

Diagnosing *Toxoplasma gondii* infection during pregnancy – a case study

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Infection with *Toxoplasma gondii* in the acute phase can be transferred from the mother to the fetus. In Poland, serological testing for toxoplasmosis is recommended by gynaecologists for patients in the 10th week of pregnancy. If the result is negative, the tests are repeated in the 21st week of pregnancy. In case of ambiguous results, or ones that suggest infection, patients are directed to an infectious disease specialist for further diagnosis and therapy. The aim of this study was to describe the diagnostic process of a case of suspected acute infection with *Toxoplasma gondii* in a pregnant woman.

Patient AH aged 29, pregnancy II, 26 weeks of gestation. The patient signed up with serological test results that suggested the possibility of a primary *T. gondii* infection acquired during pregnancy. Test results for *T. gondii* (specific IgG and IgM) in the 8th week were negative. When the tests were repeated in the 25th week, the IgG result was negative and IgM result was doubtfully positive. Tests conducted after one week were positive or negative, depending on the type of test used. Repeated IgM and IgG testing was recommended, along with a determination of IgG avidity and the presence of IgA. Amniotic fluid testing for the presence of *T. gondii* DNA was prescribed.

Serological testing revealed IgG and IgM seroconversion as well as low IgG avidity, which might indicate an infection acquired in pregnancy despite the lack of IgA-class antibodies. No *T. gondii* DNA was found in the amniotic fluid and ultrasound diagnostics of the foetus returned normal results, which could rule out vertical infection. After birth, the child displayed no clinical symptoms of congenital toxoplasmosis. The child received no serological testing.

Serological monitoring allows *T. gondii* infection to be detected during pregnancy. However, the employed range of tests provide conflicting information, which delays the diagnostic and therapeutic process for the fetus.