How is Parvovirus B19 diagnosed?

After a Parvovirus B19 infection, the person will have immune protection. This can be determined by laboratory antibody tests that look for parvovirus IgG (immunoglobulin G). If IgG antibodies against Parvovirus B19 cannot be detected, there is no immune protection. If IgG antibodies are detected, but IgM antibodies (produced during the acute phase of infection) are not, this indicates that the infection has passed and the person is immune. It should be noted that IgM antibodies can usually only be detected for a short time after an infection. Therefore, for a better assessment, an IgG immunoblot that tests for antibody maturation (avidity test) should also be carried out. If IgM antibodies are detected, further tests are recommended in consultation with your attending physician (immunoblot, and PCR, if applicable). If a suspected infection during pregnancy is confirmed, regular examinations of the foetus via imaging procedures (e.g. ultrasound) will be carried out during the pregnancy.

Is there a treatment?

There is no specific treatment for infected adults or children. Any symptoms are treated symptomatically (e.g. bed rest, fever-reducing medications, etc.).

If the foetus shows signs of a parvovirus B19 infection (e.g. anaemia), they can be treated with a blood transfusion via the umbilical cord.

PATIENT INFORMATION

For statutory health insurance holders:

Some medical services cannot be covered by health insurance companies or cannot be covered in every case (e.g. at the patient's own request) and must therefore be paid by the patient.

Please refer to the order form for individual healthcare services for the current prices.

Please note that further diagnostics are required if IgM antibodies are detected. The scope of these services is determined by the attending physician. The costs may then vary.

For private health insurance holders:

Private health insurance will cover the costs according to the valid GOÄ if there has been no previous exclusion of benefits. If you have any questions about this, your doctor will be happy to advise you.

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Parvovirus B 19 (Slapped cheek syndrome/ fifth disease)

Infection in pregnancy

IMD Labor Berlin

What is Parvovirus B19?

Parvovirus B19 is a pathogen that causes slapped cheek syndrome (also known as fifth disease) and, to date has only been detected in humans. The virus is widespread worldwide and is highly environmentally stable. It can survive in the environment for several days to weeks under favourable conditions. Infections occur year-round, but peak in winter and spring.

How is Parvovirus B19 spread?

Parvovirus B19 is passed from person to person through droplet transmission. It often spreads through the air by coughs, sneezes and talking. Alternatively, the virus can be passed on from surfaces (for example, through contaminated door handles) or, in rare cases, through blood.

If an infection occurs during pregnancy, there is a risk of the virus being transmitted to the unborn child.

People with no immune protection, i.e. anyone who has not yet been infected, are vulnerable to infection. Depending on age, up to 60 percent of the population are in this group. Children of preschool age, school employees or childcare workers are at increased risk of infection.

What are the symptoms?

An infection with Parvovirus B19 either goes unnoticed or with signs of illness. An infected individual may experience flu-like symptoms such as headache, fever, and possibly lymph node swelling, general malaise, and diarrhoea.

About 1–2 weeks after infection, a rash can develop, usually starting on the cheeks and then spreading to other areas of the body such as shoulders, arms, hands, legs and feet.

Occasionally, joint pain (arthralgia) may develop in the small joints of the hands and feet. The symptoms usually go away after about 1–2 weeks, but in some cases may persist or recur.

Infection in pregnancy

About 30–40 percent of women of childbearing age are not immune to Parvovirus B19. If a woman becomes infected during pregnancy, the virus can be passed to the foetus. The risk is particularly high during the first 20 weeks of pregnancy.

The virus targets cells in the bone marrow of the unborn child that become red blood cells and affects the production of new red blood cells. This then results in severe anaemia, accompanied by water retention in the tissues (hydrops fetalis). Therapeutic intervention is required if this happens, as it could otherwise lead to miscarriage or stillbirth.

How can I protect myself and my unborn child?

There is currently no protective vaccine. Pregnant women who have not yet had a Parvovirus B19 infection should avoid contact with anyone who may have Parvovirus B19. If a child becomes ill in their household, special hygiene and disinfection measures are required. Your doctor will be happy to advise you on this.