early-ACUTE MI-

Late (Dressler`s syndrome )

## **III. Malignancy- infiltration- metastasis**

Mesothelioma, lymphoma, leukaemia

Metastatic pericarditis- Ca. lung

## **IV. Uraemia**

## **V. Myxodema**

## **VI chylopericardium- LYMPHATIC obstruction**

## **VII. Radiation**

## **IIIV. Autoimmune**

**(rheumatoid arthritis, RA-  
rheumatic fever, SLE, scleroderma )**

Drugs

**( procainamide, hydralazine, INH  
Doxorubicin, cyclophosphamide )**

**IX. Post- surgical**

**X. Post-traumatic**

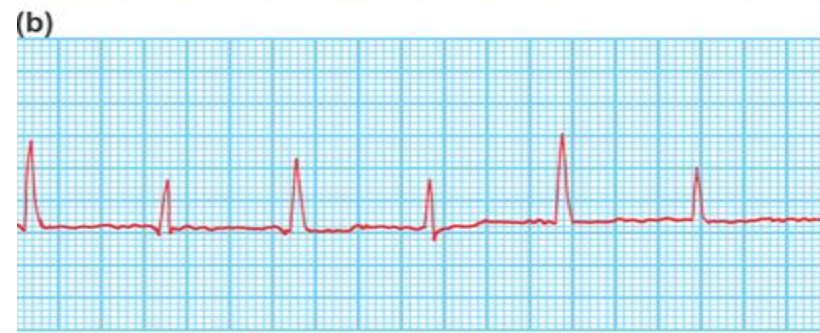
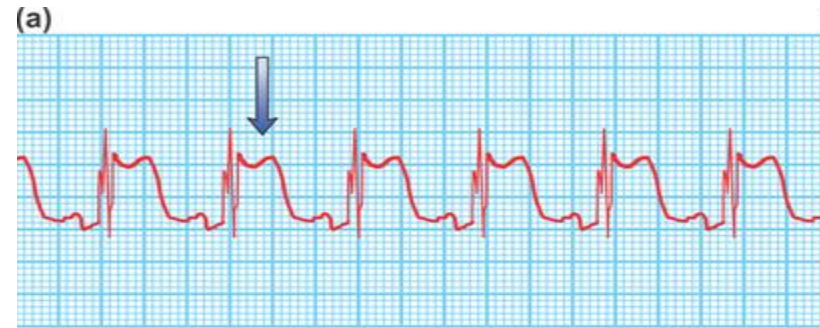
**XI. Idiopathic**

## Investigation

- ECG
- **diagnostic, there is concave- upward (saddle shaped )**
- **ST elevation initially , then T wave flattening/ inversion**
- **then T wave returns to normal**
- **Cardiac enzymes are normal**
- **Chest X-ray and echocardiogram are normal unless there is effusion**

## Treatment

- **treat the underlying cause**
- **bed rest**
- **NSAID ( e.g. high- dose aspirin ,ibuprofen  
and indomethacin)**
- **corticosteroids ?**



## Pericardial effusion

collection of fluid within the pericardial sac,  
commonly follows acute pericarditis,  
when the volume of the fluid is so  
large and SEVER, affecting ventricular filling  
causing hemodynamically unstable patient  
resulting in cardiac tamponad- MEDICAL EMERGENCY.

### Clinical features on examination

- Apex beat not palpable-high JVP-SHOCK .
- AUSCULTATION- heart sound faint and distant.
- Friction rub in the early stages then disappear.
- Rarely, left lung basal collapse ( Ewart`s sign )

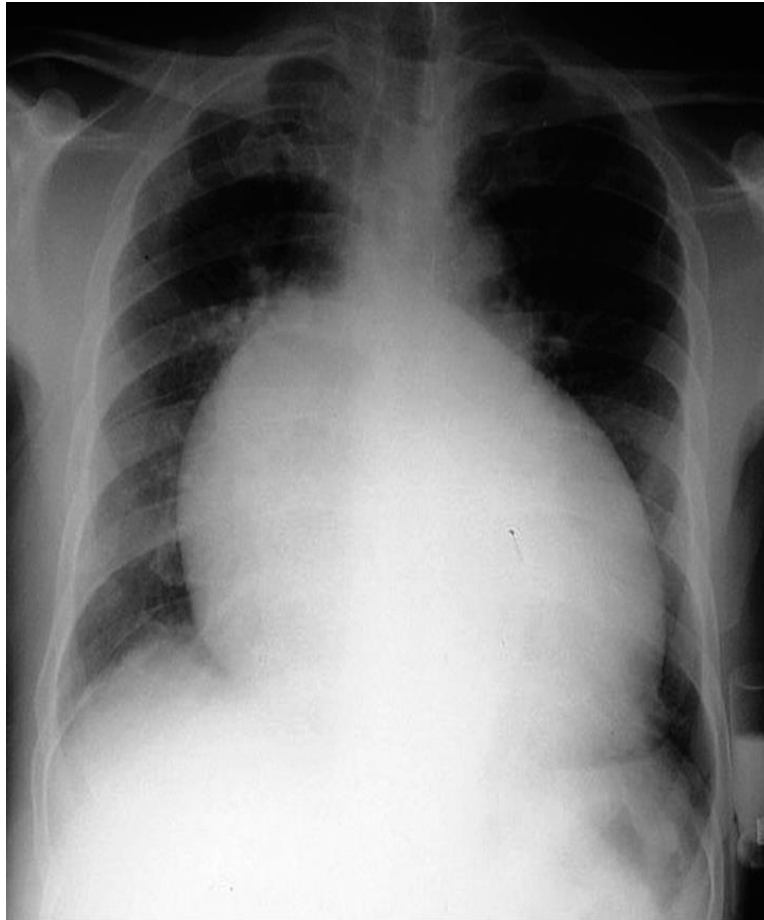


## **Signs of cardiac tamponade- MEDICAL EMERGENCY**

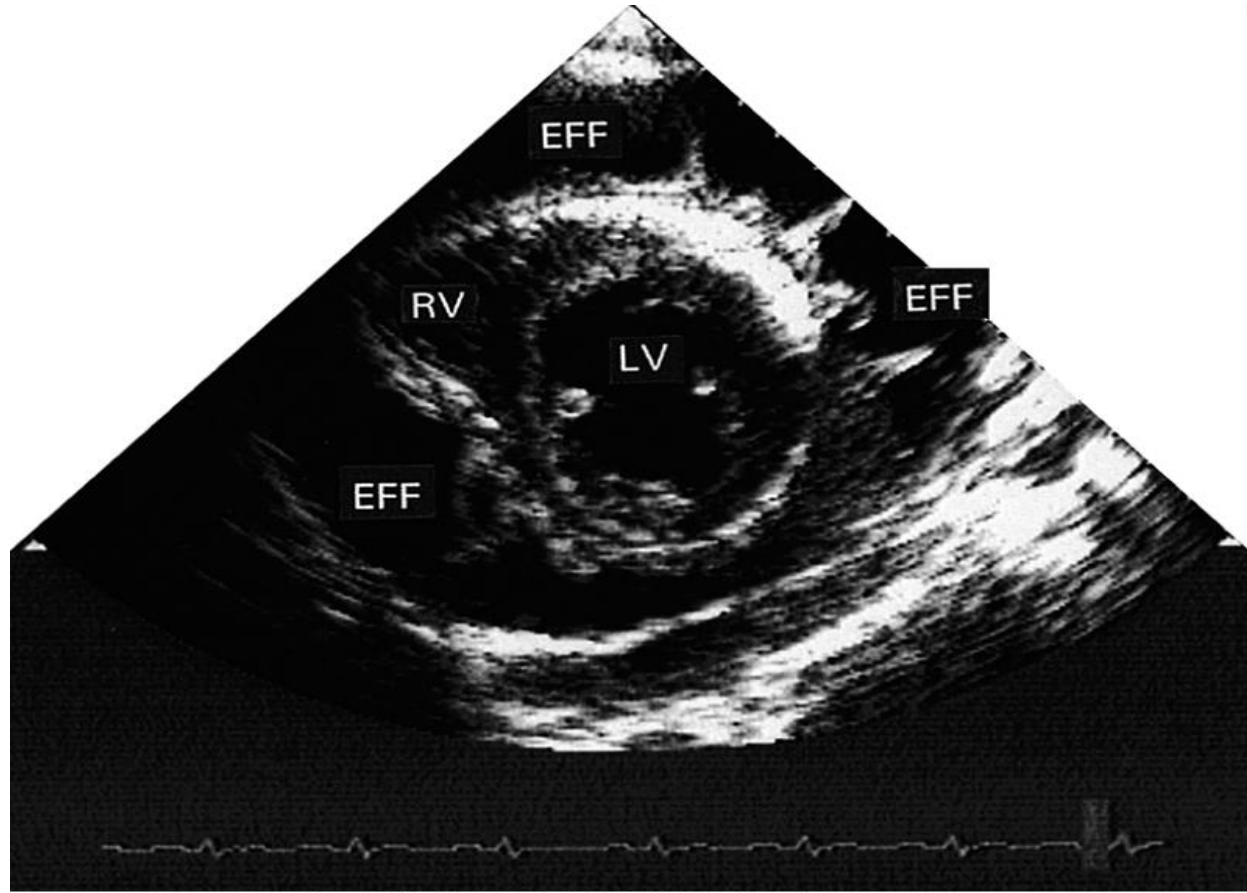
- Raised jugular venous pressure with sharp - y descent .
- Kussmaul`s sign
- Pulsus paradoxus
- Reduced cardiac output- hypotension – shock

## **Investigation**

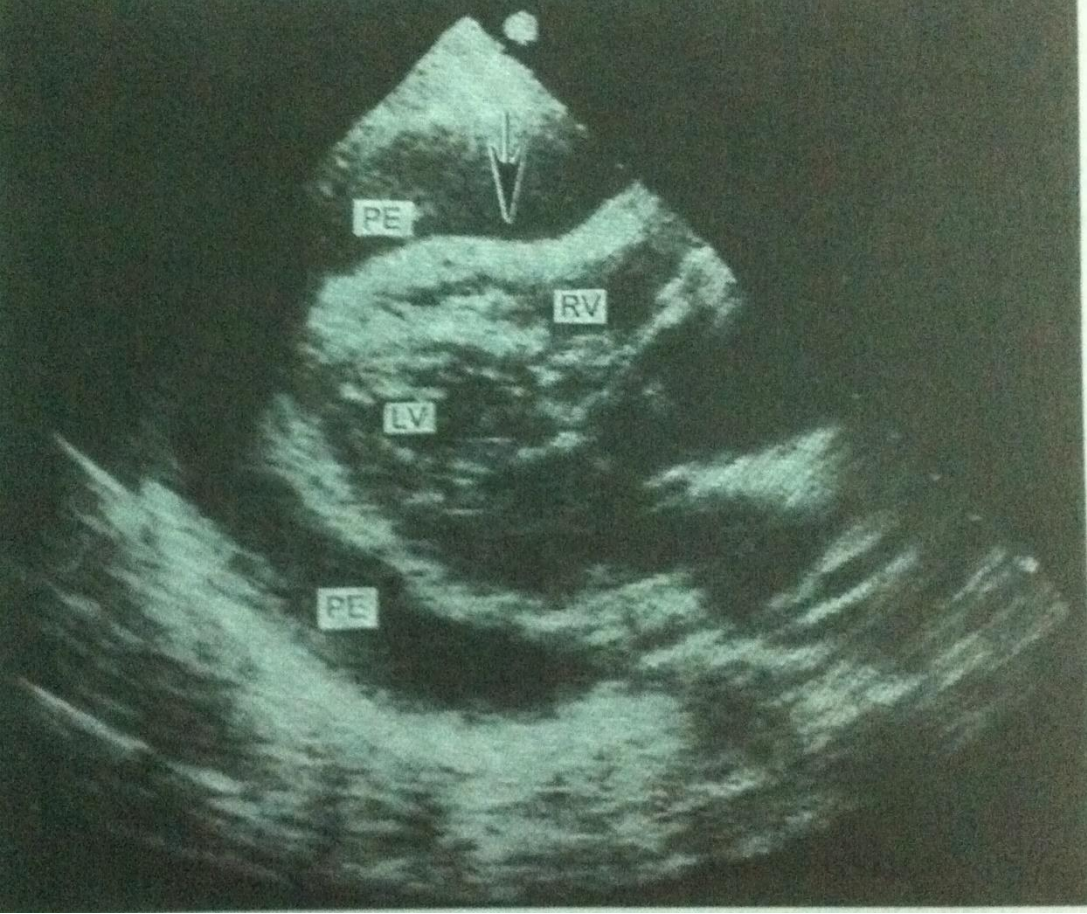
- ECG low-voltage QRS complexes
- Chest X-ray show globular or pear-like shape heart
- Echocardiography is the most useful test
- MRI is useful to demonstrate hemo-pericardium or loculated pericardial effusion
- TREATMENT- underlying aetiology
- Pericardiocentesis and pericardial biopsy



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## **CHRONIC Constrictive pericarditis**

It is a form of pericarditis where the pericardium is thick , fibrous and calcified.

Which interfere the ventricular diastolic filling .

it should be distinguished from restrictive cardiomyopathy

### **Causes :-**

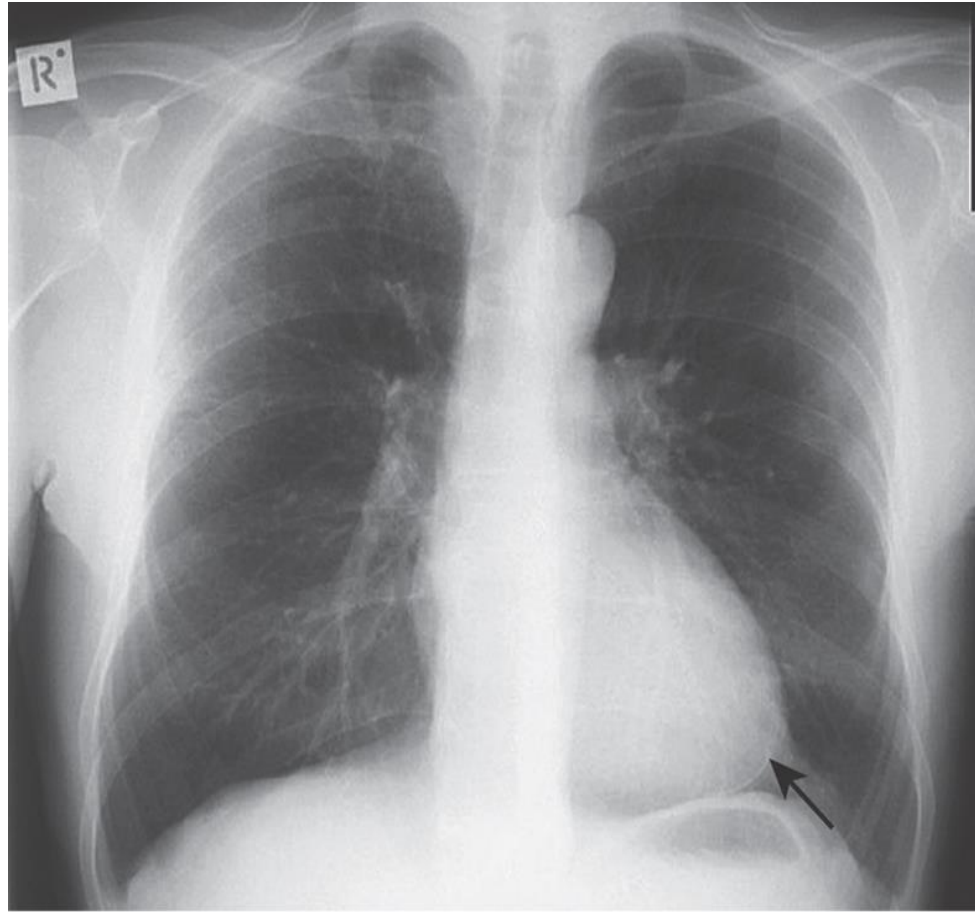
tuberculosis, hemo-pericardium, bacterial infection,  
rheumatic heart disease and after cardiac surgery

## **Clinical features**

**A combination of symptoms due to reduced ventricular filling,  
systemic venous congestion,  
reduced cardiac output with less pulmonary venous congestion**

## **Investigation**

- Chest X-ray a relatively small heart- clear lung
- with pericardial calcification in 50 %
- ECG - low-voltage QRS complexes with generalized  
T wave flattening or inversion
- Echocardiography
- thickened calcified pericardium. small ventricular  
cavities with normal wall thickness



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