A Case of Adult Still's Disease Presenting as Prolonged Fever

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A 35-year-old lady was evaluated for fever for 20 days with polyarthralgia, headache, nausea and dry cough. She had no localising abnormal signs and all the investigations in stages 1 and 2 of our protocol for the advanced fever clinic. All investigations drew blank.

After discussion with the other consultants including the rheumatologist, we repeated the Serum Ferritin level which was very high. All tests for vasculitis package, culture, and scans were not contributory. We gave a course of Naprosyn for which she showed improvement in the form of Normal temperature and was free of pain.

Stages of investigations in our protocol of advanced fever clinic

STAGE 1
Medi Pack A
Random Blood Sugar
Blood Urea
Creatinine
Liver Function Test
Urine Routine and Culture
Stool Routine
Chest X-Ray
Blood Culture
USG – Whole Abdomen
Fever Agglutinins Like Dengue, Lepto, Mp,
Brucellosis, Mononucleosis, Scrub Typhus,
Influenza A and B
Peripheral Smear to Look for Malignant Cells
Serum Electrolytes

If no clue for diagnosis, then the patient goes into the second stage of investigations

STAGE 2	
Thyroid Function Tests- T4, T3 And Tsh	
Hiv	
Ferritin Levels	
Echo Screening (Also Tee)	
Ct Abdomen And Thorax	
Vasculitis Package	
Epstein Barr Virus (Ebv- Igm)	
Cytomegalovirus (Cmv- Igm)	

Then we proceed to stage -3 if a diagnosis is not made. stage -3 contains invasive and non-invasive procedure that require hospitalisation.

STAGE 3
Invasive Procedures- Biopsy
Laparoscopy, Drainage Of Abscess
Mediastinoscopy, Cystoscopy
Liver Biopsy, Splenic Puncture, Bone Marrow Biopsy
Nuclear Bone Scan, Pet Scan

Laboratory tests in still's disease

Elevated ESR	99 percent
WBC	
≥ 10,000/mm3	92 percent
≥ 15,000/mm3	81 percent
Neutrophils ≥ 80 percent	88 percent
Serum Albumin ≤ 3.5 g/dl	81 percent
Elevated liver enzymes (any)	73 percent
Anemia (Hgb ≤ 10g.dl)	68 percent
Platelets $\geq 400,000/\text{mm}3$	62 percent
Nagative ANA	92 percent
Nagative RF	93 percent

Adapted from pouchot et al and Ohta et al

Table 1 AOSD clinical manifestations in the largest series (percentage of patients)

Manifestations	Study (No of patients)									
	Wouters (28) ⁶	Masson (65) ²³	Ohta (90) <u>¹⁴</u>	Pouchot (62) 111	Fujii (systemic) (18) ²¹	Fujii (chronic articular) $(17)^{\frac{21}{}}$	Fautrel $(72)^{\underline{24}}$	Andres (17) ³²		
Sore throat	68	68	70	92	67	71	38	35		
Myalgia	75	62	56	84	61	12				
Fever	100	94	100	100			85	82		
Arthritis	68	69	72	94	89	100				
Arthralgia		100	100	100	11	0	64	53		
Lymphadenopathy	54	48	69	74	56	47	32	35		
Rash	54	85	87	87	94	88	51	76		
Splenomegaly	14	22	65	55	56	29	32			
Pleuritis	25	15	12	53						
Pericarditis	25	23	10	37			15			



Chronic arthritis or established rheumatoid arthritis results as an effect of Still's disease in a small percentage of people

Conclusion

This case is being presented for the difficulties we underwent in making a diagnosis since stages 1, 2 and 3 were exhausted and the repetition of already done one test, that is serum ferritin level was very high in this patient which gave us a clue for diagnosis and he responded to treatment. The hospital stay was stormy with high temperatures around the clock and with severe arthralgia. This patient has to be followed up as she may develop rheumatoid arthritis as a latent complication.