

## Infectious Diseases

Cellulitis & Abscess*	
<b>Etiology</b>	Beta-hemolytic strep, S. Aureus
<b>Differential</b>	Erysipelas, necrotizing fasciitis (pain out of proportion to exam, crepitus, toxic appearing), tenosynovitis (tenderness over flexor sheath, reduced motion), compartment syndrome (early → late: paresthesia, pain out of proportion/with stretch, pallor, pulseless)
<b>Workup</b>	<ul style="list-style-type: none"> <li>• Diagnosis clinical based on tenderness to palpation, warmth, erythema, induration, fluctuance, fever</li> <li>• Obtain ultrasound if c/f abscess</li> <li>• Circle lesion w/indelible ink; TigerText to care team and/or place in chart (Cerner Camera Capture)</li> <li>• No need for labs (e.g., CBC) or MRSA swab if hemodynamically stable</li> </ul>
<b>Treatment</b>	<ul style="list-style-type: none"> <li>• Typically 5-7 days</li> <li>• <b>Non-purulent:</b> Cephalexin/cefazolin, clindamycin, ceftriaxone</li> <li>• <b>Purulent:</b> clindamycin, TMP-SMX, doxycycline</li> <li>• Consider MRSA coverage (TMP-SMX, vanc, linezolid) if: <b>no response to initial therapy</b>, systemic illness, recurrent infection, <b>prior history of MRSA, high prevalence of MRSA in community</b></li> </ul>

Osteomyelitis*	
<b>Etiology</b>	<ul style="list-style-type: none"> <li>• Hematogenous seeding &gt; direct inoculation vs. contiguous spread</li> <li>• S. aureus, GAS, S. pneumo, H. flu type b, Salmonella (sickle cell), E. coli (neonates), Group B Strep (&lt;3 mo), Kingella, Bartonella (vertebral)</li> </ul>
<b>Presentation</b>	Fever, localized pain, swelling, warmth, reduced ROM/weight bearing
<b>Differential</b>	Cellulitis, septic joint, fracture, sickle cell crisis, rheumatic disease, bleed/joint effusion, malignancy
<b>Workup</b>	CBC, CRP, ESR, BCx, plain film (only + after 10-14 days), <b>MRI</b> (sens 80-100%, spec 70-100%), technetium 99 bone scan
<b>Treatment</b>	<ul style="list-style-type: none"> <li>• IV antibiotics +/- surgical debridement, full antibiotic course 4-6 weeks, ortho consult</li> <li>• 1st line: <b>Cefazolin or clindamycin, vancomycin if unstable/toxic-appearing</b></li> <li>• Transition to PO antibiotics when no fever &gt;24 hours, improved pain/ROM, CRP decreasing, BCx negative x48 hours</li> </ul>

Septic Arthritis*	
<b>Etiology</b>	MSSA, Strep pneumo, GAS, > MRSA, Kingella, gonorrhea, Lyme
<b>Presentation</b>	Fever, localized pain, reduced ROM/weight bearing
<b>Differential</b>	Crystal-induced arthritis, inflammatory arthritis (SLE, reactive, sarcoid), OA, malignancy, hemarthrosis
<b>Workup</b>	<ul style="list-style-type: none"> <li>• CBC, BCx, CRP, ESR, synovial fluid analysis, X-ray, US, consider Lyme Ab, ASLO, DNase-B ab</li> <li>• Kocher Criteria: (1) ESR &gt;40, (2) WBC &gt;12, (3) Fever &gt;38.5, (4) Non-weight bearing</li> <li>• Risk of septic arthritis with 0/4 (0.2%), 1/4 (3%), 2/4 (40%), 4/4 (99.8%)</li> </ul>
<b>Treatment</b>	<ul style="list-style-type: none"> <li>• 1st line: <b>Cefazolin</b> x3 weeks, 2nd line: Clindamycin x3 weeks</li> <li>• Use ceftriaxone if concern for Lyme, gonorrhea, or GNR</li> <li>• Add vancomycin if clinically ill-appearing</li> </ul>