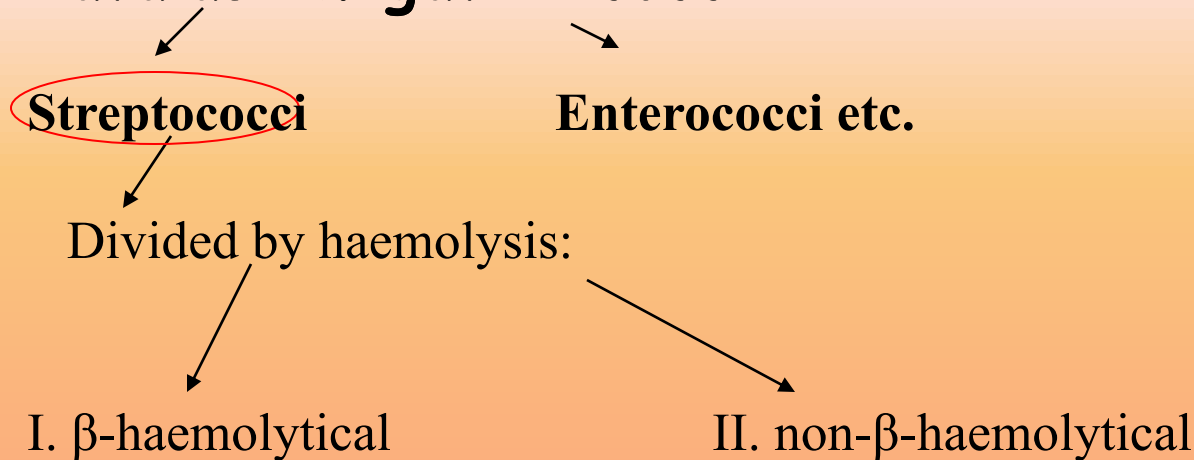
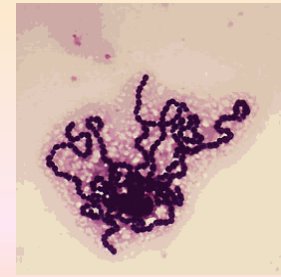


## Catalase negative cocci



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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<sup>+</sup> cocci in pairs or chains 

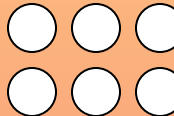
**Cultivation:** full haemolysis on BA

susceptibility to bacitracin

pyrase +

latex agglutination



Indirect: ASLO (detection of antistreptolysin O) 

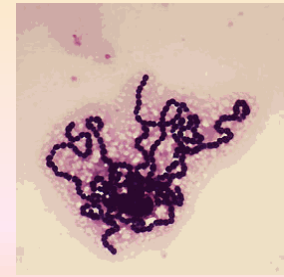
**Factors of virulence:** capsule, streptolysin O, S, streptokinase, hyaluronidase, pyrogenous toxin

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

Late sequellae: rheumatoid fever, acute glomerulonefritis. skin laesions

**Therapy:** penicillin, macrolides, lincosamids

# *S. agalactiae* (B group)



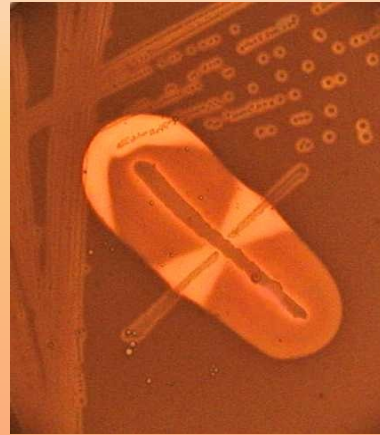
## Detection:

**Microscopy:** G+cocci in chains

**Cultivation:** haemolysis on BA

positive CAMP test

latex agglutination



**Patogenicity:** urinary tract infection, new born babies infections

**Therapy:** ampicillin, penicillin

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

II: non- $\beta$ -haemolytical: *S. pneumoniae*, oral streptococci etc.

*S. pneumoniae*

**Detection:**

Microscopy: G+ lancet-like cocci

Cultivation: blood agar with  $\alpha$ -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 ( $\alpha$ -haemolytical streptococci)**

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

**Detection:** Streptotest