A case of fever with Lymphadenopathy.

Dr Mekapothu sai Kishore

Dept of GENERAL MEDICINE

Clinical History

A 15 year old male residing at moshi came to medicine OPD with complaints of

- Fever on & off since 1 month
- Swelling in the neck region since 20-25 days
- Generalised weakness since 20 days

General examination:

- Pulse – 80 bpm (regular)
- BP - 100/60 mmHg
- No pallor / icterus / clubbing / cyanosis / pedal edema
- Lymphadenopathy present – multiple swellings seen over Right side upper jugular and middle jugular areas.On palpation sub mental and sub mandibular ,upper and middle jugular lymph nodes palpable which are soft in consistency ,non matted ,non tender and mobile in nature, with largest measuring 2cm x 2cm.

Systemic examination:

- CVS : S1 S2 present , no murmur
- RS : B/L Normal vesicular breath sounds,no adventitious sounds
- P/A : Soft, non tender,no organomegaly
- CNS : conscious, oriented,no neuro deficit

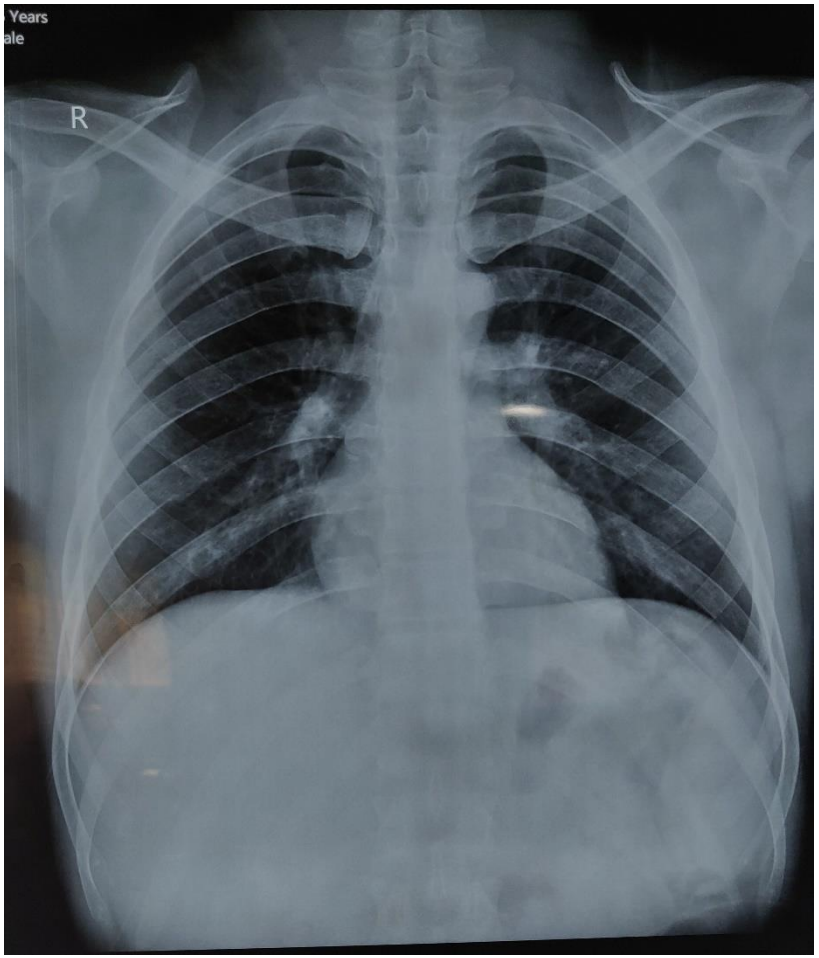
Investigations:

Hb	10.6
TLC	3600
Platelets	1.10 lakhs
PCV	38.6
MCV	76.7
MCH	25.7
MCHC	33.6
Neutrophils	64%
Lymphocyte	27%
Eosinophils	01%
Monocytes	08%
ESR	29mm

T.Bilirubin	0.42
C.Bilirubin	0.18
UC.Bilirubin	0.24
SGPT	38
SGOT	47
Urea	16
Creatinine	0.7
Na	140
K	4.2
Urine r/m	normal

aptt	30.7 sec
INR	1.1
Dengue	Negative
Widal	Negative
RMT	Negative
Weil-Felix	Negative
S.LDH	713

Chest x ray pa view



ANA blot: negative

Blood cultures – negative

Urine cultures- negative

Paul bunnell test: negative

USG neck

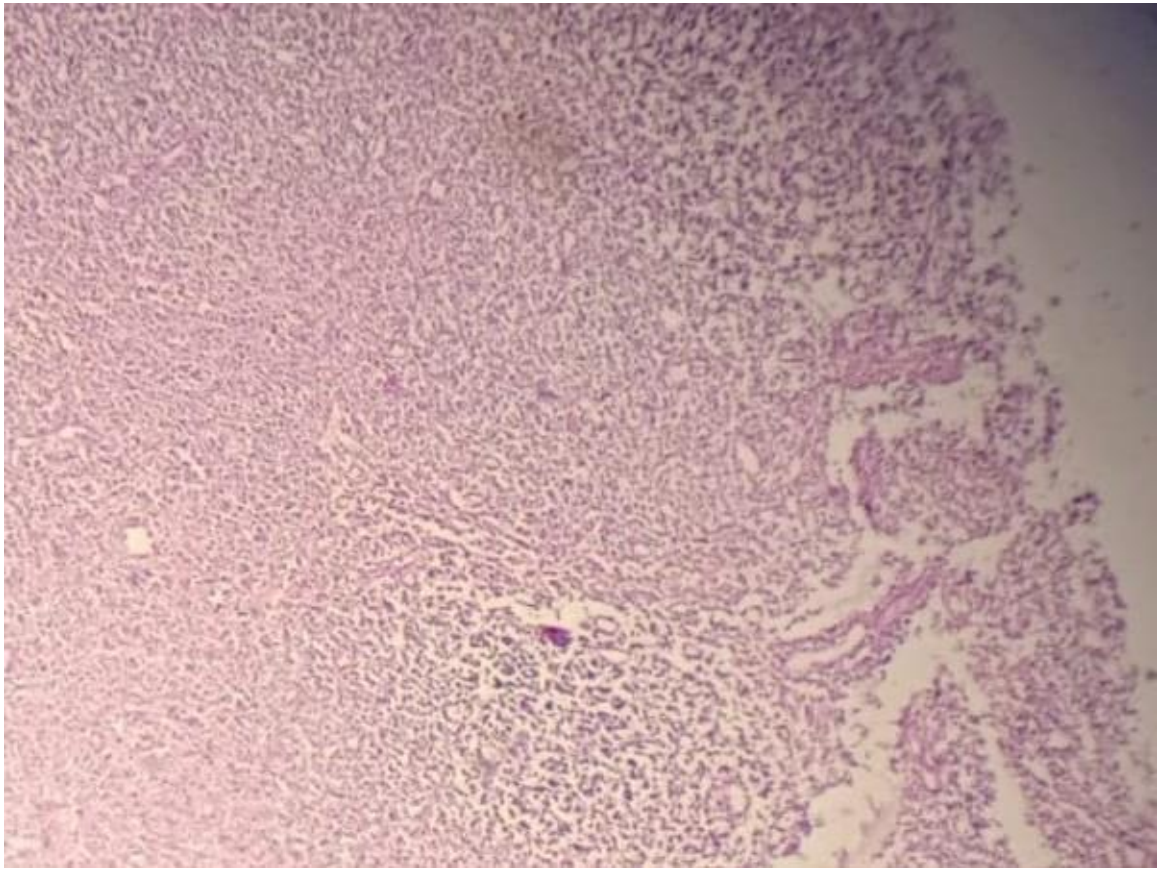
- Multiple enlarged hypoechoic lymph nodes on right side – Level 1B,2,3,4 and in posterior triangle .Largest one measuring 29x14mm seen at level 2.
- Few mildly enlarged lymph nodes seen at level 1, left level 1B, and 2.
- Impression: Cervical lymphadenopathy (Right > left) likely to be inflammatory etiology

Cervical lymph node biopsy:

- TB PCR-Negative
- HPE- Necrotising lymphadenitis (to rule out Kikuchi disease or SLE)
- No AFB seen on ZN staining.

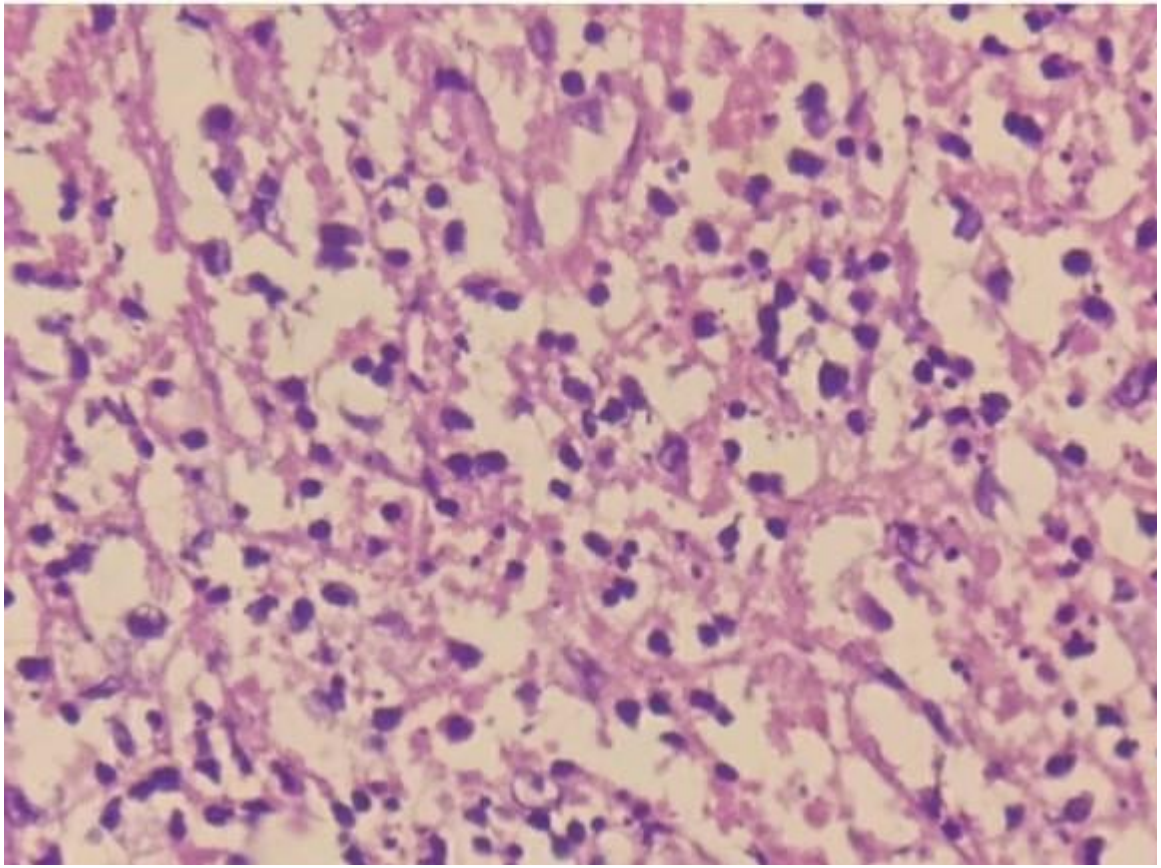
ECG- Normal sinus rhythm

LYMP NODE BIOPSY



These pictures are scanner view – showing lymphoid structures with areas of necrotising lesions

Lymph node biopsy



These pictures are high power view depicting necrosis with karyorrhexis/pyknosis with nuclear debris but no neutrophils,

Zn stain for AFB IS NEGATIVE.

- Considering lymph node biopsy report,age and negative TB test by CBNNAT and no AFB seen on ZN stain diagnosis was made as **Kikuchi- Fujimoto Disease**

Treatment given:

1. Inj amoxycillin and clavulanic acid 1.2gm iv TDS X 7 DAYS
2. Inj Pantoprazole 40mg iv OD
3. Tab paracetamol 650 mg BD
4. Tab prednisolone 40mg (1-0-0) for 7 days

5. Tab prednisolone 30 mg OD FOR 7 DAYS

6. Tab prednisolone 20 mg OD for 7 days

7. Tab prednisolone 10 mg OD for 7 days

8. Tab prednisolone 5 mg OD for 7 days

Discussion:

- Kikuchi-Fujimoto disease, or histiocytic necrotizing lymphadenitis, is a self-limited condition, characterized by benign lymphadenopathy with associated fever and systemic symptoms.
- Most commonly affects adults younger than 40 years of age and Asian population.
- Involved lymph nodes demonstrate paracortical areas of apoptotic necrosis with abundant karyorrhectic debris and a proliferation of histiocytes, plasmacytoid dendritic cells, and $CD8^+$ T cells in the absence of neutrophils.
- The etiology is unknown, although viruses(Epstein- barr virus,HHV-6,HHV,8,HIV,HEP-B) and autoimmune mechanisms have been proposed.

- Kikuchi-Fujimoto disease is thought to have 3 evolving phases: proliferative, necrotizing, and xanthomatous.

- Electron microscopic studies have revealed tubular reticular structures in the cytoplasm of activated lymphocytes and histiocytes in KFD.

- Similar structures have also been seen in endothelial cells and lymphocytes in patients with systemic lupus erythematosus (SLE) and other autoimmune disorders.

- However, serologic test findings for autoimmune antibodies, including antinuclear antibodies, rheumatoid factor and anti–double-strand DNA antibodies, have been consistently negative in patients with KFD, providing no support for an autoimmune mechanism of the disease.

TAKE HOME MESSAGE:

- KFD is an extremely uncommon, self-limited, and perhaps underdiagnosed process of unknown cause with an excellent prognosis that seems to be more prevalent among Asians.

- The diagnosis of KFD merits active consideration in any nodal biopsy showing fragmentation, necrosis, and karyorrhexis, especially in young people with posterior cervical lymphadenopathy.

- Treatment with corticosteroids(oral prednisolone) in tapering doses is recommended and patient usually recover well after steroids.

- Patient was given 6 weeks of prednisolone ,he came for regular follow up and there was significant improvement.

Thank you