

# Scarlet fever

## General:

Scarlet fever is caused by Group B Streptococci (GBS) and is the most common cause of sepsis, meningitis and pneumonia of newborn. GBS disease among newborns occurs in the first week of life ("early-onset disease"), and most of these cases are symptomatic about 20 hours after birth. The course can be dramatic and can lead to a septic shock.

Maternal intrapartum GBS colonization is a major risk factor for early-onset disease in infants, and vertical transmission of GBS from mother to fetus primarily occurs after the onset of labor or membrane rupture. In addition to colonization with GBS, other factors increase the risk for early-onset disease. These include gestational age 12 hours, intrapartum temperature  $>37.5^{\circ}\text{C}$  and young maternal age. The risk of lethality is 4%, however it can be higher in very preterm newborn.

Intrapartum antibiotic prophylaxis is the method of choice to prevent neonatal early-onset GBS disease. Approximately 10% to 30% of pregnant women are colonized with GBS in the vagina or rectum.

The investigation of a GBS-Screening by an ano- and genital microbiological swab is recommended between the 35th and 37th week of gestation. It is tested by cultivation on special media. The streptococci can be differentiated by antigen group testing (literature: Prevention of Perinatal Group B Streptococcal Disease, Revised Guidelines from CDC, 2002).

The following tests are available:

- **Streptococcus group A, Scarlet fever**

Indication: Suspicion of scarlet

Material: swab

Preanalytics: Streptococci are damaged by cool temperatures. Storage at room temp. is recommended. Transportation time  $> 24$  h is not recommended.

TAT: 2-3 days, FML

Method: cultivation and identification

Note: There is also a Quick Test available.

The result will be provided the same day. (Material: dry throat swab)

- **Streptococcus group B screening, GBS**

Indication: Prophylaxis of early onset Newborn Sepsis

Material: swab

Preanalytics: Streptococci are damaged by cool temperatures. Storage at room temp. is recommended. Transportation time > 24 h is not recommended.

TAT: 2-3 days, FML

Method: cultivation

For complete list of laboratory test offered at Freiburg Medical Laboratory, please visit <http://www.fml-dubai.com/parameter-listings/>