

Chest Pain and Peripheral Neuropathy as a Harbinger of Serious Systemic Illness

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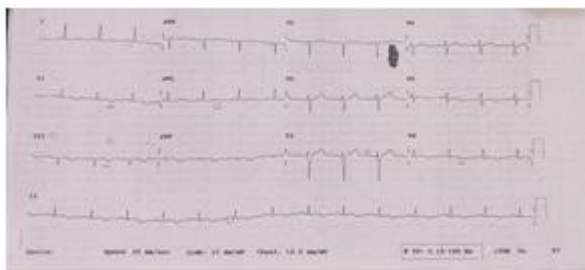
1. Introduction

Chest pain is one of the most frequent symptoms driving the patient to the physician; the commonest underlying causes are well established and addressed. Nevertheless, in some clinical scenarios excluding the common etiologies, it is important to consider less common causes.¹ We are presenting a clinical case with such rarity.

2. Case Report

History- 44-year-old female presented to the ER with chest pain radiating to the left arm associated with sweating, she had B/L lower limb pain and tingling sensation. On probing into the history she had symptoms suggestive of Raynaud's phenomenon, recurrent sinusitis, and asthma in childhood.

Physical examination- absent B/L posterior tibial artery pulsations.



Investigations

ECG- Q wave in L3, T wave inversions in L2-3, avF, V5-6. **ECHO-NORMAL STUDY**

TROPONIN->10.962^^

ESR-41^, **CRP**-48.5^^, **AEC**-5248^^,

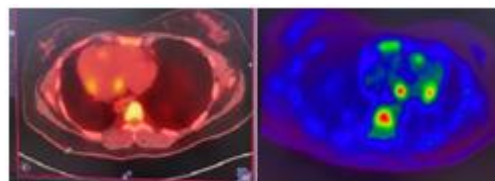
ANA Profile, ANCA, RF, Anti CCP, Anti Cardiolipin antibody, Serum Ig4, ACE, Mantoux

-Negative



CT upper and lower limb angiography-complete total occlusion of right and left posterior (mid and distal) tibial artery

CT coronary and abdominal angiography –normal



Nerve conduction study- asymmetrical motor sensory neuropathy

PET Cardiac and whole body- showed increased tracer activity in the mid and basal inferolateral wall, apical and basal segments inter-ventricular septum of LV myocardium

Considering the positive history of recurrent episodes of asthma, Sinusitis, Raynaud's phenomena, absent pulses in the B/L posterior tibial artery on examination and investigations (AEC- 5248, CRP>48.5, ESR>41, troponin>10.96, CT Peripheral angiogram showing occlusion of the B/L posterior tibial artery, Cardiac PET-Increased uptake, and ANCA-negative) we came to the diagnosis of **ANCA Negative Eosinophilic Granulomatosis with Polyangiitis with Myocarditis, small vessel thrombosis of both lower limbs.**

Treatment

She was initially started on a pulse dose of steroids for 3 days, then later shifted to tablet wysolone, pregabalin, and vitamin B12 supplementation given for neuropathy and dabigatran for small vessel thrombosis. On follow up she was added to cyclophosphamide.

3. Discussion

Eosinophilic Granulomatosis with polyangiitis formerly known as Churg-Strauss syndrome is a rare systemic vasculitis of unknown etiology characterized by necrotizing small, medium vessel vasculitis and eosinophil-rich granulomatous inflammation of tissues and vessels, associated with asthma and peripheral blood eosinophilia.

Diagnosis is made by the presence of ≥ 4 criteria of the six criteria according to ACR which includes bronchial asthma, paranasal sinusitis, peripheral blood eosinophilia $>10\%$, pulmonary infiltrates, histologically confirmed vasculitis, and neuropathy.

ANCA are positive in 40%-60% of cases, heart involvement occurs in 15%-60% of EGPA patients especially those who are ANCA negative.

Treatment- For mild diseases, we start on corticosteroids, a severe diseases we start them on corticosteroids + cyclophosphamide, for failure we consider biological agents, Maintenance therapy (azathioprine or methotrexate).

4. Conclusion

Not every troponin elevation is ACS and not every cause of myocarditis is a viral fever! We as clinicians need to consider rare causes, by having a supportive history, clinical picture, and investigations. Seeing the patient as a whole is important rather than restricting them to a particular sub-specialty.

References

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