Parvovirus B19 infection is a viral illness caused by Parvovirus B19, a DNA virus. This virus is responsible for a wide range of conditions, including erythema infectiosum (also known as fifth disease),iesenemia, and a variety of other conditions. The symptoms of Parvovirus B19 infection can range from mild to severe, and the course of the illness can be unpredictable. In some cases, the virus can cause a serious complication called aplastic crisis, which can lead to a severe decrease in the number of red blood cells, white blood cells, and platelets. This can result in severe anemia, infection, and bleeding disorders.

Parvovirus B19 infection is usually transmitted through contact with infected skin lesions or respiratory secretions. However, it can also be transmitted through blood and blood products. The virus is present in the blood of infected individuals for several weeks to months after the onset of symptoms. This can make it difficult to prevent transmission, especially in healthcare settings.

The diagnosis of Parvovirus B19 infection is typically made based on the clinical presentation and the results of laboratory tests. The laboratory tests used to diagnose Parvovirus B19 infection include a blood test to measure the level of the virus in the blood, a test to detect the presence of antibodies to the virus, and an enzyme-linked immunosorbent assay (ELISA) to measure the level of antibodies to the virus.

There is no specific treatment for Parvovirus B19 infection. However, supportive care may be necessary to manage the symptoms of the infection. In some cases, antiviral medications may be used to treat the infection.

Parvovirus B19 infection can have serious complications in some individuals, particularly those with underlying medical conditions or immune deficiencies. Therefore, it is important to monitor individuals with Parvovirus B19 infection closely and provide appropriate care to prevent complications.

In conclusion, Parvovirus B19 infection is a common viral illness that can cause a variety of symptoms and complications. The diagnosis and treatment of Parvovirus B19 infection are important to prevent serious complications and manage the symptoms of the infection.

**Discussion:** The “gloves and socks” syndrome is a rare complication of Parvovirus B19 infection. It is characterized by the appearance of purpuric lesions on the hands and feet, which can be mistaken for vasculitis. The condition is usually self-limiting and resolves without specific treatment. However, it can be associated with severe hematologic alterations in some cases. The pathogenesis of this syndrome is not fully understood, but it is thought to be related to the immune response to the virus.

**References:**

1. Rehermann B, Ferrari C, Pasquinelli C, Chisari FV. The hepatitis B virus infection in childhood but more rare clinical entities have been described. The latter include arthralgia and arthritis, aplastic crisis in patients with red cell defects and chronic anemia in immunocompromised patients. The wide spectrum of clinical manifestations of parvovirus B19 infection includes also the “gloves and socks papular-purpuric syndrome.” This syndrome is characterized by pruritic and painful edema and erythema localized to the hands and feet. Oromucosal lesions, fever, asthma, anorexia, arthralgia and myalgia can be rarely associated 3–7.

We report the case of a young girl in whom the dermatologic lesions occurred simultaneously with severe hematologic alterations.

**Case History:** A healthy girl, 14 years old, was admitted to our unit because of fever, itching edema and petechial lesions on the dorsa of both hands and both feet. The skin eruption appeared the day before the admission, and 24 h later she developed fever (39°C), vomiting and diarrhea. A history of atopic diathesis was present.

On physical examination she had multiple purpuric cutaneous lesions on the dorsa and palms of both hands (Fig. 1A) and the dorsa and soles of both feet (Fig. 1B). These skin lesions were petechial and marginalized on the wrists and the ankles. She was febrile (39°C). No lymph nodes, liver or spleen enlargement were present. She was anorectic and had a sore throat because of oral erosions. There was hyperemia of the lips. Laboratory investigations revealed severe leukopenia (1500/mm³) with relative neutrophilia (73%) and eosinophilia (9%), mild thrombocytopenia (120 000/mm³), elevation of protein C-reactive (54 mg/l) and increased erythrocyte sedimentation rate (62 mm/h). Hemoglobin, red blood cell count, reticulocyte count, blood urea nitrogen, serum amino-transferase, coagulation tests and urinalysis were normal. Blood culture was sterile. Serologic studies for Epstein-Barr, coxsackie A and B, herpes, cytomegalovirus, rubella and echo viruses, Salmonella typhi and Brucella melitensis were negative. Parvovirus B19 IgM (>150 units/ml, negative if <30) but not IgG (4.3 units/ml, negative if <3.5) were detected by enzyme-linked immunosorbent assay during the acute phase of the disease. The petechial lesions on both hands and both feet disappeared within 3 days, and other similar lesions in the inguinal region and an intensely itching maculopapular exanthem on the internal aspects of the arms and legs appeared. Fever and skin signs disappeared within 6 days, and a concomitant increase of leukocyte (3400/mm³) and platelet count (257 000/mm³) and a significant reduction of protein C-reactive (12 mg/l) were observed. The erythrocyte sedimentation rate was still elevated when the patient was discharged. The diagnosis of parvovirus B19 infection was confirmed by a significant elevation of specific IgG (100 mlU/ml, negative if <2.5) and a persistence of IgM (25 mlU/ml, negative if <17) tested 3 months later. No treatment was administered with the exception of antihistaminic drugs for 3 days when the itching was intense.

**Discussion:** The “gloves and socks” papular purpuric syndrome caused by parvovirus B19 infection is a rare and
parvovirus B19 is one of the etiologic agents but not the only one. In fact in addition to parvovirus B19 other viral agents such as cytomegalovirus, measles, coxsackie B6, Epstein-Barr and herpes type 6 have been observed.\(^7, 14, 15\)

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