

Group B streptococcus test for pregnant women: advantage of universal screening unclear

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Serological group B streptococci (GBS) are common bacteria, which usually remain unnoticed. This is also the case for the almost 20% of pregnant women with vaginal or anal colonization of GBS. The bacteria pose a risk for the babies, however: In the worst case, an infection at birth can cause sepsis or meningitis in the newborn. To prevent these complications, pregnant women with certain risk factors receive antibiotics shortly before birth (risk strategy). However, there is also a test on the market that could be offered to all pregnant women (testing strategy). This test could detect also those pregnant women who have no risk factor, but still carry GBS.

The German Institute for Quality and Efficiency in Health Care (IQWiG) therefore investigated whether universal screening, i.e. the testing strategy, would offer advantages, and hence an added benefit, for newborns or [expectant mothers](#) in comparison with the currently used risk strategy. The [final report](#) now presented confirms the results of the preliminary report from 2018. According to the findings, this question cannot be answered as there are no informative studies for the comparison. In the Institute's opinion, it is unrealistic that these kinds of studies will be conducted in the future because it is very difficult to achieve the large sample sizes required.

Antibiotics are standard treatment for certain risks

About one in 3000 newborns is infected with GBS at birth; 3.2% of them die of the consequences. Pregnant [women](#) receive antibiotic prophylaxis if they have a fever, if there is a risk of premature birth, or if the birthing process is very slow, for example. This risk strategy can already prevent most infections. As an alternative option, all expectant mothers could be offered a microbiological examination in the form of the GBS test (universal screening). However, the test, which costs between 10 and 30 euros, is not a standard treatment reimbursed by German statutory health insurance funds—unless there is a risk of premature birth.

Study results not sufficiently robust

As was the case in the preliminary report, the Institute identified no study that could have provided robust results. There is a large "cohort study" comparing both strategies with each other (Schrag 2002), which is also referred to by the medical society. However, the Institute still rates its results as not sufficiently certain. The main reason is that there were notable differences between the participants not only regarding the test, but also in other characteristics. A lower complication rate, for example, could therefore have many reasons. The study also showed no "dramatic effects", i.e. no very large differences.

Studies on "screening chain" not realistic

In the final report, the Institute also showed scepticism whether it will ever be possible to conduct informative studies on the total so-called screening chain. Such studies would have to include several hundreds of thousands of [pregnant women](#) to ensure sufficient certainty of results. The large sample size is required as infections and their complications overall are rare. In smaller sample sizes, differences between the groups, e.g. the frequency of sepsis in newborns, could be due to chance alone.

In contrast, studies investigating which strategy is better at reducing the currently frequent use of antibiotics are considered reasonable and feasible by IQWiG. Quick tests used during labour, which are already approved in the United States, should also be considered as another prevention strategy in these studies.

More information: www.iqwig.de/en/projects-resul...guidelines.8017.html

Provided by Institute for Quality and Efficiency in Health Care

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