AN UNUSUAL CAUSE OF PYREXIA
OF UNKNOWN ORIGIN

Dr. Keerthi
DNB post graduate
Dr. Janani Sankar unit
KKCTH
HISTORY

• 6 year old boy
• Intermittent high grade fever for 3 weeks
• No major localizing symptoms
• Occasional headache

• No h/o contact with TB/pets

• Investigated elsewhere, treated with antibiotics
• Referred in view of persisting fever
ON EXAMINATION

• Not sick looking
• Haemodynamically stable
• Systems – NAD.
• No significant lymphadenopathy / organomegaly
• No rash
• Joints – normal
INVESTIGATIONS

• TC - 27,300, P 84, L14,
• Platelet count - 6.6 lakhs/cumm
• ESR - 67 mm/hr
• CRP – 15 mg/L

• Blood and urine cultures - sterile
• Mantoux - negative
• CXR, USG Abdomen - normal
• HIV ELISA - non reactive

• ECHO showed ‘prominent left coronary artery’
WHAT ARE WE DEALING WITH?

- Fever for 4 weeks with intermittent headache
- High inflammatory markers
- No obvious focus of infection
- Prominent left coronary artery

Incomplete Kawasaki
Partially Treated Meningitis
Evolving Autoimmune Disease
Lymphohoreticular Malignancy
FURTHER WORKUP

• Persisting fever spikes, intermittent headache

• REPEAT CBC:
  TC – 28,500, P84 L13,
  Platelet count – 6.2 lakhs/cumm
  ESR – 49mm/hr

NEUROIMAGING & CSF ANALYSIS - PLANNED TO R/O PARTIALLY TREATED MENINGITIS
MRI BRAIN

- Non enhancing hyperintense lesions in bilateral caudate putamen, left middle cerebellar peduncle suggestive of ADEM!!
CSF ANALYSIS

- Glucose – 50mg/dl
- Protein – 60mg/dl
- Cells – 30 WBC’s, all lymphocytes
- HSV PCR - negative
- CSF culture - sterile
- CSF AFB stain - negative
- CSF AFB culture – sterile
48hrs later

• Developed ataxia, extensor plantar and brisk DTR

• No encephalopathy

• Bowel, bladder – normal

• Fundus examination was normal

• Persisting fever spikes
NEUROLOGIST CONSULT

• ??ADEM presenting as PUO

• Advised to r/o lymphoproliferative disorders
• Bone marrow – reactive marrow

• Baseline Auto immune work up
  ANA, dsDNA – negative

• Repeat ECHO - no change in size of LCA
Literature review – 2 similar case reports!!


• Suggest that ADEM should be considered in the differential diagnosis of pyrexia of unknown origin in children, even in the absence of any neurological manifestations, as early treatment can be associated with clinical improvement and may prevent serious complications.
LITERATURE REVIEW


• Described an atypical case of ADEM that initially manifested as several weeks of FUO. A successful diagnosis of the underlying disease required an intensive and rational diagnostic evaluation of the wide spectrum of possible etiologies of FUO. This case report suggests a new possible syndromic association between ADEM and FUO, which should be considered in the clinical examination of patients with FUO, especially in the presence of also modest neurologic or neuropsychiatric symptoms.
FINAL STEP

• Pulse methylprednisolone for 5 days

• Discharged on oral steroid
SUMMARY

• This child presented to us as PUO with no focal neurological signs
• He later developed neurological signs and radiological features of ADEM
• Hence the possibility of ADEM presenting as PUO was considered.
• However close follow up is essential
FOLLOW UP

• On tapering dose of steroid
• Brisk DTR, flexor plantar, no ataxia
• Repeat MRI Brain planned later
LESSONS LEARNT

• ADEM can present as PUO
• ADEM has a wide range of presenting features. We report an atypical case of ADEM that initially manifested as several weeks of PUO.
• Periodic clinical examination will give us valuable information
• Judicious use of second line investigations
• Close follow up of these patients is important
ACKNOWLEDGEMENTS

• Dr.G.Kumaresan, Consultant Neurologist

• Dr.Prasad Manne, Consultant Cardiologist