

Slapped Cheek Syndrome: Review

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Abstract

Slapped cheek disease also called erythema infectiosum is caused by parvovirus. As per statistics in UK the peak seasons for occurring of this disease condition is April and May. This disease are more to children, once affected person will not be affected due to the activity of immunological cells called memory cells.

Keywords: Slapped cheek syndrome, children, disease, immunological cell

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INTRODUCTION

Slapped cheek disease is sometimes termed fifth disease or erythema infectiosum. It is an infection caused by the parvovirus B19 virus. It usually occurs in children aged 3–15 years but anyone can be affected. It can be passed on (it is infectious). The infectious period is for 4–20 days before the rash appears. By the time the rash develops, it is usually no longer infectious. As per statistics by WHO in UK, April and May are the peak months for this condition. However, it may occur at any time. Approximately 50–60% of people in the UK have had this infection in the past, usually without realising it. One only has slapped cheek disease once in a lifetime. This is because you make antibodies during the infection which protect you from future infections with this same germ (virus) [1].

FIFTH DISEASE

Fifth disease, which is also recognized as 'slapped cheek syndrome' or erythema infectiosum is a common viral infection triggered by parvovirus B19. Fifth disease is typically a disease of school aged children but sporadically adults can catch it if they have not been exposed in childhood.

SYMPTOMS

The characteristic symptom is a bright red rash on the face, which has a 'slapped-cheek' appearance. A lace-like rash then appears on the body [2]. The rash can sometimes be itchy. It will usually resolve in 7–10 days, but can come and go for several weeks particularly after exposure to sunlight or exercise. Before

the rash, the person may have 'flu-like' symptoms for 1–4 days, such as sore throat, malaise, headache, diarrhoea and occasionally a fever [3]. It is during this stage of the illness that people are infectious to others. The symptoms generally develop 4–20 days after the person is infected. Unlike children the majority of affected adults will also experience joint aches and pains, which can last for days to months [4].



Fig. 1: Slapped cheek disease in children.



Fig. 2: Slapped cheek disease in adults.

The usual symptom is a facial rash, which looks like slapped cheeks. The rash generally spreads to the body and limbs, and may last up to three weeks. It often fades, but returns when exposed to sunlight or heat [4].

Before the rash develops, the following symptoms may occur:

- Mild fever or flu-like symptoms
- Headache
- Stuffy or runny nose
- Sore throat
- Tiredness or itching

In some children, there may be nausea, abdominal pain and diarrhoea. Adults may develop aches or pains in their joints. In rare cases, there may be brain or heart circulation problems [5]. The gestation period is between 4 and 20 days, with an usual of 13 to 18 days. Physical indications are not usually present through the infectious period, which is formerly the rash appears. At this time, it can be passed on very easily. Moreover, when the rash appears the person is no longer infectious to others [6].

SPREADING PATTERN

Fifth disease is chronically contagious disease, spread by airborne droplets of respiratory secretions (saliva, sputum) when people sneeze or cough [7]. It can also be spread by blood transfusion. It can only be caught from humans and is different from the parvovirus found in dogs and other animals [8].

DELINEATION OF FIFTH DISEASE

Most people with fifth disease recover without any complications. Moreover, people who are immunosuppressed or who have anaemia may develop severe, chronic anaemia, and may remain infectious for a prolonged period) [6]. For most pregnant women who develop fifth disease, there are no serious complications for them or their unborn baby. Less than 10% of pregnant women in their first 20 weeks of pregnancy who are not immune and acquire parvovirus B19 infection have a miscarriage [9]. The risk of miscarriage minimizes to less than 1% in the second half of pregnancy. In about 5% of infections during the first 20 weeks of pregnancy, the unborn baby can

develop severe anaemia and other complications.

AVOIDING SPREAD OF FIFTH DISEASE

- Make sure that all children and staff use good hand washing practices, especially after wiping or blowing noses; after contact with any nose, throat or eye secretions; and before preparing or eating food.
- Do not share food, pacifiers, bottles, toothbrushes, eating utensils or drinking cups.
- Clean and disinfect all mouthed toys and frequently used surfaces on a daily basis.
- Don't kiss children on the mouth.
- Play outdoors as much as possible.
- Avoid exposing pregnant women and people with blood disorders and immune problems.
- Make sure that the child care facility is well ventilated, either by opening windows or doors or using a ventilation system.
- Make sure that children are not crowded together, during naps on floor mats or cots.
- Teach children to cough and sneeze into their elbow and away from people.
- If an outbreak of Fifth Disease occurs in the childcare setting:
- Notify all parents and staff members. Pregnant women and parents of children who have a damaged immune system, sickle cell anaemia or other blood disorders may want to consult their health care providers.
- Make sure that all children and adults use good hand washing techniques.
- Symptoms appear 4–20 days after becoming infected. The early symptoms can last for 2–3 days and include headache, body ache, sore throat, mild fever and chills.
- Children then develop a bright red rash on their cheeks that looks almost like slap marks. This characteristic rash is often followed by a lace-like rash on the body, arms and legs that may be itchy. The rash usually lasts 7–10 days, but may reappear with heat (such as during bathing) or stress over the next few weeks.

- Adults are less likely to have the rashes but sometimes get swollen and painful joints, especially in the hands and feet. This joint pain and swelling usually last for 1–2 weeks if it occurs, but may last for several months [8].

CONCLUSION

The bright red rash usually begins on the face. This has similarity with a ‘slapped cheek’ appearance, hence this disease is often referred to as ‘slapped cheek syndrome’. Several days later, the rash spreads and red blotches (usually lighter in colour) extend down to the trunk, arms, and legs. The rash spares the palms of the hands and soles of the feet. As the centres of the blotches begin to clear, the rash takes on a lacy net-like appearance. Children younger than 10 years old are most likely to get the rash. This paper garners the information about the cause, symptom and description of slapped cheek syndrome.

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