Posters

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Eosinophilic Myocarditis Secondary to Hypereosinophilic Syndrome vs. Eosinophilic Granulomatosis with Polyangiitis: A Diagnostic Dilemma

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Eosinophilic Myocarditis Secondary to Hypereosinophilic Syndrome vs. Eosinophilic Granulomatosis with Polyangiitis: A Diagnostic Dilemma

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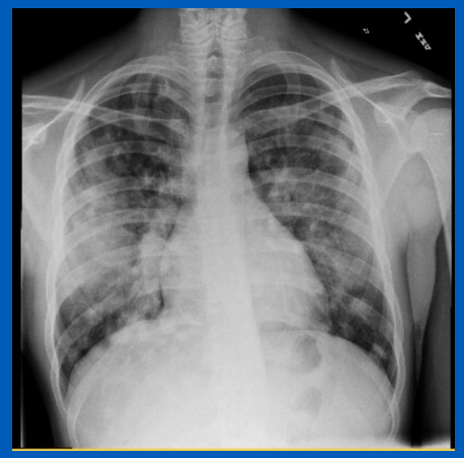
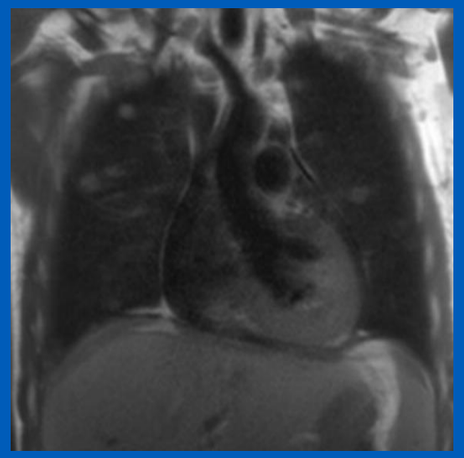
INTRODUCTION

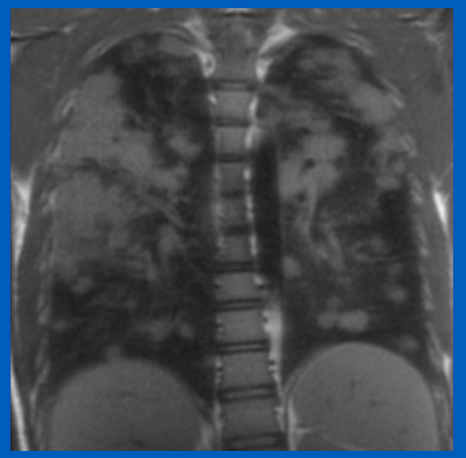
- HES is a rare diagnosis
- Cardiac involvement can lead to irreversible damage and death
- Overlap exists between HES and EGPA, requiring a multi-disciplinary approach

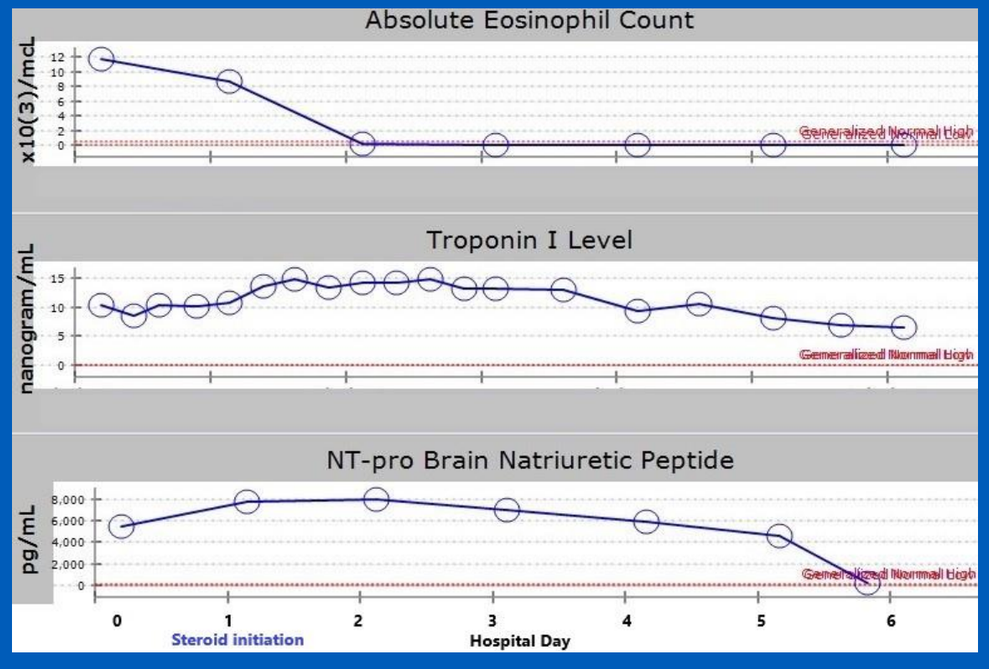
CASE

- 16 y/o male with history of asthma presents with acute onset of chest pain
- Peripheral eosinophilia of 11.7 (x10^3/mcl)
- Troponin elevation of 10.4 (ng/mL)
- ECG: ST elevations, multifocal PVCs, and rate dependent BBB
- Cardiac MRI: moderate to severe dysfunction, moderate effusion
- Extensive genetic and infectious work up
- High dose steroids initiated → improvement in eosinophilia, cardiac function, and arrythmia burden
- Recurrent eosinophilia and effusion → transitioned to therapy with mepolizumab
- Overall improved function









HES

- Hereditary, Primary, Secondary, Unknown
- AEC >1500 or tissue hypereosinophilia x2, 1mo apart for >6mo

1. Must be no other cause
2. Signs/symptoms of organ involvement

- Abnormal bone marrow biopsy
- JAK2, V617F, c-kit D816V, FIP1L1/PDGFR alpha gene mutations
- Can present with myocarditis

EGPA

1. Asthma
2. Peripheral eosinophilia (>10% and/or >1500 cells/microL)
3. Neuropathy
4. Pulmonary opacities
5. Paranasal sinus abnormality
6. Eosinophils on biopsy

- Polyangiitis/surrogates of vasculitis

Conclusion

- HES requires prompt recognition and treatment
- Initial management of HES and EGPA are similar but refractory therapies differ

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