

AntiBio.InoGram

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Syndrome – Empiric Antibiotics

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|--------------------------------------|---|
| Bites: human | If wound not yet infected, amoxicillin-clav 875/125mg PO BID x 5 days |
| Bites: dog / cat | amoxicillin-clavulanate (875/125 g PO BID or 500/125mg PO TID) |
| Bites: bat, racoon, skunk | amoxicillin-clavulanate (875/125g PO BID or 500/125mg PO TID) OR doxycycline 100mg PO BID |
| Cellulitis (admitting) | no MRSA -- cefazolin 1g IV q8h; MRSA -- vancomycin 15mg/kg IV q 12h |
| Cellulitis (outpatient) | no MRSA -- PCN 500mg PO QID OR azithromycin 500mg PO x 1, then 250mg PO x4 days; MRSA -- doxycycline 100mg PO BID OR TMP-SMX ds PO BID |
| Conjunctivitis | ceftriaxone 250 mg IM x 1 AND azithromycin 1 g PO x 1 OR doxycycline 100mg PO x 7 days |
| Cholecystitis | piperacillin-tazobactam 3.375g IV q6h OR imipenem/meropenem 1g IV q 24h OR ampicillin-sulbactam 3g IV q 6hr OR (iproflaxacin 400mg IV q12h AND metronidazole 500mg IV q8h) |
| Endocarditis (native valve, empiric) | vancomycin 15-20mg/kg q8-12h + ceftriaxone 2g q24h or gentamicin 1mg/kg q8h/IV |
| Menigitis (preterm < 1 mo) | ampicillin 75-100 mg/kg IV q8h AND ceftriaxone 50 mg/kg/dose IV q8h OR gentamicin 7.5mg/kg/day divided every 8hrs |
| Menigitis (1 mo – 50 yrs) | ceftriaxone 2g IV q8h OR ceftriaxone 2g IV q12h AND vancomycin 45-60mg/kg/day IV q8-8h AND dexamethasone 0.15mg/kg IV q6h w/ or before 1st/dose of abx |
| Menigitis prophylaxis | rifampin 600mg q24h x 4 days |
| Necrotizing Fasciitis | imipenem OR meropenem OR piperacillin-tazobactam AND vancomycin if S. aureus suspected, AND clindamycin 600-900 IV q 8h (block toxin production) |
| Neutropenia, febrile (high risk) | cefepime 2g IV q8h; +/- enhanced gram+ coverage or hemodynamic instability: vancomycin |
| Neutropenia, febrile (low risk) | iproflaxacin 750mg PO BID + amoxicillin-clavulanate 875mg PO BID |
| Otorrhagic Infections | intr: amoxicillin-clavulanate (875/125mg PO BID or 2000/125mg BID) q12 hr; severe piperacillin-tazobactam 3.375g IV q6h |
| Otitis Media | Penicillin 80-90mg/kg/day (high dose for strep pneumoniae) PO divided into BID (age<2 for 10 days, age > 7 days); Adults amoxicillin 1000mg TID |
| Otitis Externa | intr: acetic acid + propylene glycol hydrocortisone (Vascol) 5 drops 3-4x/day until sx resolve; mod-severe: ciprofloxacin + hydrocortisone (iproflaxacin-HC otics) 3 drops in each BID x7days |
| Otitis Externa (malignant) | iproflaxacin 400mg IV q8h |
| Parotitis | If no MRSA, nafcillin 2g IV q4h + metronidazole 500mg IV q6-8h or clindamycin 600mg IV q6-8h x 10-14 days; If MRSA/immunocompromised, vancomycin 15mg/kg IV q12h + piperacillin-tazobactam 4.5g IV q6h |
| Pharyngitis | penicillin V 250mg PO QID x10 days OR amoxicillin 500mg/kg (low dose given no strep pneumoniae) PO daily x10days; adults 500mg PO BID x10 days or Benzathine PCN 1.2 million units IM x 1 |
| PID (admitting) | ceftriaxone 2g IV q 8h AND doxycycline 100mg IV q12h |
| PID (outpatient) | ceftriaxone 250mg IM/IV x1 AND doxycycline 100mg PO BID x 14 days + metronidazole 500mg PO BID x14 days |
| Pneumonia: peds, age <1mo | ampicillin + gentamicin (age + wt based dosing) |
| Pneumonia: peds, age 1-3mo | subq: gentamicin 10 mg/kg PO (max 500 mg) x 1 then 5 mg/kg (max 250 mg) PO x 4d; inpatient: ceftriaxone 75-100mg/kg IV q 24h |
| Pneumonia: peds, age 3-6mo | subq: amoxicillin 50mg/kg/day into BID x 8 days or azithromycin 10mg/kg (max 500mg) PO x1, then 5mg/kg (max 250mg) PO x4 days; inpatient: ampicillin 150-200mg/kg/day IV q 6hrs |
| Pneumonia: CAP (healthy) | azithromycin 500mg PO x 1, then 250mg/day x 4d (Z-pack) |
| Pneumonia: CAP (comorbid) | levofloxacin 750mg PO q 24h x 5d |
| Pneumonia: CAP (outpatient) | ceftriaxone 1g IV q24h + azithromycin 500mg IV q 24h OR imipenem 1g q24h + azithromycin 500mg IV q 24h |
| Pneumonia: (admitting to ICU) | ceftriaxone 1-2g IV q 24h OR ampicillin-sulbactam 3g IV q6h + azithromycin 500mg IV q24h |
| | OR levofloxacin 750mg IV q 24h |
| Pneumonia: CAP w/ COPD | If MRSA, add Van 15-20mg/kg IV q8-12h; If pseudomonas considered: ceftazidime 2g q12h or pip-tazo 3.37g q8h or ceftazidime 2g q8h or meropenem 1g q8h |
| Pneumonia: HCAP | levofloxacin 750mg IV q24h |
| Pneumonia: HCAP | vancomycin 15-20mg/kg IV q8-12h + ceftepime 2g IV q12h OR piperacillin-tazobactam 4.5g q6 OR meropenem 1g q8h |
| Pyelonephritis | subq: ciprofloxacin 500mg BID x7d OR levofloxacin 750mg q24h x5d; inpatient: ciprofloxacin 400mg IV q 12 or levofloxacin 750mg IV q24h x5-7d or ceftriaxone 1-2g IV q24h x 14d |
| Septic neonate | ampicillin 25mg/kg IV q6h AND ceftazidime 50mg/kg q12h +/- gentamicin 2.5mg/kg q8h IV |
| Septic child | ceftriaxone 50mg/kg IV q8h OR ceftriaxone 100mg/kg IV q 24h AND vancomycin 15mg/kg q8h |
| Septic adult | imipenem 1g IV q6h OR imipenem 0.5g IV q 6h or meropenem 1h IV q8h AND vancomycin 1g IV q12h; Note many other regimens available. |
| Traveler's Diarrhea | iproflaxacin 750mg PO BID OR levofloxacin 500 mg q24h x 1-3 days |
| UTI (cystitis) adult | If 100% of abx is not resistant to TMP-SMX, TMP-SMX OR 3 days + pyridium 200mg PO x 2 days; If e. coli resistant to TMP-SMX, nitrofurantoin 100mg PO BID x 5days OR ciprofloxacin 250 mg bid or levofloxacin 250 mg q24h x 3d |
| UTI (cystitis)child >2mo | PCN-amoxicillin-clavulanate 10-15mg/kg q8h; Or IV: ceftriaxone 75-100mg/kg daily |
| UTI (cystitis) infant <2mo | empiric treatment for febrile infant: ampicillin/gentamicin, +/- ceftazidime given rates of e. coli resistance to ampicillin |

Bacterial – Antibiotic Coverage

Key: Green = coverage, Yellow = some coverage, Red = no coverage or no data

| Bug | Gram Positives | | | | | | | | | | Gram Negatives | | | | | | | | | | Anaerobes | | | Atypicals | |
|--------------------------------|--------------------------|------------------|------------------------------|------|------|------------|---------------|-----------------|----------------|---------------|----------------|------|----------|----------|-------------------|-------------|-----------|-------------|--------------|-----------|-----------------------|---------------------|--|-----------|--|
| | Strep pyogenes (A,B,C,G) | Strep pneumoniae | Enterococci faecalis/faecium | MRSA | MRSA | Ureaplasma | N. gonorrhoea | N. meningitidis | M. catarrhalis | H. influenzae | E. Coli | ESBL | Shigella | Shigella | Proteus mirabilis | Pseudomonas | Lipoptera | Actinomyces | C. difficile | Chlamydia | Mycoplasma pneumoniae | Mycobacterium avium | | | |
| PCN | | | | | | | | | | | | | | | | | | | | | | | | | |
| Anti-staph PCNs | | | | | | | | | | | | | | | | | | | | | | | | | |
| Amnio-PCNs | | | | | | | | | | | | | | | | | | | | | | | | | |
| Anti-pseudomonal PCNs | | | | | | | | | | | | | | | | | | | | | | | | | |
| Carbapenems | | | | | | | | | | | | | | | | | | | | | | | | | |
| Fluoroquinolones | | | | | | | | | | | | | | | | | | | | | | | | | |
| Cephalosporins 1 st | | | | | | | | | | | | | | | | | | | | | | | | | |
| Cephalosporins 2 nd | | | | | | | | | | | | | | | | | | | | | | | | | |
| Cephalosporins 3 rd | | | | | | | | | | | | | | | | | | | | | | | | | |
| Cephalosporins 4 th | | | | | | | | | | | | | | | | | | | | | | | | | |
| Antimycobiotics | | | | | | | | | | | | | | | | | | | | | | | | | |
| Macrolides | | | | | | | | | | | | | | | | | | | | | | | | | |
| Tetracyclines | | | | | | | | | | | | | | | | | | | | | | | | | |
| Clindamycin | | | | | | | | | | | | | | | | | | | | | | | | | |
| Other | | | | | | | | | | | | | | | | | | | | | | | | | |

Syndrome – Pathogens

| Syndrome | Strep pyogenes | Strep pneumoniae | Enterococci faecalis/faecium | MRSA | MRSA | Ureaplasma | N. gonorrhoea | N. meningitidis | M. catarrhalis | H. influenzae | E. Coli | ESBL | Shigella | Shigella | Proteus mirabilis | Pseudomonas | Lipoptera | Actinomyces | C. difficile | Chlamydia | Mycoplasma pneumoniae | Mycobacterium avium | |
|--------------------------------------|----------------|------------------|------------------------------|------|------|------------|---------------|-----------------|----------------|---------------|---------|------|----------|----------|-------------------|-------------|-----------|-------------|--------------|-----------|-----------------------|---------------------|--|
| Bites: human | | | | | | | | | | | | | | | | | | | | | | | |
| Bites: dog | | | | | | | | | | | | | | | | | | | | | | | |
| Bites: bat, racoon, skunk | | | | | | | | | | | | | | | | | | | | | | | |
| Cellulitis (inpatient) | | | | | | | | | | | | | | | | | | | | | | | |
| Cellulitis (outpatient) | | | | | | | | | | | | | | | | | | | | | | | |
| Cholecystitis | | | | | | | | | | | | | | | | | | | | | | | |
| Endocarditis (native valve, empiric) | | | | | | | | | | | | | | | | | | | | | | | |
| Otitis Media | | | | | | | | | | | | | | | | | | | | | | | |
| Pharyngitis | | | | | | | | | | | | | | | | | | | | | | | |
| Otitis Externa | | | | | | | | | | | | | | | | | | | | | | | |
| Otitis Externa, Malignant | | | | | | | | | | | | | | | | | | | | | | | |
| Parotitis | | | | | | | | | | | | | | | | | | | | | | | |
| Pneumonia: peds, age <1mo | | | | | | | | | | | | | | | | | | | | | | | |
| Pneumonia: peds, age 1-3mo | | | | | | | | | | | | | | | | | | | | | | | |
| Pneumonia: peds, age 3-6mo | | | | | | | | | | | | | | | | | | | | | | | |
| Pneumonia: CAP | | | | | | | | | | | | | | | | | | | | | | | |
| Pneumonia: (ICU) | | | | | | | | | | | | | | | | | | | | | | | |
| Pneumonia: CAP w/ COPD | | | | | | | | | | | | | | | | | | | | | | | |
| Pneumonia: HCAP | | | | | | | | | | | | | | | | | | | | | | | |
| Menigitis (1 mo – 50 yrs) | | | | | | | | | | | | | | | | | | | | | | | |
| Menigitis prophylaxis | | | | | | | | | | | | | | | | | | | | | | | |
| Necrotizing fasciitis | | | | | | | | | | | | | | | | | | | | | | | |
| Neutropenia, febrile (high risk) | | | | | | | | | | | | | | | | | | | | | | | |
| Neutropenia, febrile (low risk) | | | | | | | | | | | | | | | | | | | | | | | |
| Otorrhagic Infections | | | | | | | | | | | | | | | | | | | | | | | |
| Otitis media | | | | | | | | | | | | | | | | | | | | | | | |
| PID (admitting) | | | | | | | | | | | | | | | | | | | | | | | |
| PID (outpatient) | | | | | | | | | | | | | | | | | | | | | | | |
| Pyelonephritis | | | | | | | | | | | | | | | | | | | | | | | |
| Septic neonate | | | | | | | | | | | | | | | | | | | | | | | |
| Septic child | | | | | | | | | | | | | | | | | | | | | | | |
| Septic adult | | | | | | | | | | | | | | | | | | | | | | | |
| Shingles | | | | | | | | | | | | | | | | | | | | | | | |
| Traveler's Diarrhea | | | | | | | | | | | | | | | | | | | | | | | |
| UTI (cystitis) adult | | | | | | | | | | | | | | | | | | | | | | | |
| UTI (cystitis)child >2mo | | | | | | | | | | | | | | | | | | | | | | | |
| UTI (cystitis) infant <2mo | | | | | | | | | | | | | | | | | | | | | | | |

Disclaimer: This table should not be used as the sole reference in making treatment decisions. Choice of antimicrobials must be made in consideration of local/institutional patterns of organism susceptibility and drug resistance, as well as predicted drug concentrations at sites of infection.

References

The Sanford Guide to Antimicrobial Therapy (latest digital content update February 27, 2015). Accessed via Digital Edition for Android Sanford Guide: Antimicrobial Rx by Antimicrobial Therapy, Inc. UpToDate.com various topics, accessed in 2015. UpToDate, Waltham, MA.