

LECTURE 1

| Myocarditis | | pericarditis. |
|-------------------------|---|---|
| Epidemiology/ Causes | no accurate, infectious & non infectious causes. (Toxins, drugs, hypersensitivity immune response) | Idiopathic / Radiotherapy / Cardiac surgery / C.T disorders /Dialysis /Bacterial infection |
| pathogenesis | - | Inflammation → fibrinous exudate → pericardium become dull, opaque, sandy → scarring + adhesions +fibrosis |
| types | - | -Caseous Pericarditis: tuberculous -Serous Pericarditis: autoimmune diseases -Fibrous Pericarditis: chronic - suppurative |
| etiologic agents | most common | Coxsackie virus B |
| | Less common | Adenoviruses ,Influenza, Mumps,, Hepatitis V, HIV |
| | other | Corynebacterium diphtheriae, Syphilis, M. tuberculosis Fungi: Chlamydia * Giant cell myocarditis: SLE, Thyrotoxicosis. Parasite: Taxoplasma |
| clinical presentation | Chest pain, arrhythmias ,sweating , fatigue and may congestive heart failure. | -Acute pericarditis: Sudden pleuritic chest pain (positional retrosternal) / Dyspnea / exaggerated pulses / paradoxus JVP / ↑pericardial pressure →syncope -Chronic pericarditis: Tuberculous pericarditis |

Types of Effusive Fluid :

- Serous :heart failure
- Suppurative: Pyogenic infection
- Hemorrhagic: especially malignancies
- Serosanguinous

Tuberculous Pericarditis :

- Incidence of pericarditis in patients with pulmonary TB
- Clinical findings: fever, pericardial friction rub, hepatomegaly
- Tuberculin skin test (+)
- Fluid smear for AFB (-)
- Pericardial biopsy more definitive

- 1-Contiguous spread
- 2-Hematogenous spread
- 3-Lymphangetic spread
- 4-Traumatic or irradiation

| | | Myocarditis | pericarditis. |
|--------------|---------------------|---|--|
| diagnosis | microbiological | Blood cultures - Viral serology | -ECG : ST elevation, PR depression ,T-wave inversion -Blood culture, urea, creatinine test |
| | non microbiological | ECG – Radiology Pathologic examination: lymphocytic inflammatory, Giant cells | -Chest x-ray : enlarged cardiac shadow or calcified pericardium - CT scan: pericardial thickening -Immunology /Serology |
| management | | -supportive→restricted physical activity in heart failure. -drugs → anticoagulant, NSAID, steroid or immunosuppresses -antimicrobial therapy → agent is identified. -viral myocarditis →self limited. -Heart transplant | -supportive →idiopathic + viral pericarditis -Corticosteroid + anticoagulants →contraindicated -antibiotics →S. aureus - Acyclovir →Herpes simplex or Varicella - Ganciclovir → CMV -Pericardiocentesis |
| complication | | conduction defects - heart failure - Sudden death | - |
| prognosis | | Patient should be followed regularly every 1-3 months | Patients who recovered should be observed for recurrence |

Qs:

1-A 48 year old female present with fever, headache, chest pain and sweating In the investigation, Chest X-ray shows cardiomegaly and ECG shows nonspecific ST-T changes. What is the most common agent in her condition?

A-Corynebacterium diphtheriae

B-Adenoviruses

C-Coxsackie virus B

D-Coxsackie virus A

2-A 54 year old male has fever, headache, chest pain and sweating In the investigation, Chest X-ray shows cardiomegaly and ECG shows nonspecific ST-T changes. What is the most appropriate diagnosis?

A- Pericarditis

B- Myocarditis

C-endocarditis

D- Vasculitis

3-when does The normal transparent and glistening pericardium turned into a dull, opaque, and “sandy” sac ?

A-In pericarditis

B-In heart failure

C-In myocarditis

D-In TB

4-A 60-year male presented with pleuritic chest pain, Dyspnea and Fever. On examination there was a paradoxus JVP and tachycardia. What is the most appropriate diagnosis?

A- Endocarditis

B- Chronic pericarditis

C- Myocarditis

D- Acute pericarditis

Ans:

1-C

2-B

3-A

4-D