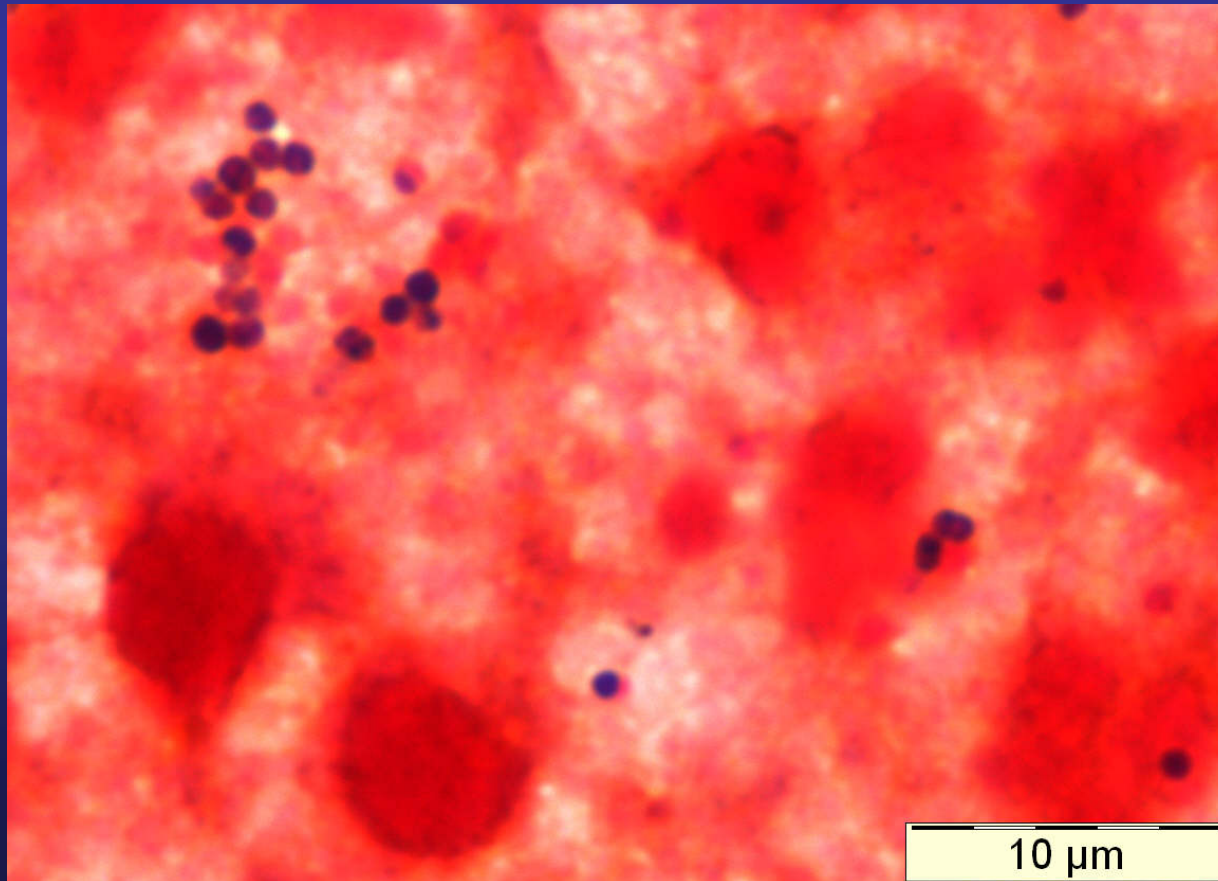


# Gram-positive facultatively anaerobic cocci

Enterococci, staphylococci, and  
streptococci

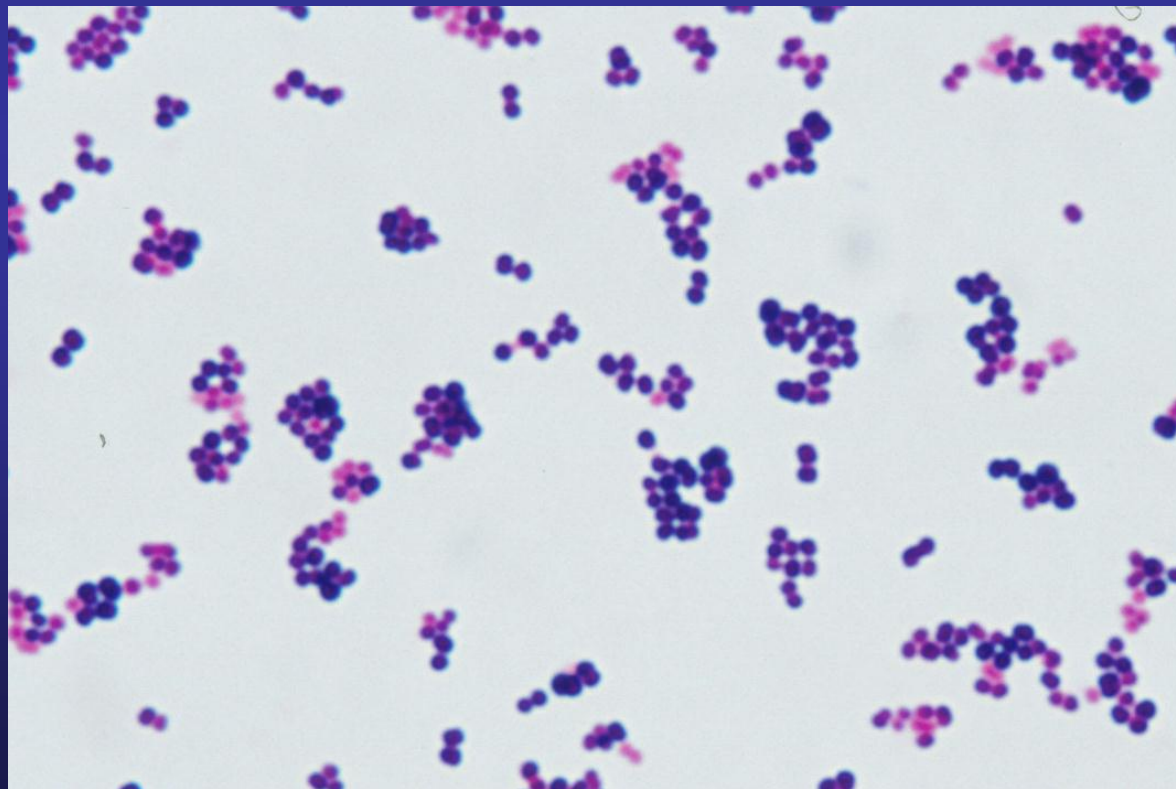
# *Aerococcus urinae*

Gram-positive cocci in small clusters on a heart valve of a patient who died from endocarditis (Gram stain).



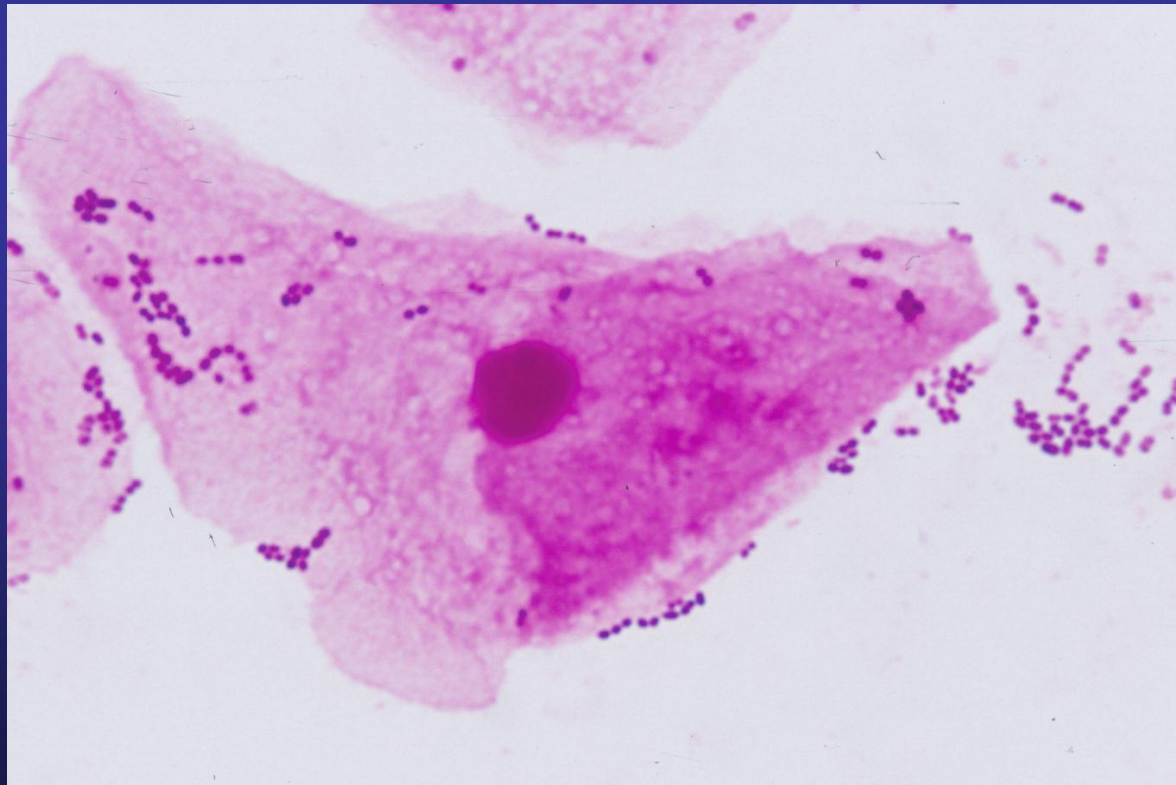
# *Aerococcus urinae*

Catalase-negative Gram-positive cocci in small clusters (tetrads) from a culture (Gram stain).



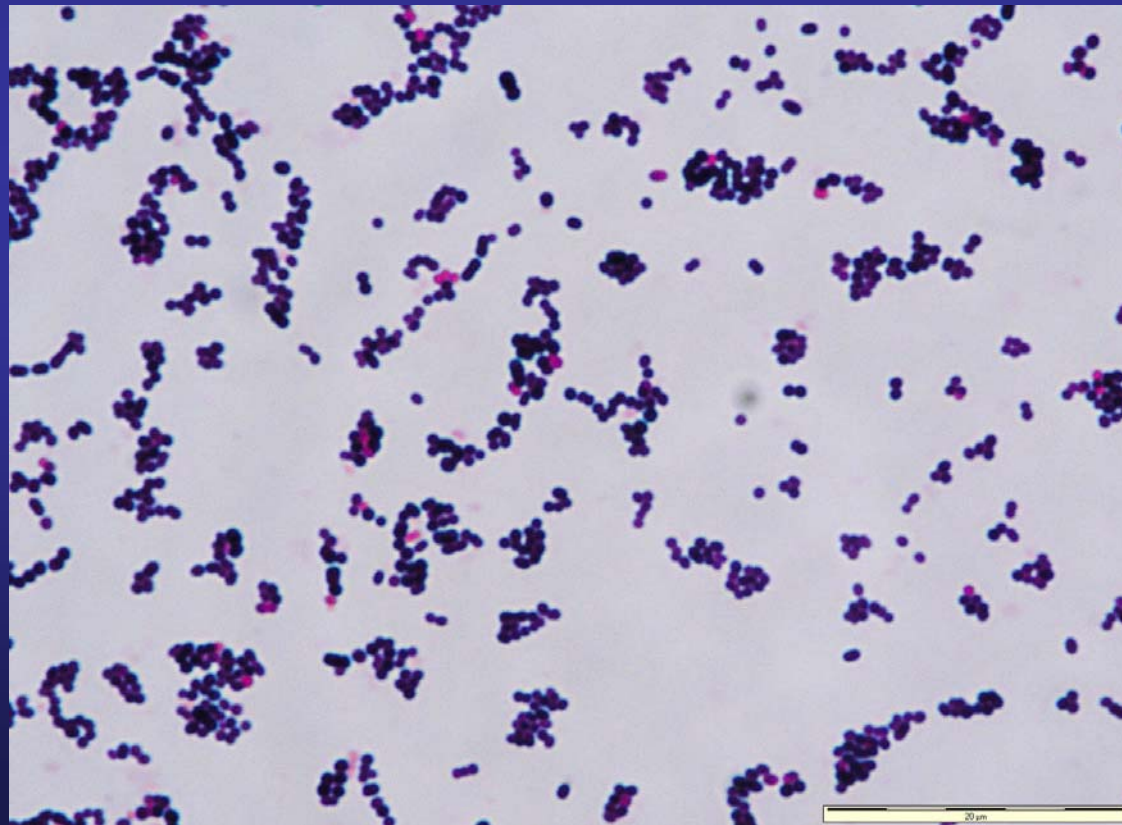
# *Enterococcus faecalis*

Medium-sized Gram-positive cocci forming also short chains in vaginal mucus (Gram stain).



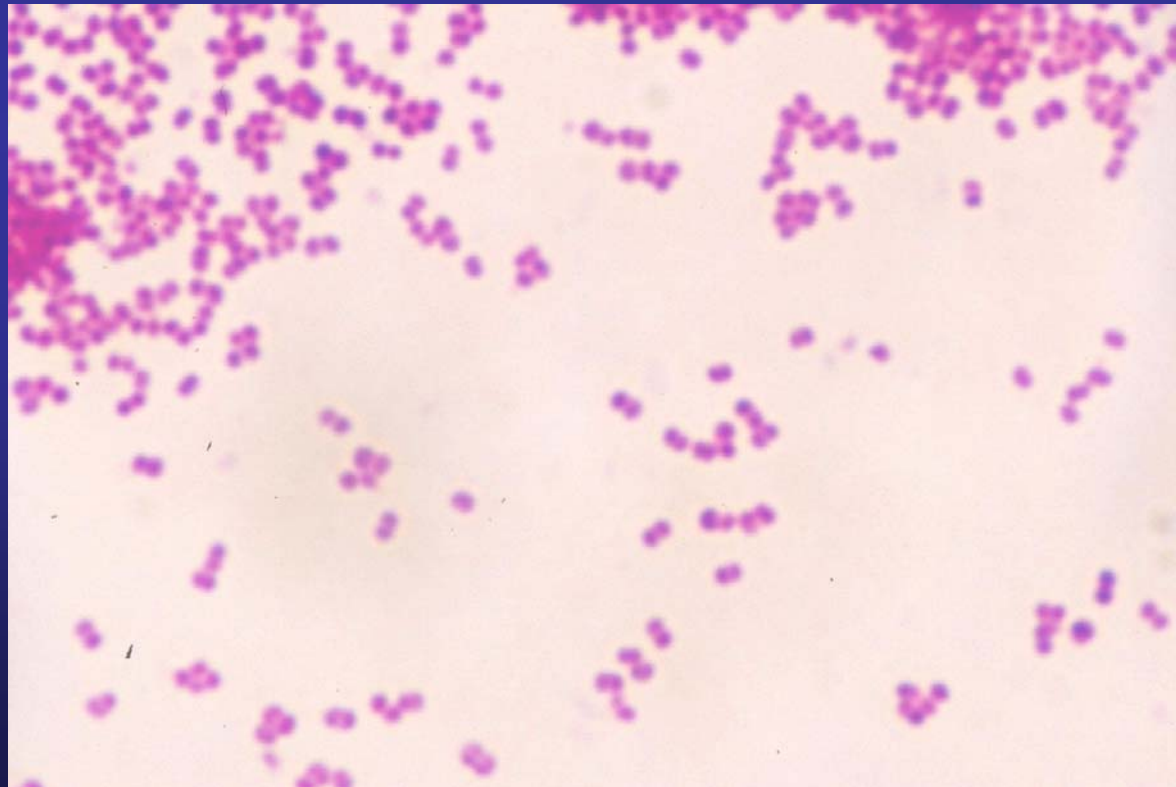
# *Enterococcus faecalis*

Gram-positive cocci in culture (Gram stain).



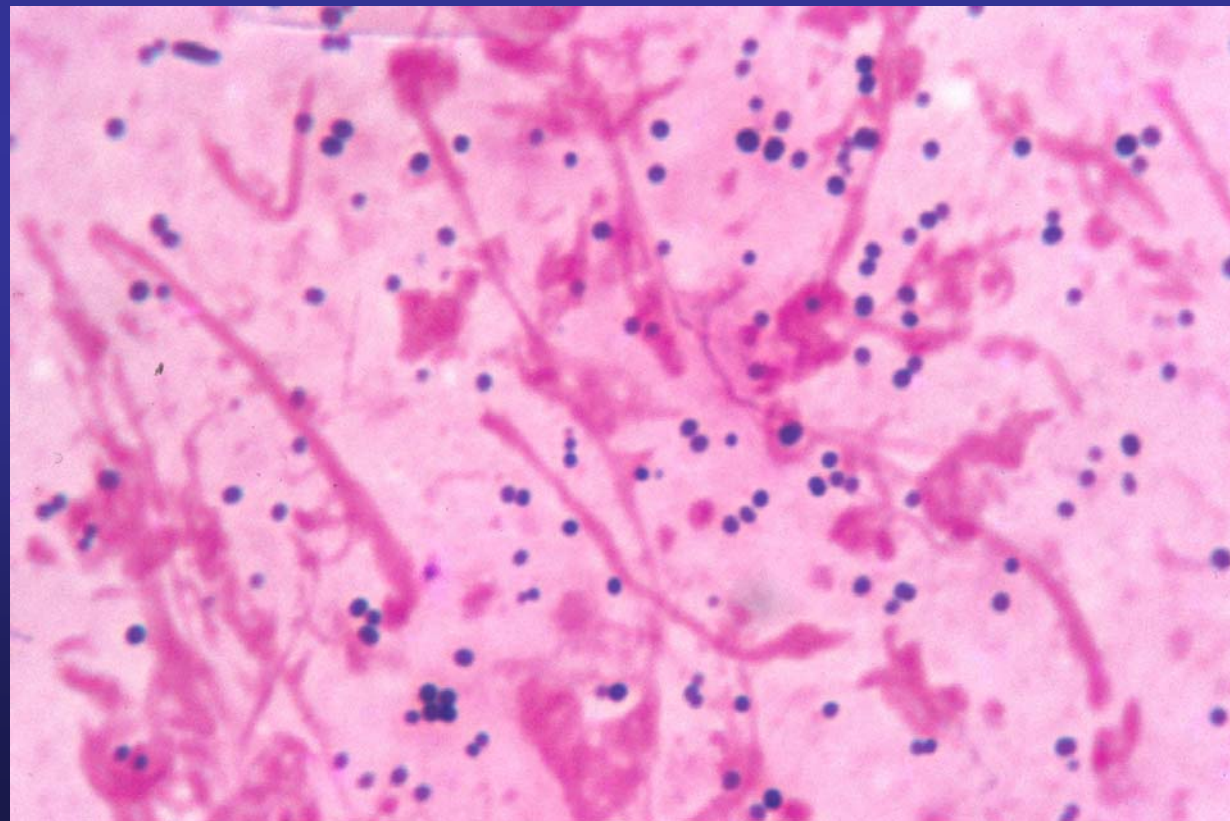
# *Gemella haemolysans*

Cocci of *G. haemolysans* in culture, often staining Gram-variable (Gram stain).



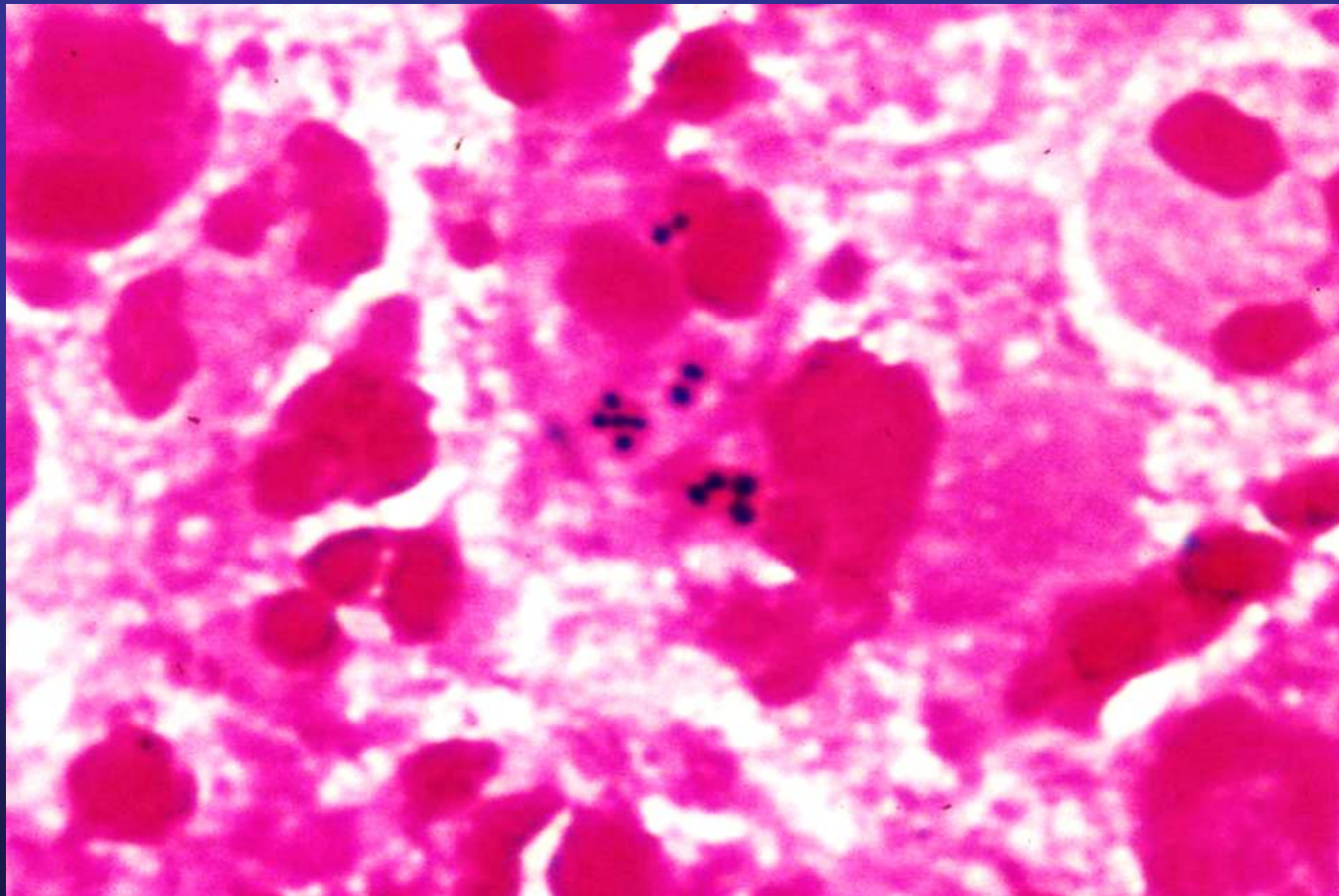
# *Staphylococcus aureus*

Pus from a furuncle. Gram-positive cocci in small clusters, surrounded by neutrophil granulocytes and fibrin (Gram stain).



# *Staphylococcus aureus*

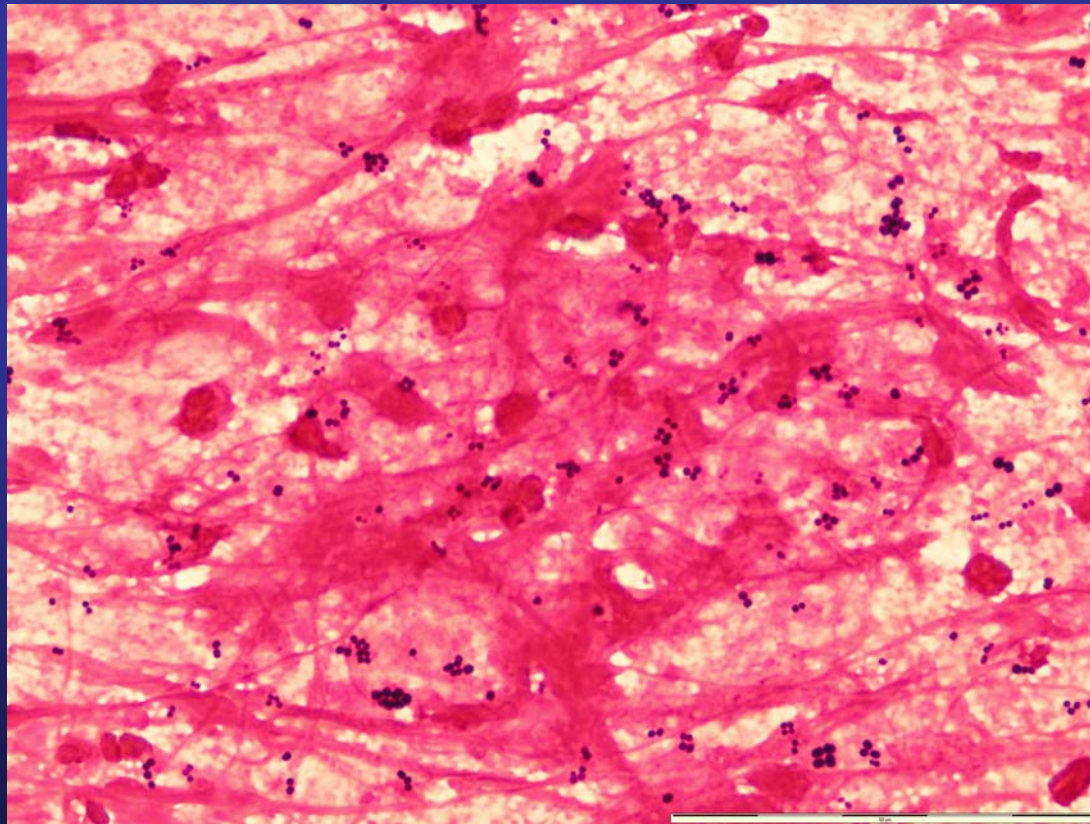
Pus from a furuncle. Gram-positive cocci in small clusters, surrounded by numerous neutrophil granulocytes (Gram stain).





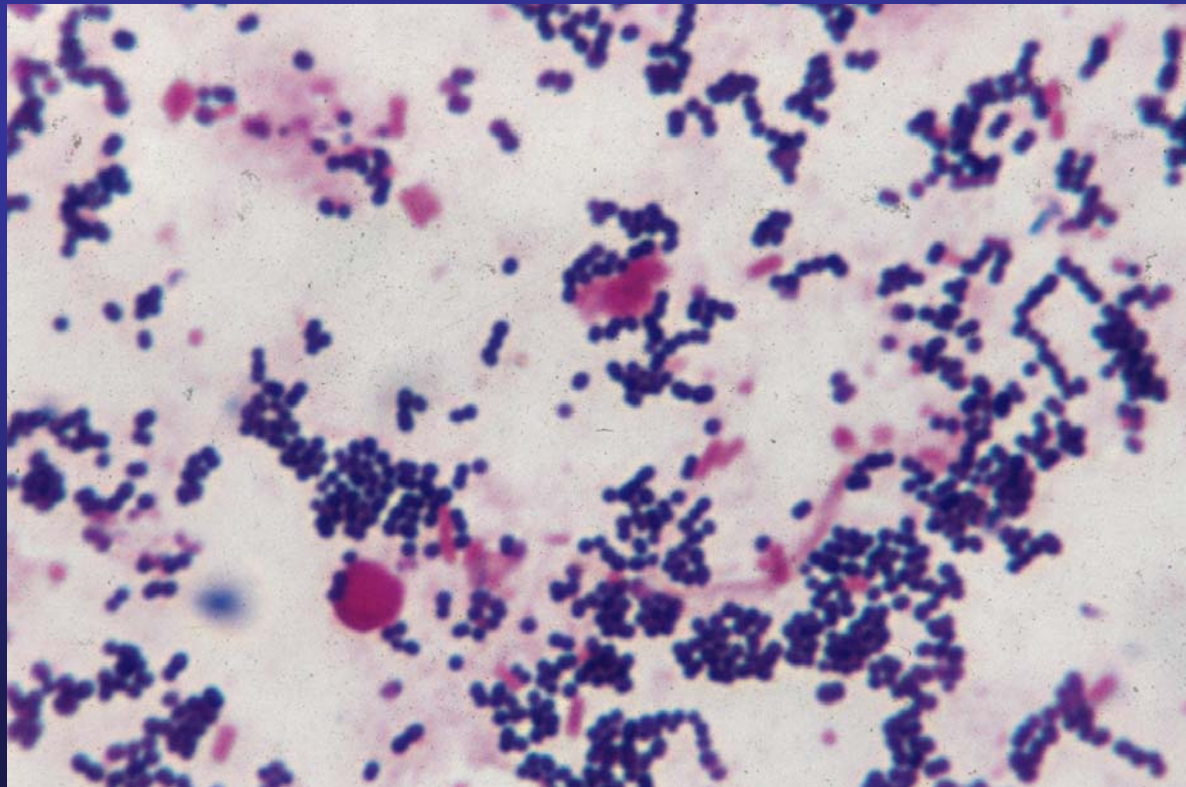
# *Staphylococcus aureus*

Gram-positive cocci in small clusters in sputum  
(Gram stain).



# *Staphylococcus aureus*

Large numbers of Gram-positive cocci in faeces are usually *Staphylococcus aureus*. The diagnosis should be confirmed by culture on a selective medium (Gram stain).



# *Staphylococcus aureus*

Inducible (induced by erythromycin) clindamycin resistance (MLS<sub>B</sub> type) detected by the D-zone test.



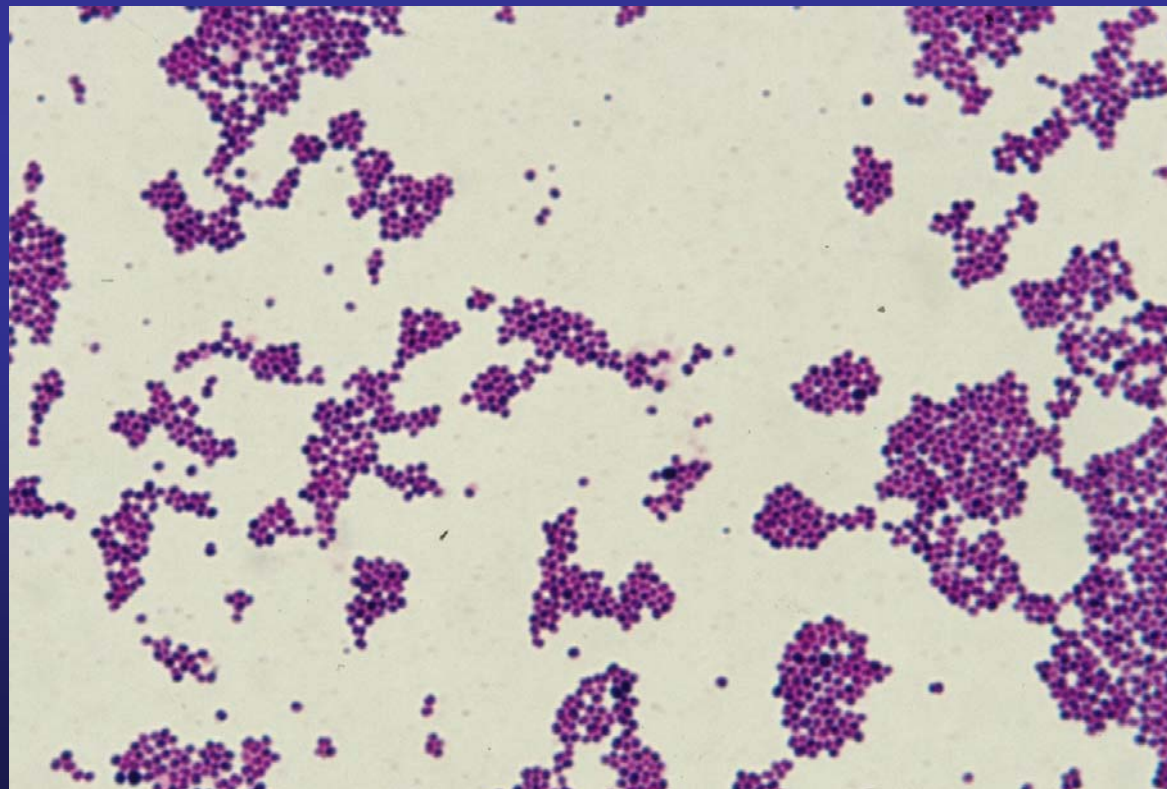
# *Staphylococcus epidermidis*

These cocci are located within a leukocyte in a thin blood smear (May-Grünwald-Giemsa stain).



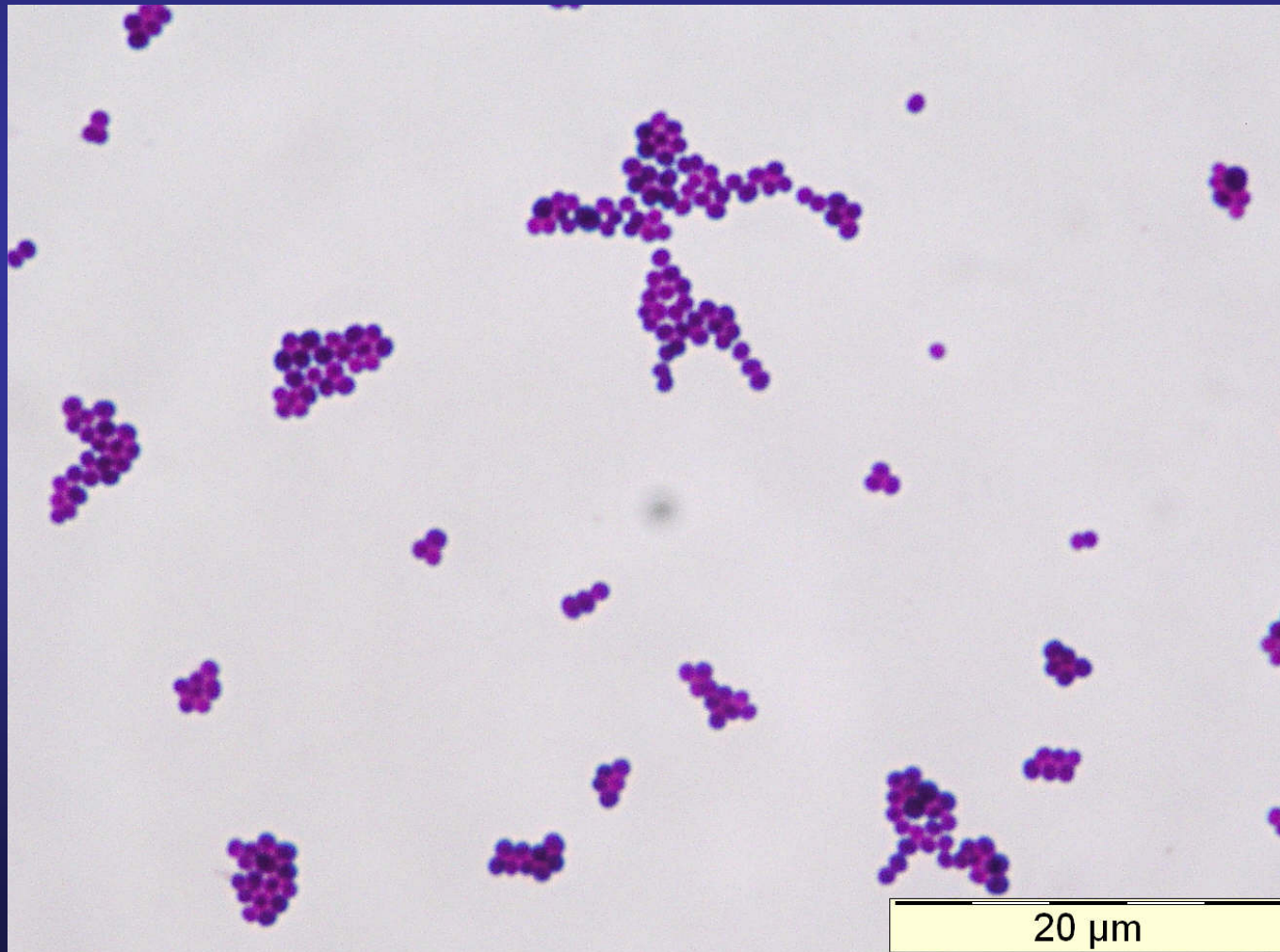
# *Staphylococcus epidermidis*

Gram-positive cocci in clusters from a culture (Gram staining).



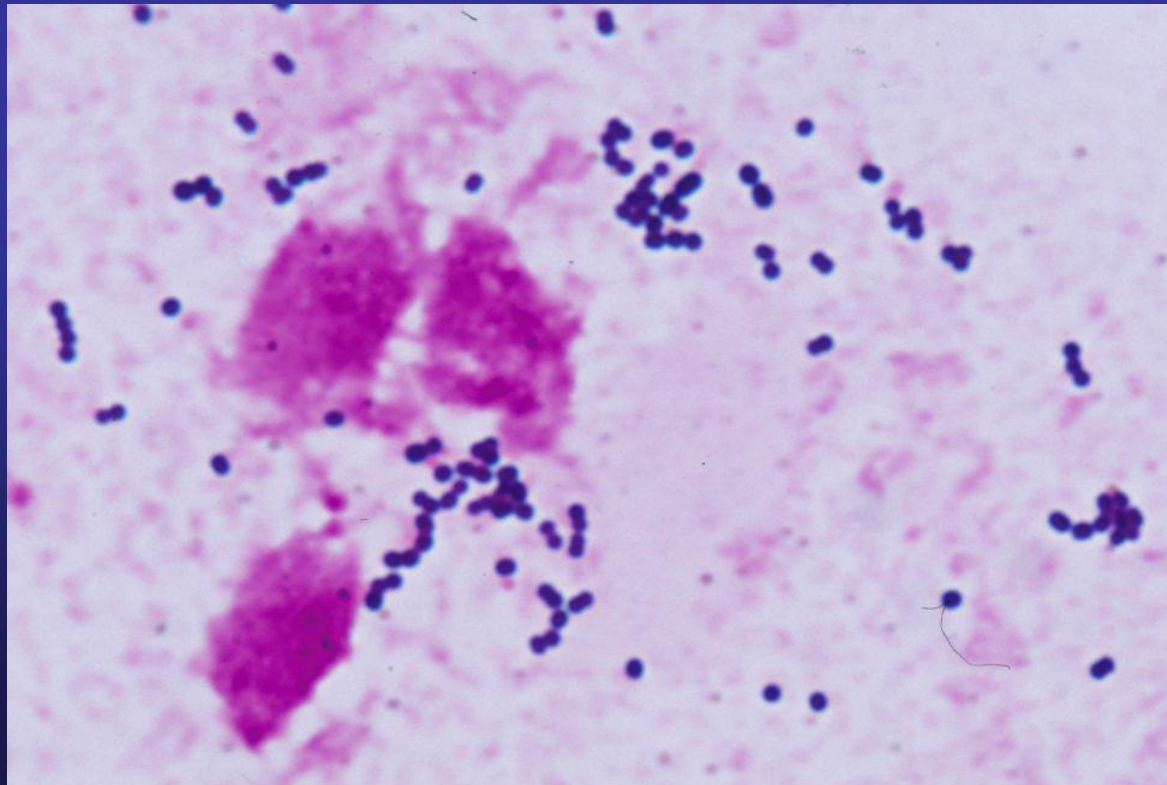
# *Staphylococcus saprophyticus*

Gram-positive cocci from a culture (Gram staining).



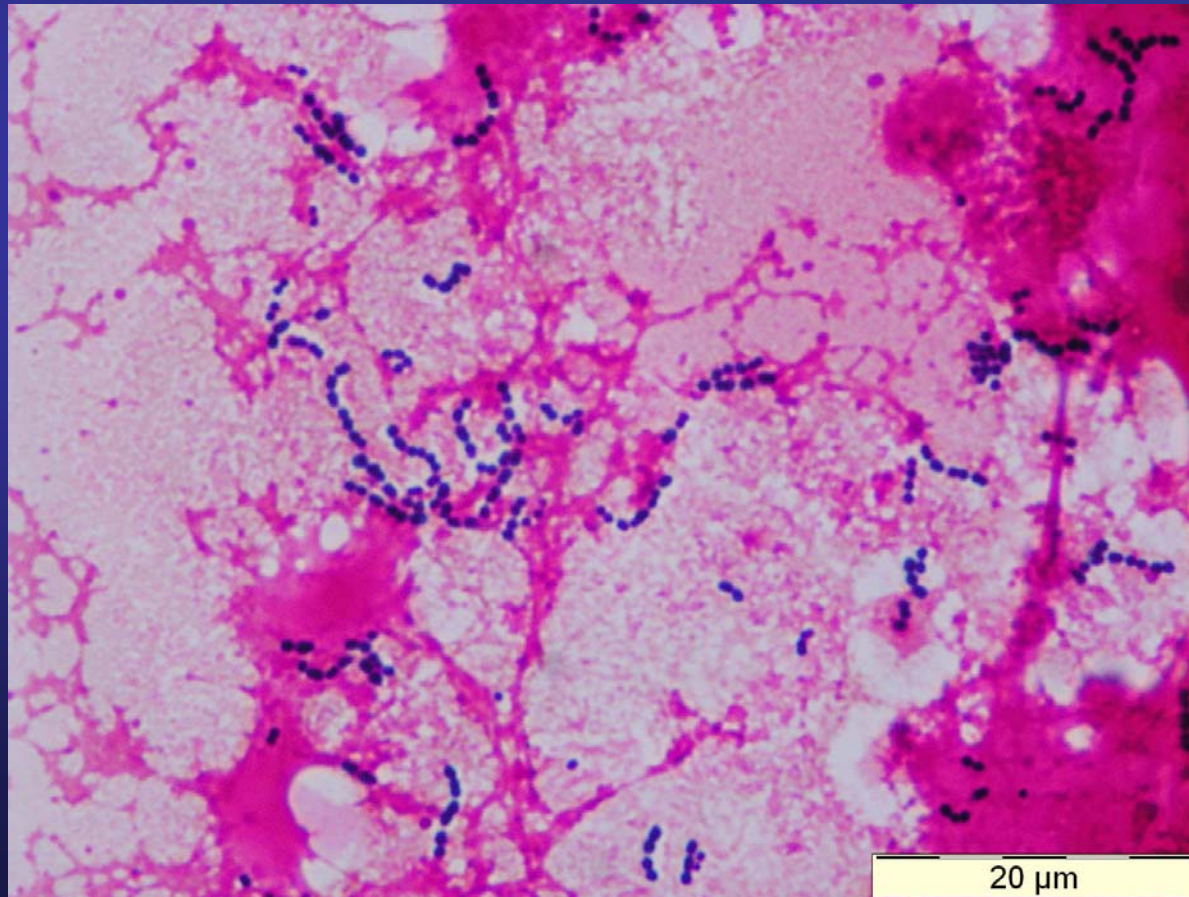
# *Streptococcus agalactiae*

Medium-sized Gram-positive cocci (Lancefield group B) in vaginal mucus. Morphologically indistinguishable from other streptococci and enterococci (Gram stain).



# *Streptococcus agalactiae*

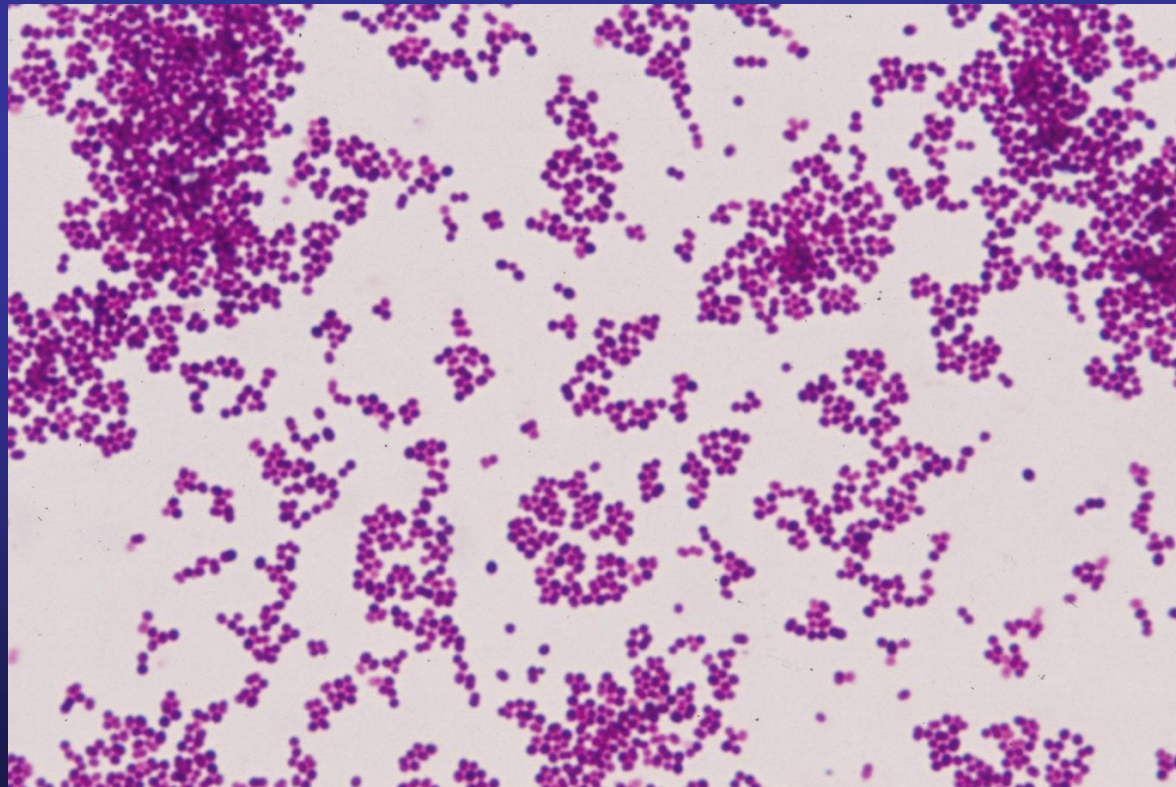
Medium-sized Gram-positive cocci  
(Lancefield group B) forming short chains in vaginal  
mucus (Gram stain).





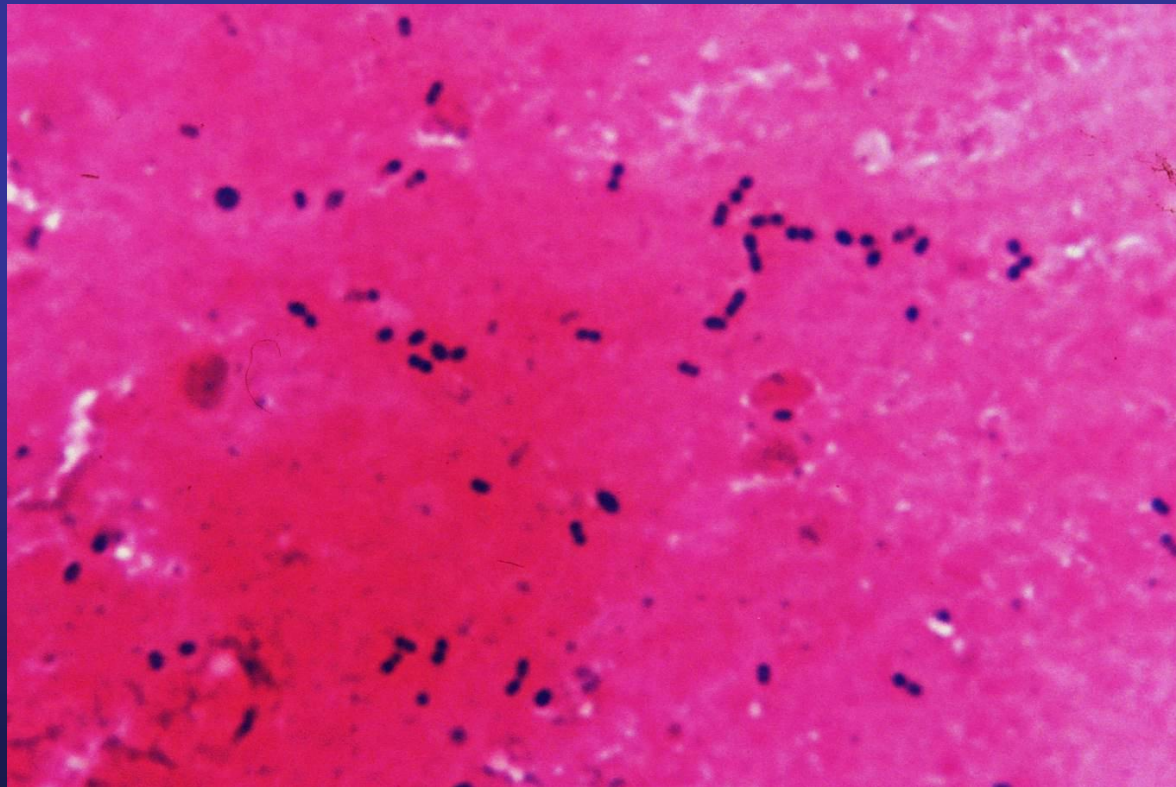
# *Streptococcus* group G

Small Gram-positive cocci in culture on blood agar  
(Gram stain).



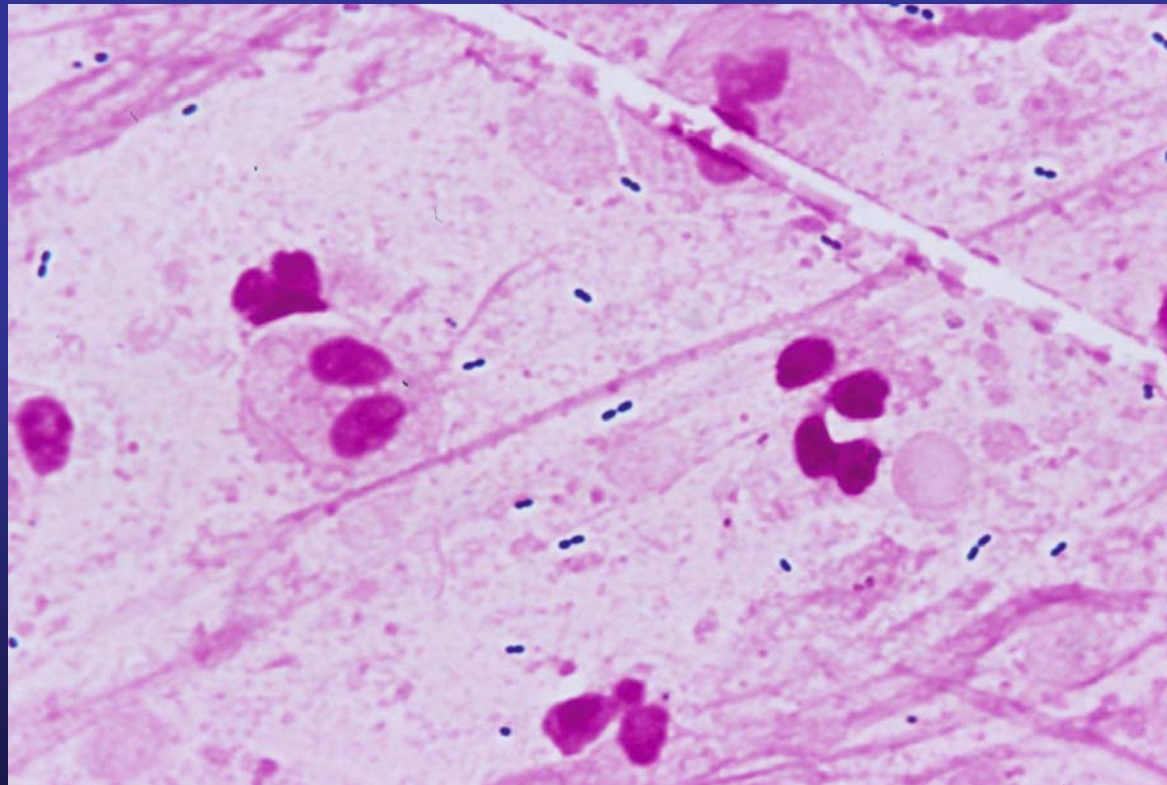
# *Streptococcus milleri (anginosus)*

Gram-positive cocci in short chains in pus from a breast abscess (Gram stain).



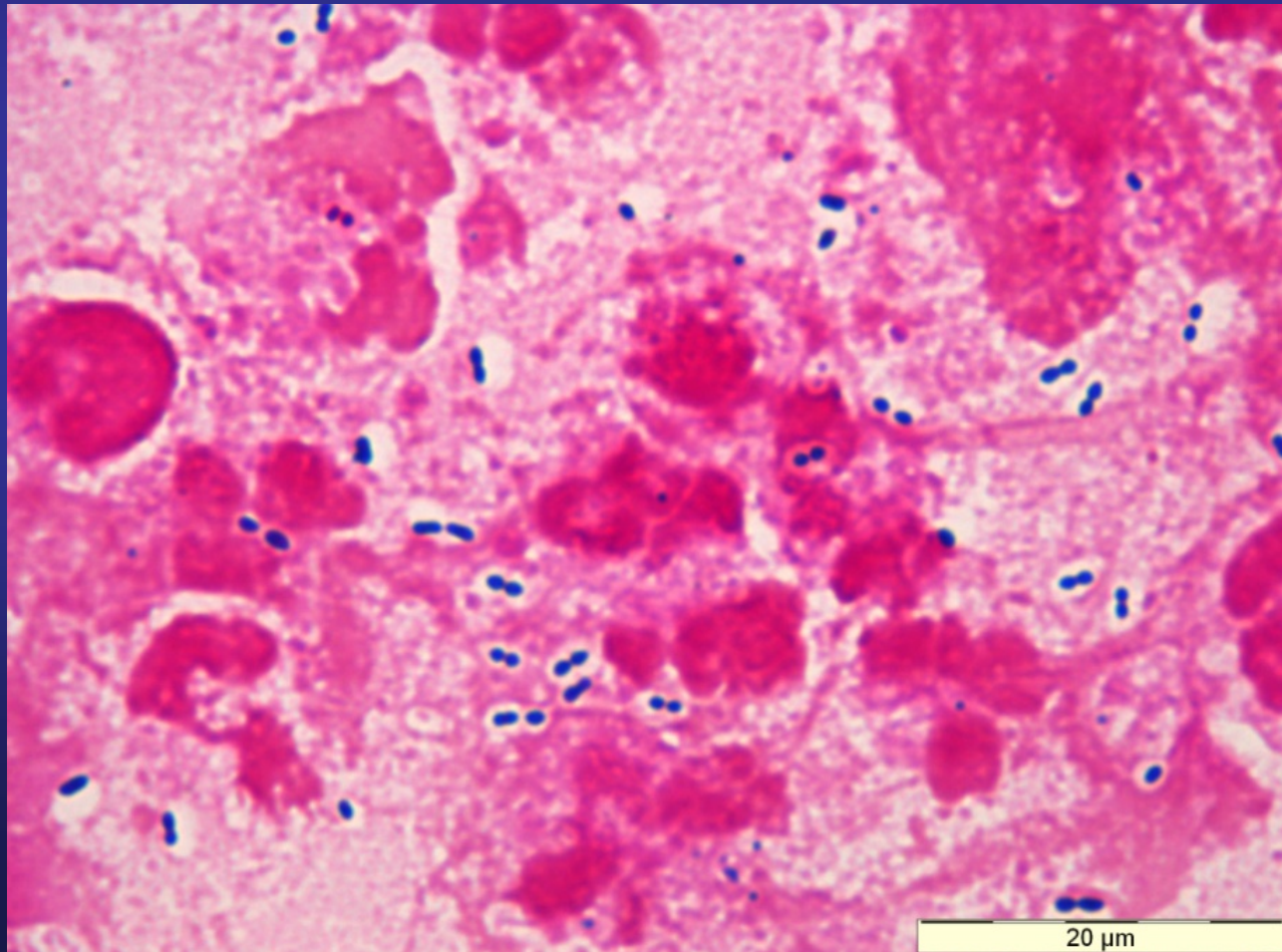
# *Streptococcus pneumoniae*

Encapsulated Gram-positive diplococci in purulent sputum (Gram stain).



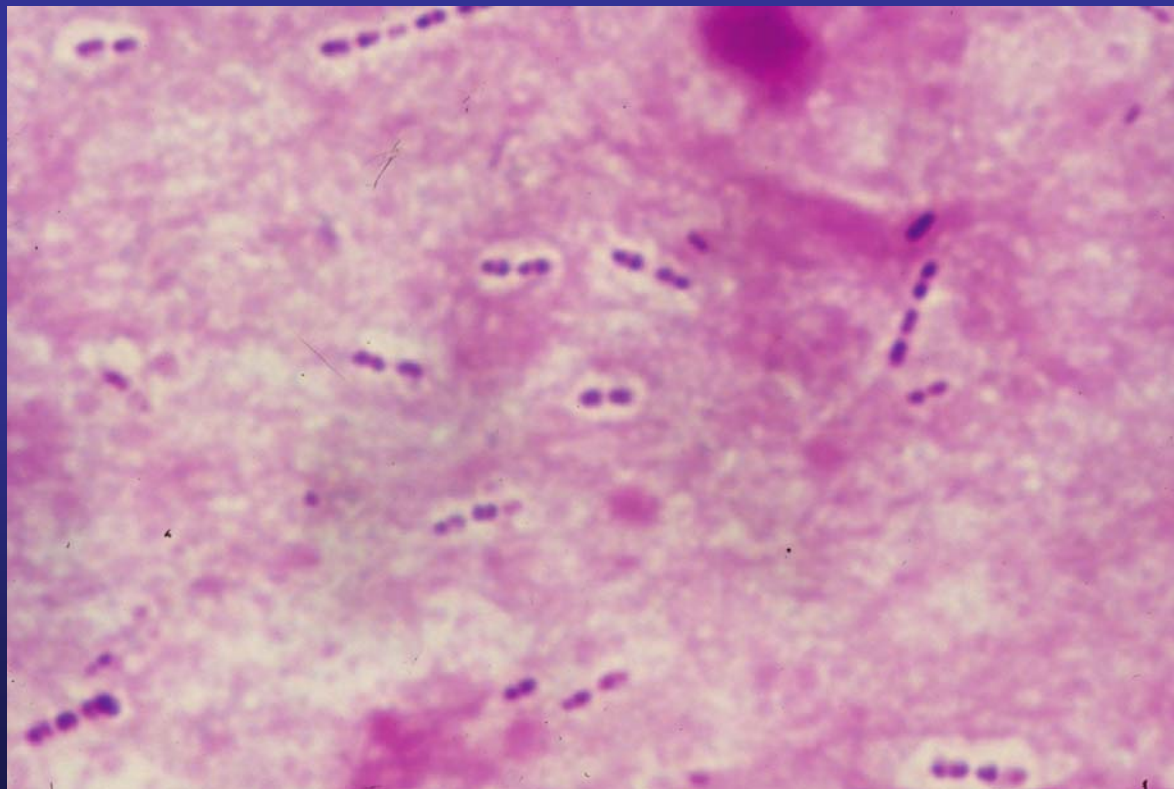
# *Streptococcus pneumoniae*

Encapsulated Gram-positive diplococci in purulent sputum (Gram stain).



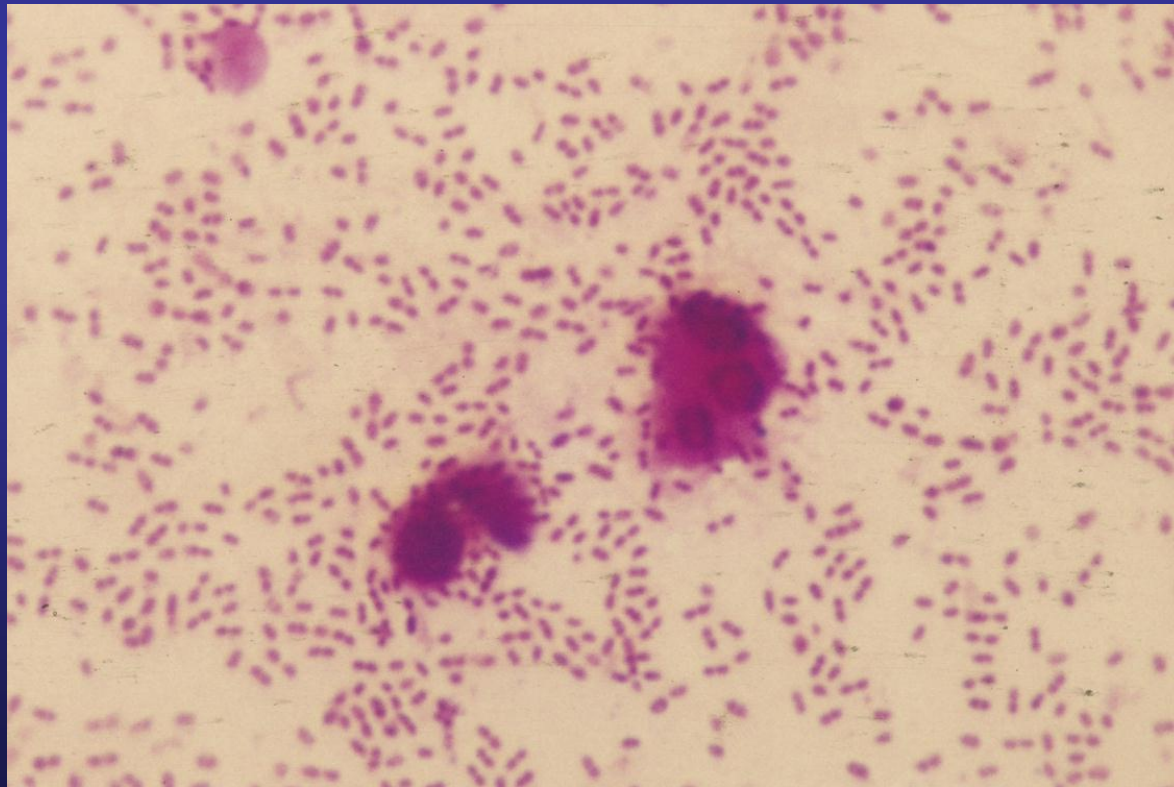
# *Streptococcus pneumoniae*

Encapsulated Gram-positive diplococci in sputum, also forming short chains (Gram stain).



# *Streptococcus pneumoniae*

Many Gram-positive diplococci and two polynuclear leukocytes in cerebrospinal fluid (Gram stain).



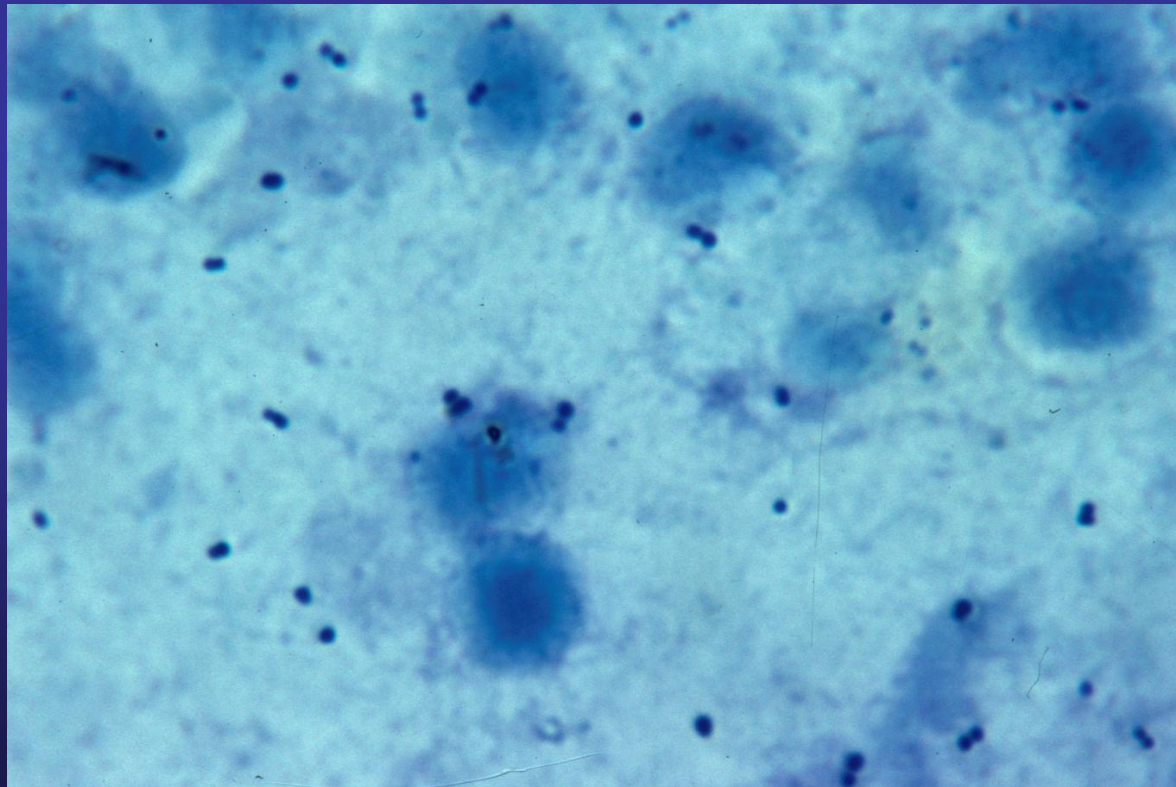
# *Streptococcus pneumoniae*

The majority of the *S. pneumoniae* strains are inhibited by optochin. The optochin disk is applied on a blood agar plate incubated overnight in 5% CO<sub>2</sub>.



# *Streptococcus pyogenes*

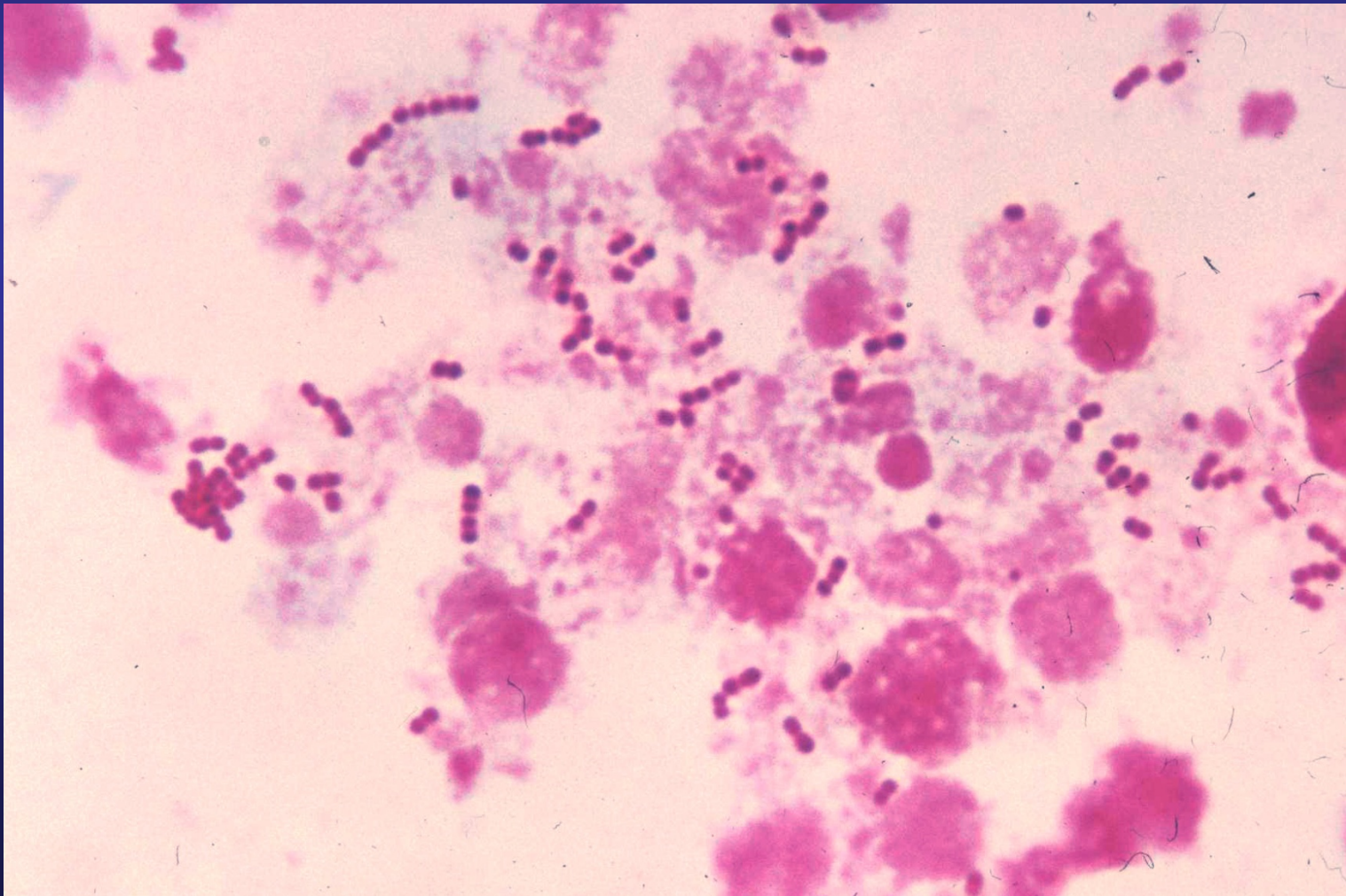
Cocci in pus from a tropical ulcer of the leg  
(Methyleneblue stain).





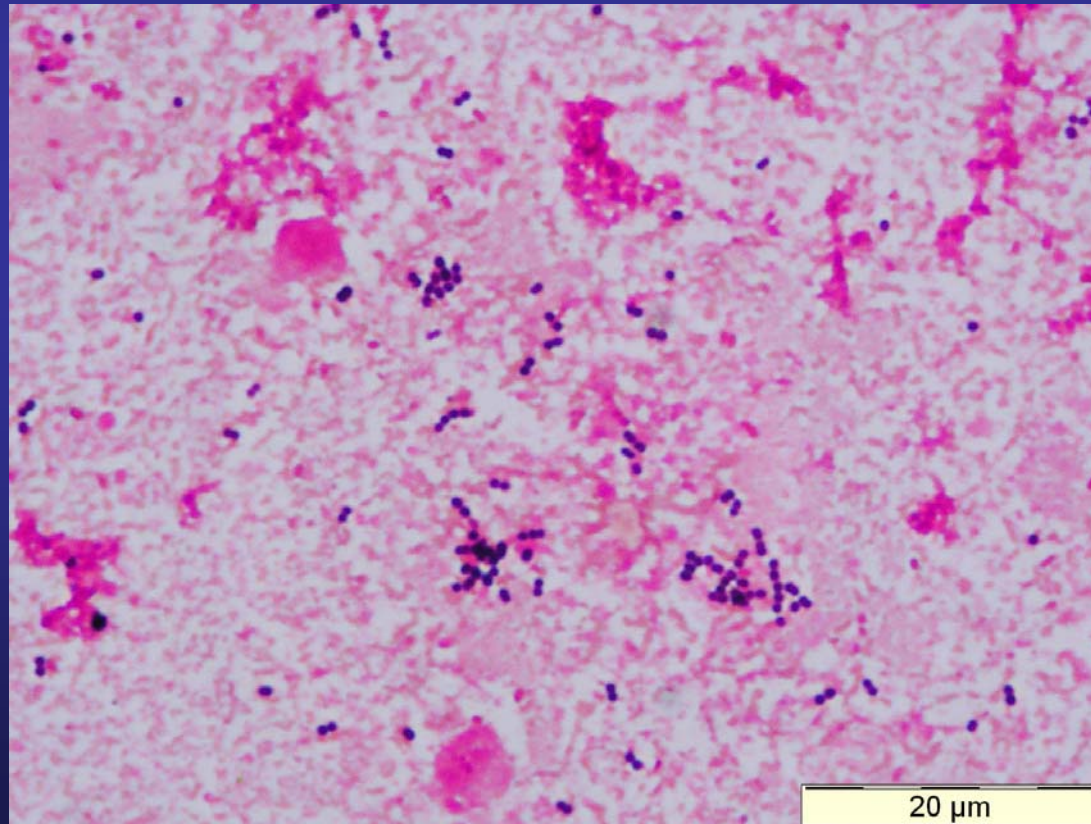
# *Streptococcus pyogenes*

Cocci in pus (Gram stain).



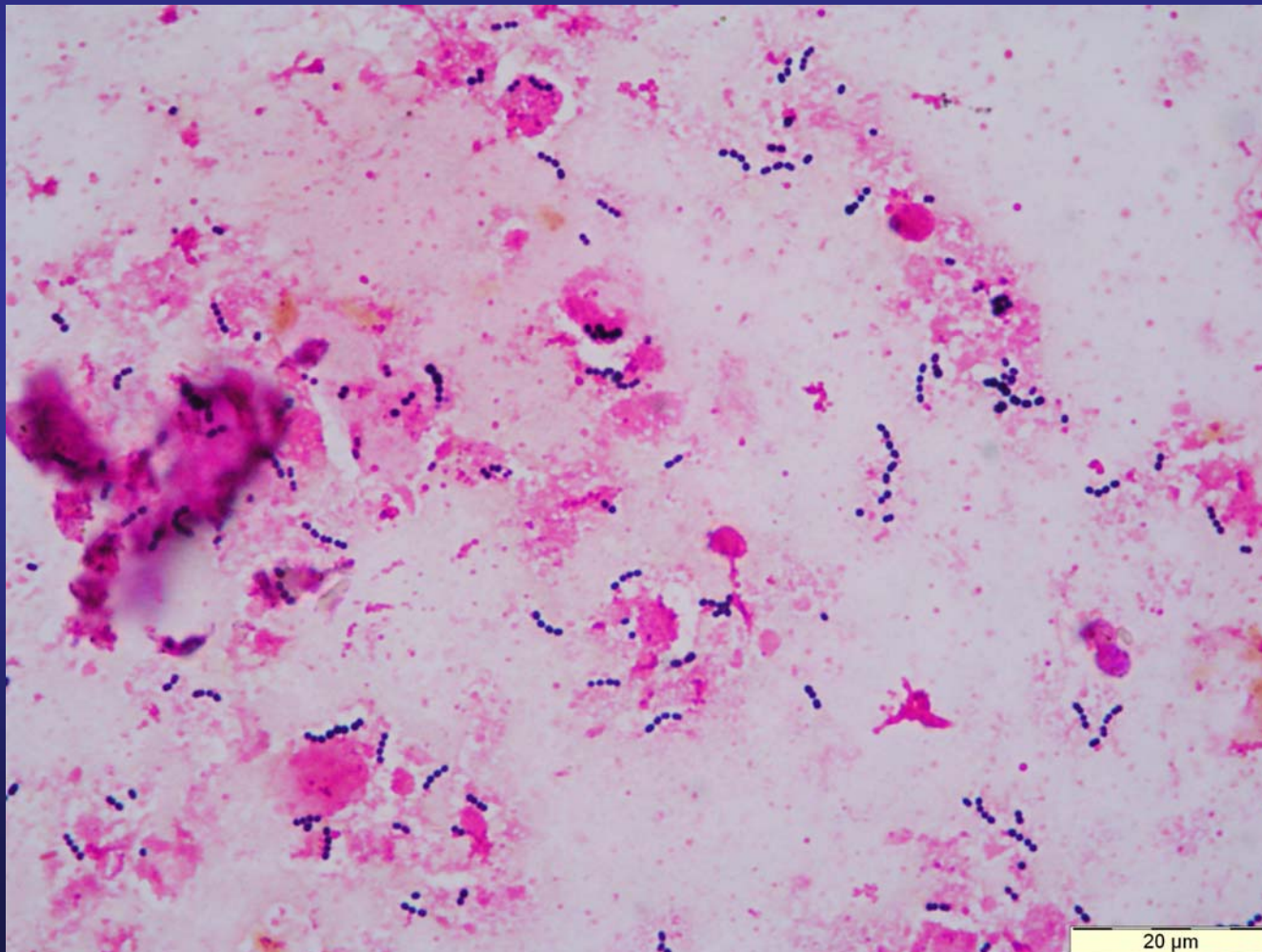
# *Streptococcus pyogenes*

Grampositive cocci in pus from a throat (Gram stain).



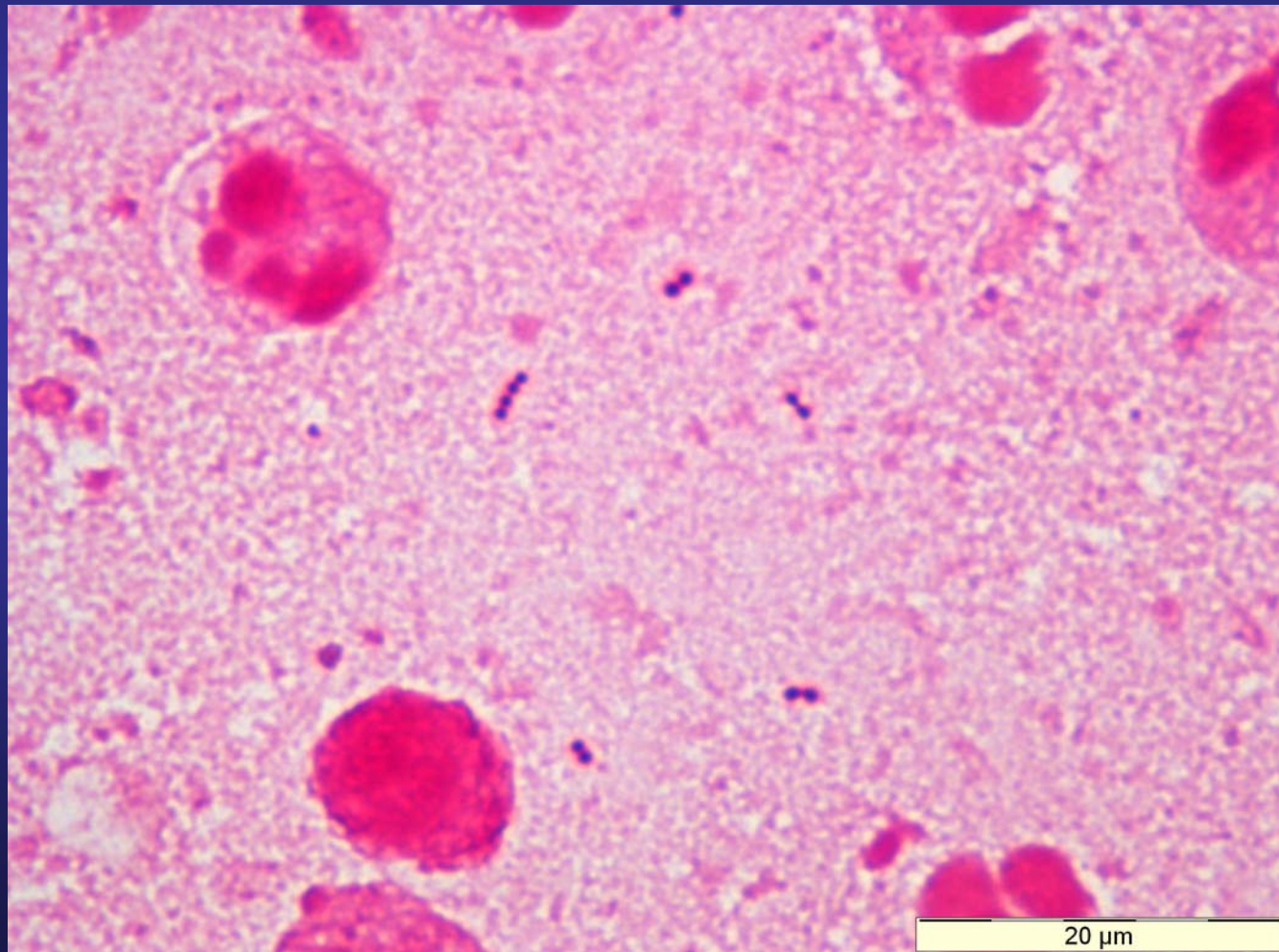
# *Streptococcus pyogenes*

Grampositive cocci in pus from a throat (Gram stain).



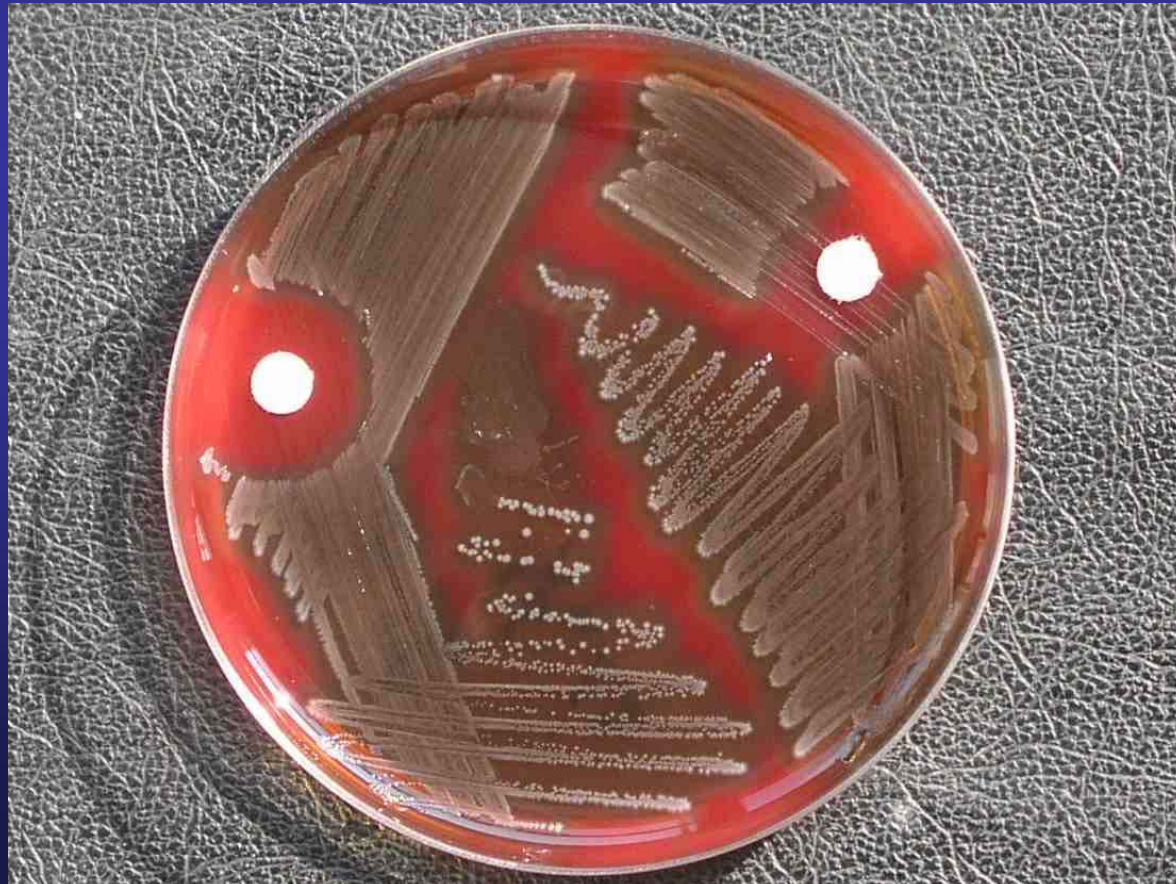
# *Streptococcus pyogenes*

Grampositive cocci in sputum (Gram stain).



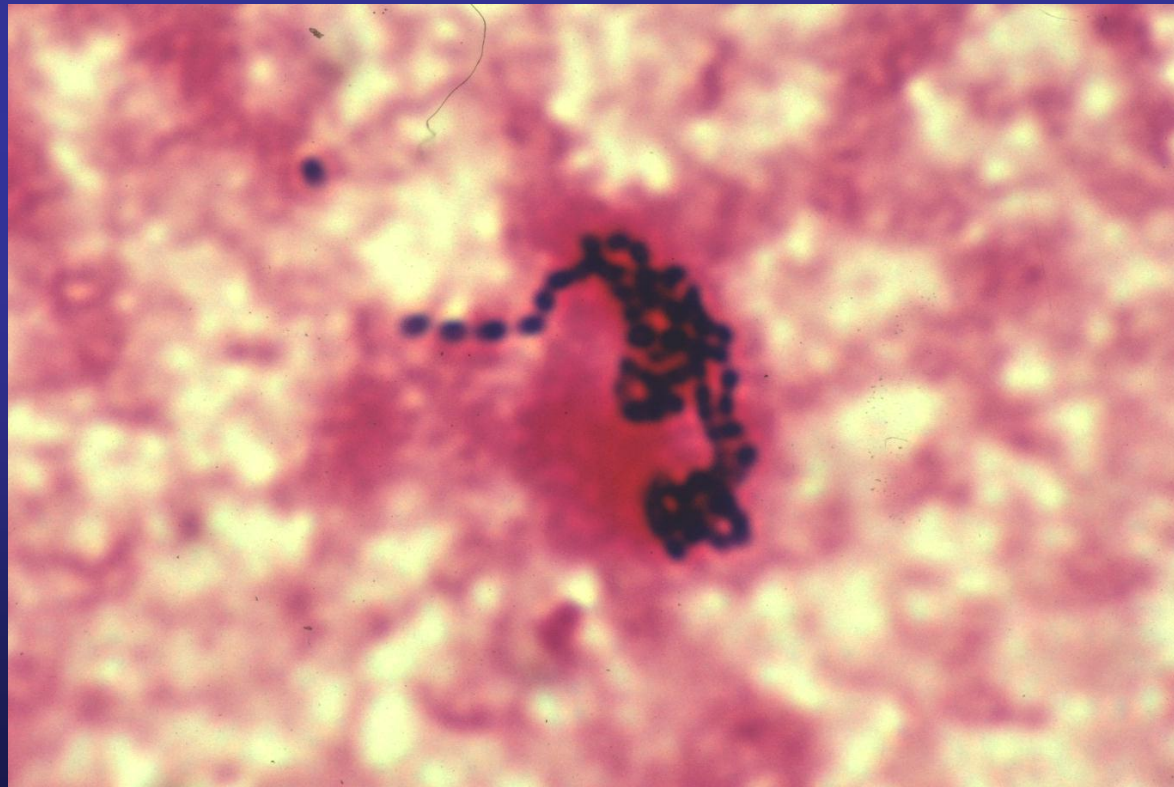
# *Streptococcus pyogenes*

The majority of the *S. pyogenes* strains are inhibited by bacitracin. The bacitracin disk is applied on a blood agar plate incubated overnight in 5% CO<sub>2</sub>.



# *Streptococcus sanguis*

Gram-positive cocci in short chains in an hemoculture in a case of endocarditis (Gram stain).



# *Streptococcus* “viridans”

Gram-positive cocci in long chains in an «old» sputum  
(Gram stain).



# *Streptococcus* “viridans”

Gram-positive cocci in long chains in an «old» sputum  
(Gram stain).

