Infectious Diseases

Fever of Unknown Origin*	
Definition	Fever without a source for >7-10 days
Differential	 Bacterial: endocarditis, mastoiditis, sub-diaphragmatic abscess, liver abscess, perinephric abscess, pyelonephritis, pelvic abscess, osteomyelitis, TB, salmonellosis (including typhoid), lymphogranuloma venereum, brucellosis, cat-scratch disease, leptospirosis, tularemia, psittacosis, tick-borne disease (e.g. Anaplasma, Babesia), Q fever, RMSF Viral: adenovirus, arboviruses (e.g. West Nile, dengue), primary HIV, CMV, EBV, HBV, HCV Fungal: blastomycosis, histoplasmosis Parasitic: malaria, toxoplasmosis, visceral larva migrans Granulomatous: sarcoidosis, granulomatous colitis Collagen Vascular Disease: systemic juvenile idiopathic arthritis, polyarteritis nodosa, SLE Malignancy: leukemia, lymphoma, neuroblastoma, Langerhans cell histiocytosis Miscellaneous: diabetes insipidus, drug fever, Kawasaki disease, familial dysautonomia (Riley-Day Syndrome), familial Mediterranean fever or other periodic fever syndromes, HLH, infantile cortical hyperostosis (Caffey Syndrome), pancreatitis, serum sickness, ulcerative colitis, thyrotoxicosis
Workup	History with ROS, travel history, animal exposures, outdoor activities, insect bites, food exposures, sexual history, IV drug use Exam: skin exam, LN palpation, joint exam Labs: CBC with differential, UA/UCx, BCx, HIV, LFTs, LDH, CPK, ESR/CRP, ANA, TST/IGRA, LDH/Uric acid Imaging: CXR to start; may require abdominal axial imaging (MRI vs. CT) Additional work-up as indicated by history and physical and decided upon with guidance from consulting teams and radiology
Treatment	 Unless patient is very ill, empiric antimicrobial therapy should be avoided as it often delays diagnosis Can observe fever pattern for diagnostic purposes before treating fever Glucocorticoids or other immunosuppressive therapy should be withheld until infectious etiology is adequately ruled out