

PYREXIA (FEVER) OF UNKNOWN ORIGIN

PUO/FUO – Important subheadings



- Types of FUO
- Definition of Classic FUO
- Common causes of FUO
- Evaluation
- Treatment



TYPES of FUO



- Classic FUO
- Nosocomial FUO
(fever after hospital admission for another illness)
- Immune deficient FUO (eg: HIV patients, neutropenic patients)
- Travel associated FUO



DEFINITION OF CLASSIC FUO



- Temperature $>38.3^{\circ}\text{C}$ (100.9°F) recorded on several occasions for >3 weeks, despite 3 outpatient clinic evaluations, 1 week of intensive outpatient investigation, OR 3 days of hospital-based evaluation



COMMON CAUSES OF FUO



- Infections : Tuberculosis (especially extrapulmonary)
Infective endocarditis
Occult abscesses (eg: Abdominal, Pelvic, Dental)
Rickettsial infections
HIV
Leishmaniasis
- Autoimmune conditions : SLE, Rheumatoid arthritis, Vasculitis
- Malignancies : Lymphomas & Leukemias

Renal cell carcinoma, Hepatocellular carcinoma
- Miscellaneous : Drug induced fever, Sarcoidosis



EVALUATION

- Re-take history thoroughly
- Thorough physical examination
- Laboratory tests



Laboratory tests (if not already done)



- CBC, ESR, CRP, P.Smear
- Procalcitonin
(elevated in infectious causes of PUO)
- LFT, RFT
- 3 sets of Blood cultures
(to rule out I.E and other infections)
- Urine routine and culture
- Chest X-ray (to rule out TB)
- Nasopharyngeal swab (COVID-19)
- ANA, RA factor, ANCA
- LDH (will be elevated in lymphomas)
- Testing for HIV, Malaria, EBV, Scrub typhus
- CT Chest, Abdomen, Pelvis
(to rule out occult abscesses, TB etc.)
- Echocardiography (to rule out I.E)
- Lymph node Biopsy & CB NAAT
(to rule out lymphoma, TB)
- Bone marrow study
(to rule out leukemias, leishmaniasis etc.)
- PET scan
(to localize occult malignancy)



TREATMENT



- Specific treatment to be started once diagnosis has been made
- Empirical treatment is not advised, except if :
 - Patient clinically deteriorating (start antibiotics)
 - Culture negative endocarditis (start antibiotics)
 - Cryptic miliary TB presentation (start ATT)

