Measles

Prodrome and Clinical evolution
- Fever (mild to moderate)
- Cough
- Coryza
- Conjunctivitis
- Fever spikes as high as 105°F
- Koplik’s spots

Rash
- Erythematous, maculopapular rash which begins on the face (often at hairline and behind ears) then spreads to neck/upper trunk and then to lower trunk and extremities. Evolution of rash 1-3 days. Palms and soles rarely involved.

**INFECTION PERIOD**
Average 8-12 days from exposure to onset of prodrome symptoms (average interval between exposure to onset rash 14 day [range 7-21 days])

- NOT INFECTIOUS during this period
- INFECTIOUS: 4 days before rash and 4 days after rash

**Rash** STARTS on face (hairline & behind ears), spreads to trunk, and then to thighs/feet. Rash fades in same sequence it appears.

- 4
- -3
- -2
- -1
- 0
- 1
- 2
- 3
- 4

higher fever (103°-104°)

Koplik’s Spots
- Viral enanthem of measles typically starting 1-2 days before the rash. Appearance is similar to “grains of salt on a wet background” and may become less visible as the maculopapular rash develops.

Rubella
(Aka German Measles)
Clinical manifestations
- Generally mild illness with low-grade fever, malaise, and lymphadenopathy (commonly post-auricular and sub-occipital).

Rash
- Resembles measles but the rash is milder, more evanescent, rose-pink, fine and separate spots, discrete.
- NO Koplik’s spots, coryza, photophobia, or cough.

Scarlet Fever
(Associated with Streptococcal pharyngitis, aka ‘scarlatina’)
Clinical manifestations
- Fever, pharyngitis, malaise, chills, headache and cervical lymphadenopathy.

Enanthem
- Streptococcal pharyngitis and strawberry tongue

Rash
- Erythema rash that blanches with pressure with small (1-2 mm) papular elevations resulting in a ‘sandpaper’ quality of the skin. Rash generally starts in armpits and groin and expands to cover the trunk, followed by extremities. The rash is most marked in skin folds of the inguinal, axillary, antecubital. Linear petechial marks may be seen (Pastia’s line) (see figure) Desquamation usually follows.
- NO Koplik’s spots, coryza, conjunctivitis, photophobia, or cough.

Varicella
(Aka Chickenpox)
Clinical manifestations
- Mild prodrome of fever and malaise may occur one to two days before rash. Possible low-grade fever.

Rash
- Itchy vesicular rash and scabs appear in crops at several stages of maturity.
- NO Koplik’s spots, coryza, photophobia, or cough.

Fifth Disease
(Aka Infectious exanthem or Parvovirus B19)
Clinical manifestations
- Usually nonspecific but can include fever, runny nose, and headache

Rash
- Generally occurs after the respiratory symptoms and typically starts on face with a solid bright eruption on the face (“slapped cheek”). Within a few days, a 2nd stage rash may occur on trunk and extremities and is initially erythematous and later becomes lacy-like and/or reticular.
- NO Koplik’s spots, coryza, conjunctivitis, photophobia, or cough.

Roseola
Infantum
(Often due to HHV-6)
Clinical manifestations
- Sudden onset of high fever lasting 3-5 days. As rash develops may also have malaise, palpebral conjunctivitis, runny nose, vomiting, diarrhea or lymphadenopathy

Rash
- As fever subsides, a rash begins on neck and trunk and spreads to extremities. Rose-pink, small and separate spots, discreet, on chest and abdomen.
- NO Koplik’s spots.

Other
Several other entities can cause a rash and should be considered in the differential such as meningococcemia, enteroviruses, mononucleosis syndrome and drug reaction.