

Complications and treatment of streptococcal infections

the most common streptococcal infections include:

- streptococcal tonsillopharyngitis
- scarlet fever
- streptococcal skin infections (erysipelas, impetigo)

Complications of tonsillopharyngitis and scarlet fever

- colliquative necrosis of submandibular node
- retrotonsillar, peritonsillar abscess
- otitis, mastoiditis, sinusitis
- rarely - bacteremia, metastatic foci - purulent arthritis, endocarditis, meningitis, brain abscess, osteomyelitis
- without therapy - the risk of late complications - rheumatic fever or glomerulonephritis

Complications of streptococcal skin infections

- rarely septic complications, possibly also glomerulonephritis
- rarely rheumatic fever
- **therapy:** penicillin, macrolides, lincosamides

Rheumatic fever

- acute immunological multisystemic inflammation
- most often after an infection caused by streptococcus of group A
- 1-4 weeks after infection (about 3% infected)
- often affects the heart (carditis) - chronic changes of the valves
- **pathogenesis:** hypersensitivity reactions, Ig against M-protein of streptococci cross-react with glycoproteins of the heart muscle, joints, etc.
- the course of the original infection may be inapparent
- often relapses

Diagnosis

Jones criteria:

- streptococcal infection in the anamnesis
- the presence of at least two main symptoms, or one main and two secondary:

Main symptoms:

1. **migrating polyarthritis**
2. carditis
3. **erythema nodosum** (subcutaneous nodules)
4. **erythema marginatum**
5. **chorea** minor (neurological disorder - unconscious untargeted rapid movements), or also chorea infectiosa rheumatica, Sydenham's chorea, St. Vitus Dance

Secondary symptoms:

- non-specific: fever, joint pain, increased FW and CRP, prolonged P-R interval on the ECG, increased ASLO titer (ie positive ASLO), rheumatic fever in the anamnesis

Principles of treatment of infections caused by Streptococcus pyogenes

- *Tonsillopharyngitis and scarlet fever:* penicillin
- *Erysipelas:* penicillin
- *Impetigo:* lokální - mupirocin, framykoin, permanganate solution
- *Rheumatic fever:* antirheumatics, prevention of recurrences of acute streptococcal infection

Prevention of late consequences: proper treatment of streptococcal diseases.

Links

Related articles

- **Genus Streptococcus** : Streptococcus pyogenes • Streptococcus agalactiae • Streptococcus pneumoniae • Streptococcus mutans • Oral streptococci
- **Streptococcal infections** : Group A streptococcal infections • Burns • Burn angina • Erysipelas • Impetigo • Infections caused by virulent streptococci • Complications and treatment of streptococcal infections • Rheumatic fever

Sources

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