Exanthems

http://www.dermnetnz.org/index.html

What is an exanthem?

Exanthem is the medical name given to a widespread rash that is usually accompanied by systemic symptoms such as fever, malaise and headache. It is usually caused by an infectious condition such as a virus, and represents either a reaction to a toxin produced by the organism, damage to the skin by the organism, or an immune response. Exanthems may also be due to a drug (especially antibiotics).

What causes exanthems?

Exanthems during childhood are very common and are usually associated with the following viral skin infections:

A. Common winter and summer viruses including respiratory and enteroviruses respectively
   - Chickenpox (varicella)
   - Measles (morbilli)
   - German measles (rubella)
   - Roseola
   - Fifth disease (erythema infectiosum)
   - Laterothoracic exanthem

Exanthems may also be caused by other bacterial or viral infectious conditions including:

- Kawasaki's disease
- Rickettsial diseases
- Smallpox (deadly disease hopefully now eradicated by widespread vaccination)
- Infectious mononucleosis (usually presents as Gianotti Crosti syndrome)
- Scarlet fever
- Meningococcal disease
- Staphylococcal toxin infections
  - Toxic shock syndrome (TSS)
  - Staphylococcal scalded skin syndrome (SSSS)
B. Streptococcal toxic shock-like syndrome (STSS)

What are the signs and symptoms of exanthems?

Most non-specific rashes appear as spots or blotches and may or may not be itchy. The rash is usually widespread and may be more extensive on the trunk and extremities. In most cases, prior to the rash appearing, patients may have symptoms of general unwellness that include:

- Fever
- Malaise
- Headache
- Loss of appetite
- Abdominal pain
- Irritability
- Muscular aches and pains

These signs and symptoms may vary depending on the cause of the exanthem. See individual causes for details. Viral exanthems often occur in small epidemics so there may be other children effected at the same time.

Diagnosis of exanthems
Most common childhood viral exanthems have distinct patterns of rashes and prodromal (pre-rash) symptoms. If the patient shows classical features of the viral infection then diagnosis is usually clear-cut. However, when there are no characteristic lesions and/or distinctive prodromal signs and symptoms, diagnosis of a specific cause is made more difficult. In addition, some children may only be ill for a very short time and a specific diagnosis may not be possible. It becomes important to make a definitive diagnosis if pregnant women or immunocompromised patients have been exposed to an infected child. However, diagnosis of some causes of exanthems is very important as some of these conditions can become life-threatening if not treated urgently with appropriate medications, e.g. meningococcal disease, Kawasaki's disease.

What is the treatment for exanthems?

For most patients with non-specific exanthems no treatment is required as the condition is usually short-lived and resolves spontaneously. If necessary, symptomatic treatment with paracetamol to reduce fever and/or with topical/oral antihistamines or preparations such as calamine lotion to relieve itch may be used. Treatment of specific viral or bacterial exanthems will depend on the cause and is discussed in detail under each individual cause.

Related information

On DermNet:

- Viral skin infections
  - Chickenpox (varicella)
  - Measles (morbilli)
  - German measles (rubella)
  - Roseola
  - Fifth disease (erythema infectiosum)
  - Kawasaki's disease
  - Rickettsial diseases
  - Gianotti Crosti syndrome
  - Scarlet fever
  - Meningococcal disease
  - Staphylococcal scalded skin syndrome (SSSS)
- Laterothoracic exanthem