FUO: Fever of Unknown Origin

Reference: Antoon JW et al. Pediatric Fever of Unknown Origin. Pediatr Rev 2015;36(9):380-90

Definition: Fever 38.0 C (100.4 F) or higher for 8 days or longer without a clear source

Detailed History

Documented fevers vs tactile Fever pattern, timing, periodicity

Sick contacts

Associated symptoms (B symptoms, eg wt loss)

Animal exposure, travel, mosquito/tick exposure

AND

Thorough Physical Exam

Kawasaki signs, lymphadenopathy, hepatosplenomegaly, cardiac murmur, pulmonary findings, bone tenderness, arthritis, rash / mucosal lesions

Suspected Source? Well appearing? Work-up to confirm and treat accordingly Admit, labs as for yes, empiric abx If still no source

Differential Diagnosis

ID: EBV, cat-scratch (Bartonella), HIV, Enterovirus, Sinusitis, Osteomyelitis, Pyelonephritis / UTI, Abscess, Brucellosis, Leptospirosis, Mycoplasma, Rat Bite Fever, Salmonella, TB, Tularemia, HSV, CMV, Malaria, Ehrlichiosis, RMSF, Q fever, Fungal infection, Parasitic disease

Oncologic: Leukemia, Lymphoma, Histiocytosis, Neuroblastoma

Autoimmune: Kawasaki, SLE, JRA, PAN, IBD, Behcet, Sarcoidosis,

Hyperthyroidism / thyroiditis, Granulomatosis

Other: Drug fever, Pseudo FUO (serial viral syndrome), Periodic fever syndromes, Pancreatitis, Serum sickness, Cyclic neutropenia

Stop non-essential medications, CBC w/diff, BMP, LFTs, UA, blood and urine cultures, CXR, ESR, CRP, viral panel if available, admit if

suspect serious illness by these tests, else continue w/u as outpt

HIV, EBV, cat-scratch titers, PPD. Consider LP, ANA, RF, uric acid, LDH, C3, C4, CH50, TFTs, serologies, immunoglobulins, bone scan, bone marrow