Statement of the CCCM-SSM : increase in frequency of acute Parvovirus B19 infection

Several microbiology laboratories across Switzerland are reporting a significant increase of positive tests compatible with acute Parvovirus B19 infection (positive IgM antibodies and/or PCR) since the end of 2023. This infection is very common and often asymptomatic in children. In adolescents, the seroprevalence is estimated to be over 50% and over 90% in the elderlies.

Acutely infected patients transmit the virus via respiratory droplets. Clinical presentations ranges from typical febrile exanthema (erythema infectiosum also called “the fifth disease”), to arthropathies and hematologic disorders, due to the tropism of this virus for erythroid progenitor cells. Most cases are asymptomatic or benign, and symptoms resolve spontaneously without sequelae. However, primary infection in non-immune pregnant women can have severe consequences for the fetus. Moreover, Parvovirus B19 is part of the differential diagnosis of pancytopenia and other hematological abnormalities of unknown etiologies.

Laboratory diagnostics of Parvovirus B19 infection relies on serology and PCR from blood samples. Serology is widely available in clinical laboratories and PCR is available in specialized centers (see list below). It is important to note that IgM can persist for several weeks or months after primary infection. PCR is strongly positive during acute infection (up to $1x10^{12}$ copies/ml or more) but can remain positive for months after resolution, at a lower concentration (less than $1x10^{4}$ copies/ml).

Laboratories providing Parvovirus PCR

Institute of microbiology, CHUV, Lausanne
Virology laboratory, HUG, Geneva
Institute for medical virology, University of Zürich
Clinical virology, USB, Basel
(This list is not exhaustive)

References

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