
10 Antibiotic Therapy of the Principal Infections in Children and Adults

Antibiotic dosages are given only if they differ from the recommendations in Chap. 9.

Actinomycosis

Pathogens:

Actinomyces species (principally *A. israelii*)

Primary Therapy:

Penicillin G 10–20 IU/day or ampicillin 50 mg/kg/day i.v. 4–6 weeks, then penicillin V 2–4 g/day or amoxicillin 500 mg p.o. q8h

Alternatives:

Doxycycline, clindamycin, ceftriaxone; in penicillin allergy/pregnancy: erythromycin, roxithromycin

Remarks:

Surgical intervention is frequently necessary. Treatment duration 3–6 months for thoracic or abdominal actinomycoses; 3–6 weeks for cervicofacial forms

Amebiasis

Pathogen:

Entamoeba histolytica (not *E. dispar*)

Therapy (intestinal form):

Metronidazole 500–750 mg p.o. q8h for 10 days, then paromomycin 500 mg p.o. q8h for 10 days

Remarks:

Owing to the danger of tissue invasion, asymptomatic excretors of *E. histolytica* should also be treated (with paromomycin only, 500 mg p.o. q8h for 7 days); intestinal lumen amebicide to prevent recurrence. In severe or extraintestinal infections (e.g. liver abscess): start with metronidazole i.v. for 10 days, then paromomycin for 7 days. In case of abscess greater than 3 cm, surgical aspiration might be required.

Amnionitis, Septic Abortion**Most Frequent Pathogens:**

Bacteroides and other anaerobic bacteria, group A and B streptococci, enterobacteria, *C. trachomatis*

Primary Therapy:

Ampicillin/sulbactam + doxycycline (see remarks)

Alternatives:

Cephalosporins (3rd gen.) + clindamycin, ertapenem + doxycycline

Remarks:

Doxycycline is contraindicated in pregnancy

Arthritis**Most Frequent Pathogens:**

- Adults: *S. aureus*, gonococci, *Kingella kingae*; after surgery or joint puncture: *S. epidermidis* (40%), *S. aureus* (20%), streptococci, *Pseudomonas*
Chronic monoarthritis: brucellae, mycobacteria, nocardiae, fungi
After foreign body implantation: *S. aureus*, *S. epidermidis*
- Children (without osteomyelitis): *S. aureus*, group A streptococci, pneumococci, *Kingella kingae*, *H. influenzae*, other Gram-negative bacteria

- Infants: *S. aureus*, enterobacteria, group B streptococci, gonococci

Primary Therapy:

- Adults: oxacillin or flucloxacillin + cephalosporin (3rd gen.)
After joint puncture: vancomycin + cephalosporin (3rd gen.)
Chronic monoarthritis: according to pathogen
- Children and infants: oxacillin or flucloxacillin + cephalosporin (3rd gen.)

Alternatives:

- Adults: oxacillin or flucloxacillin + ciprofloxacin
- Children and infants: oxacillin or flucloxacillin + aminoglycoside

Remarks:

Gram staining and methylene blue staining of pus and of blood cultures usually provide important clues to the pathogen. Surgical consultation and sometimes intervention is necessary. If MRSA rate high: vancomycin instead of oxacillin/flucloxacillin. Intra-articular instillation of antibiotics is not recommended. Treatment duration (2–)3 weeks in adults, (3–)4 weeks in children and infants; 4–6 weeks in infections of prostheses. For monoarticular arthritis: if Gram-stain suggests *S. aureus*: oxacillin/flucloxacillin or 2nd generation cephalosporin; if Gram-stain is negative: 3rd generation cephalosporin, e.g. ceftriaxone, cefotaxime, ceftizoxime. For gonococcal arthritis: ceftriaxone 1 g for 7–10 days.

The Daschner Guide to In-Hospital Antibiotic Therapy
European Standards

Frank, U.; Tacconelli, E.

2012, 300 p. 20 illus. in color., Softcover

ISBN: 978-3-642-18401-7