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Department of Health Research
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Standard Treatment Workflow (STW) for the Management of

ADULT PERICARDIAL TUBERCULOSIS

ICD-10-A18.84

WHEN TO SUSPECT

SYMPTOMS

- Cough, fever, breathlessness or pleuritic chest pain
- May be associated with weight loss, night sweats or difficulty lying down
- Past history or a history of contact with a patient with a diagnosis of tuberculosis
- Examination reveals tachycardia, increased jugular venous pressure, hepatomegaly, ascites, & peripheral edema
- A pericardial friction rub and distant heart sounds present on cardiovascular examination
- If clinical picture +/- heart US suggest pericarditis or pericardial effusion refer for echo-cardiogram

COMPLICATIONS

Constrictive pericarditis: Clinical signs for recognition include

- Kussmaul's sign (lack of an inspiratory decline in jugular venous pressure)
- Elevated & distended jugular veins with a prominent Y descent (second inward deflection of internal jugular pulse due to diastolic inflow of blood into the right ventricle)
- Pericardial knock (rare)

Cardiac tamponade: Clinical signs include

- Sinus tachycardia
- Hypotension with a narrow pulse pressure
- Elevated JVP jugular venous pressure
- Muffled heart sounds
- Pulsus paradoxus (a decrease in systolic blood pressure by >10 mmHg on inspiration)
- Ascites

Other complications:

- **Myopericarditis:** Abnormal ejection fraction with evidence of myocarditis and pericarditis (elevated cardiac enzymes & ST elevation on ECG)
- **Effusive constrictive pericarditis:** Mixed clinical picture. Main clue is elevated JVP clinically & right atrial pressure on ECHO in spite of removal of pericardial fluid

INVESTIGATION

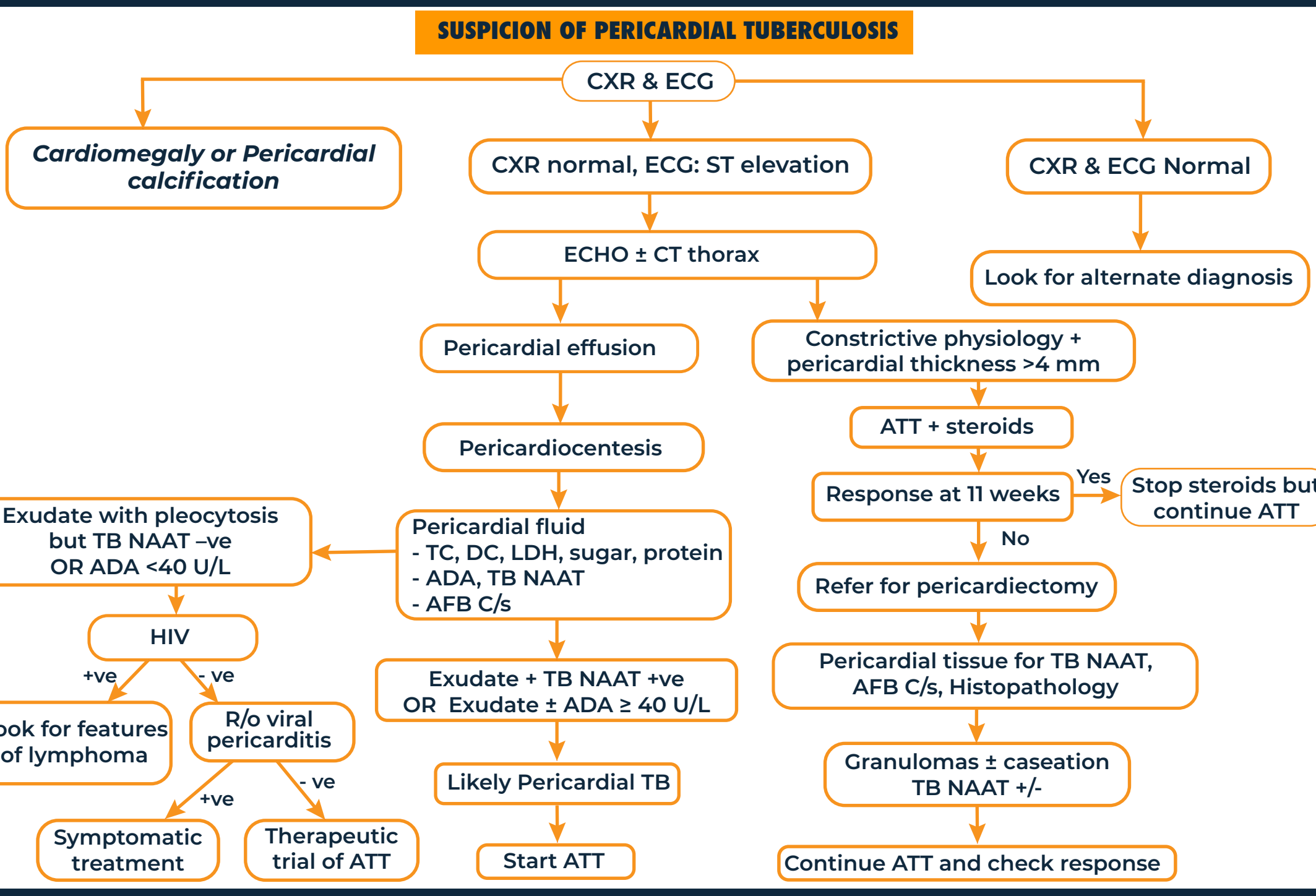
Essential tests:

- Chest X-ray
- ECG
- Echocardiogram

Desirable:

- Cardiac enzymes
- CT/MRI of Thorax
- Pericardiocentesis
- Pericardial biopsy

DIAGNOSIS



MANAGEMENT

TREATMENT

- Antitubercular therapy is advised as per NTEP
- Steroids are recommended in large pericardial effusions, prominent pleocytosis & pericardial fluid with high inflammatory markers or early constriction
- Give Prednisolone 60 mg/day for 4 weeks, 30 mg/day for 4 weeks, 15 mg/day for 2 weeks & 5 mg/day for 1 week
- Total duration of systemic steroids is 11 weeks

NON RESPONSE TO STEROIDS & ATT

- Should prompt a referral to a specialist center for confirmation of diagnosis
- Should prompt an evaluation for alternative causes of effusio-constrictive pericarditis: viral infections, systemic lupus erythematosus, primary effusion lymphomas or pericardial malignancies
- Non response of cardiac symptoms to anti-tuberculous therapy cardiac surgical evaluation may be required

ABBREVIATION

ADA: Adenosine Deaminase
ATT: Antituberculous Therapy
CXR: Chest X-ray
ECG: Electrocardiogram
ECHO: Echocardiogram
JVP: Jugular Venous Pressure
NTEP: National Tuberculosis Elimination Programme
TB: Tuberculosis

REFERENCES

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