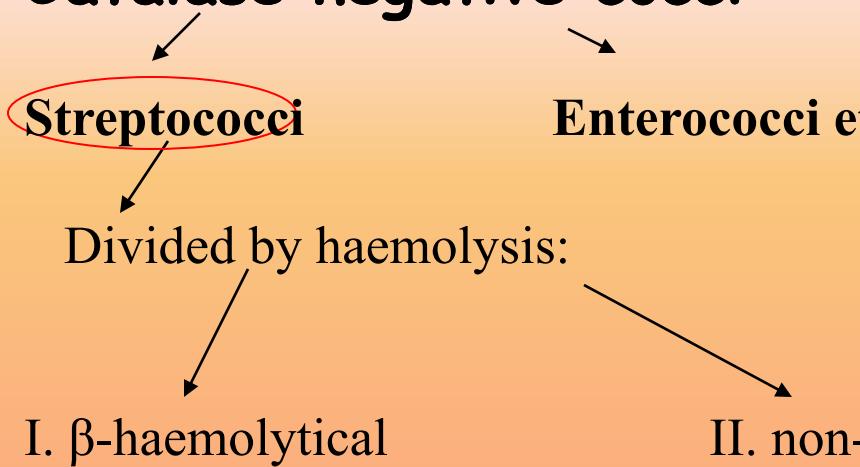
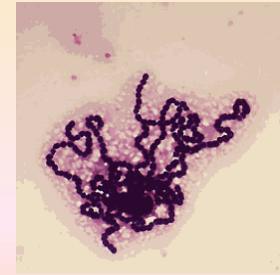


Catalase negative cocci



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- I. **β -haemolytical:** by polysaccharid C are divided into groups A-Z, important *S. pyogenes* (A group) and *S. agalactiae* (B group).

S. pyogenes (A group)



Detection:

Direct:

Microscopy: G+ cocci in pairs or chains



Cultivation: full haemolysis on BA

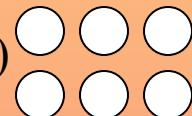
susceptibility to bacitracin

pyrase +

latex agglutination



Indirect: ASLO (detection of antistreptolysin O)



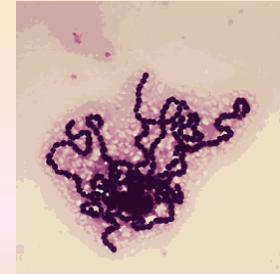
Factors of virulence: capsule, streptolysin O, S, streptokinase, hyaluronidase, pyrogenous toxin

Pathogenicity: acute tonsilopharyngitis, scarlatina, toxic shock syndrom, impetigo, erysipel, cellulitis, wound infection, fascitis, puerperal sepsis, pneumonia

Late sequellae: rheumatoid fever, acute glomerulonefritis. skin lesions

Therapy: penicillin, macrolides, lincosamids

S. agalactiae (B group)



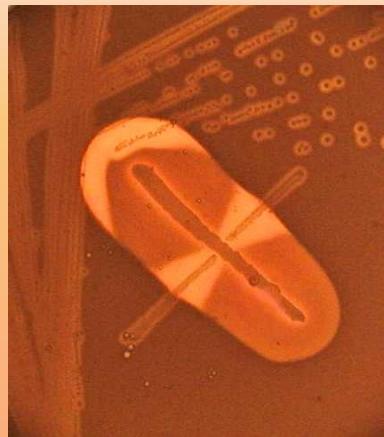
Detection:

Microscopy: G+cocci in chains

Cultivation: haemolysis on BA

positive CAMP test

latex agglutination



Pathogenicity: urinary tract infection, new born babies infections

Therapy: ampicillin, penicillin

Other hemolytical streptococci (non A non B): wound infections, tonsilitis etc.

II: non-β-haemolytical: *S. pneumoniae*, oral streptococci etc.

S. pneumoniae

Detection:

Microscopy: **G+ lancet-like coccii**

Cultivation: blood agar with α -haemolysis (green - viridation)

solubility in bile, susceptibility to optochin

latex agglutination (cerebrospinal fluid)

Factors of virulence: capsule, adhesins, invasins...

Pathogenicity: pneumonia, meningitis, otitis, conjunctivitis, sepsis

Therapy: penicillin, amoxicillin, ceftriaxon, chloramphenicol

Oral streptococci (α -haemolytical streptococci)

Pathogenicity: part of a normal faryngeal flora, can cause dental plaque, caries, endocarditis, sepsis

Detection: Streptotest