Sinusitis

Subset	Usual Pathogens	Preferred IV Therapy	Alternate IV Therapy	PO Therapy or IV-to-PO Switch
Acute	S. pneumoniae H. influenzae M. catarrhalis	Levofloxacin 500 mg (IV) q24h x 2 weeks **or** Gatifloxacin 400 mg (IV) q24h x 2 weeks **or** Moxifloxacin 400 mg (IV) q24h x 2 weeks	Ceftriaxone 1 gm (IV) q24h x 2 weeks	Levofloxacin 500 mg (PO) q24h x 2 weeks **or** Gatifloxacin 400 mg (PO) q24h x 2 weeks **or** Moxifloxacin 400 mg (PO) q24h x 2 weeks **or** Doxycycline 200 mg (IV or PO) q12h x 3 days, then 100 mg (PO) q12h x 11 days*
Chronic	H. influenzae S. pneumoniae M. catarrhalis Oral anaerobes	Not applicable	Levofloxacin 500 mg (PO) q24h x 4 weeks **or** Gatifloxacin 400 mg (PO) q24h x 4 weeks **or** Moxifloxacin 400 mg (PO) q24h x 4 weeks **or** Doxycycline 100 mg (PO) q12h x 4 weeks	

Duration of therapy represents total time IV, PO, or IV + PO. Most patients on IV therapy able to take PO meds should be switched to PO therapy soon after clinical improvement (usually < 72 hours)
** Loading dose is not needed PO if given IV with the same drug*

Acute Sinusitis

Clinical Presentation: Headache and percussion tenderness over infected sinus
Diagnostic Considerations: Diagnosis by sinus films or head CT/MRI showing air/fluid level(s) and/or sinus mucosal thickening
Pitfalls: May present as periorbital cellulitis. Obtain head CT/MRI to rule out underlying sinusitis. If CT/MRI demonstrates "post-septal" involvement, treat as acute bacterial meningitis
Therapeutic Considerations: Treat for full 2 weeks, not 7-10 days. Avoid macrolides and TMP-SMX (predispose to resistant S. pneumoniae); macrolides miss 25% of S. pneumoniae
Prognosis: Good if treated for full 2 weeks. Relapses may occur with suboptimal treatment

Chronic Sinusitis

Clinical Presentation: Generalized headache with low-grade fevers and little/no sinus tenderness by percussion in a patient with a history of acute sinusitis
Diagnostic Considerations: Diagnosis by sinus films or head CT/MRI showing air/fluid level(s) and/or sinus mucosal thickening
Pitfalls: Clinical presentation is variable/non-specific. Head CT/MRI is needed to confirm the diagnosis and rule out sinus tumor
Therapeutic Considerations: Therapeutic failure/relapse is usually due to inadequate antibiotic

duration, dose, or tissue penetration. Treat for a full 4 weeks (2-3 weeks is usually inadequate). If symptoms persist after 4 weeks of therapy, refer to ENT for surgical drainage procedure
Prognosis: Good

Facial Cellulitis

Subset	Usual Pathogens	Preferred IV Therapy	Alternate IV Therapy	PO Therapy or IV-to-PO Switch
Facial cellulitis	Group A streptococci H. influenzae	Cefotaxime 2 gm (IV) q6h x 2 weeks **or** Ceftriaxone 1 gm (IV) q24h x 2 weeks	Ceftizoxime 2 gm (IV) q8h x 2 weeks	Any oral 2nd or 3rd gen. cephalosporin x 2 weeks **or** Levofloxacin 500 mg (PO) q24h x 2 weeks **or** Gatifloxacin 400 mg (PO) q24h x 2 weeks

Duration of therapy represents total time IV, PO, or IV + PO. Most patients on IV therapy able to take PO meds should be switched to PO therapy soon after clinical improvement (usually < 72 hours)

Clinical Presentation: Acute onset of warm, painful, facial rash without discharge, swelling, pruritus
Diagnostic Considerations: Diagnosis by clinical appearance. May spread rapidly across face. Purplish hue suggests H. influenzae
Pitfalls: If periorbital cellulitis, obtain head CT/MRI to rule out underlying sinusitis/CNS involvement
Therapeutic Considerations: May need to treat x 3 weeks in compromised hosts (chronic steroids, diabetics, SLE, etc.)
Prognosis: Good with early treatment; worse if underlying sinusitis/CNS involvement