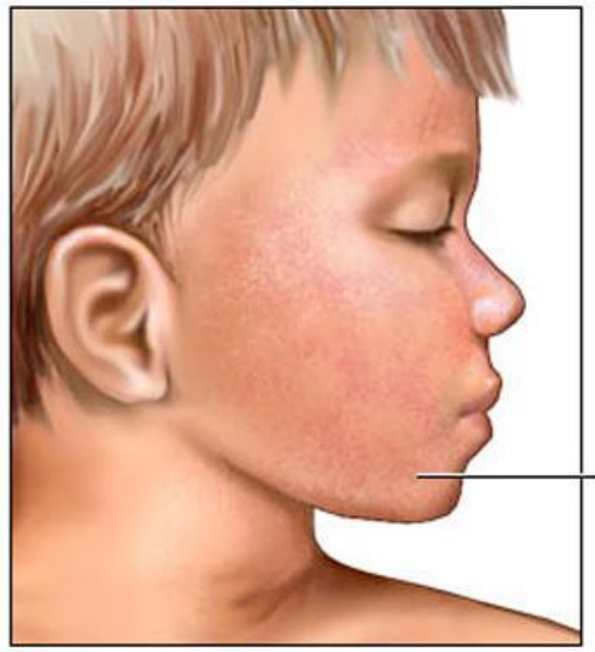
Rubella



Rubella
(German measles)

Source: myhealth.alberta.ca

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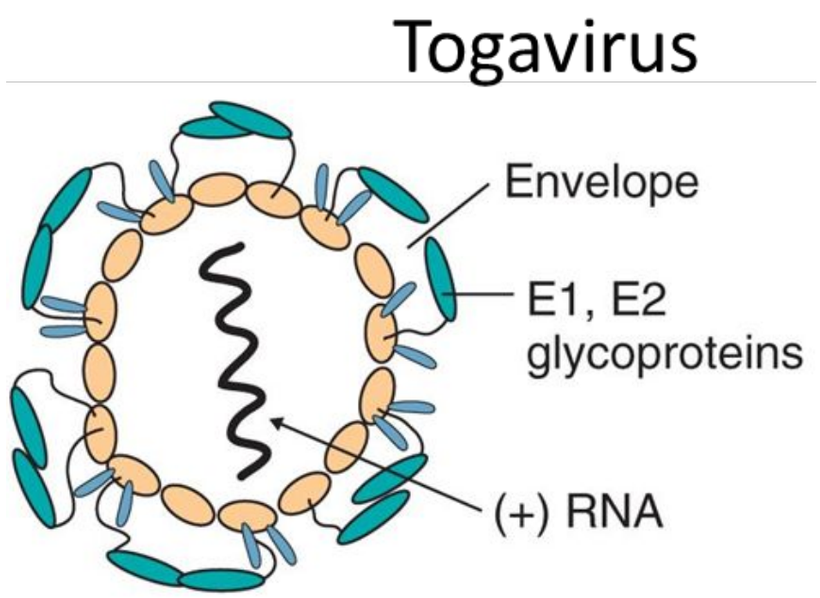
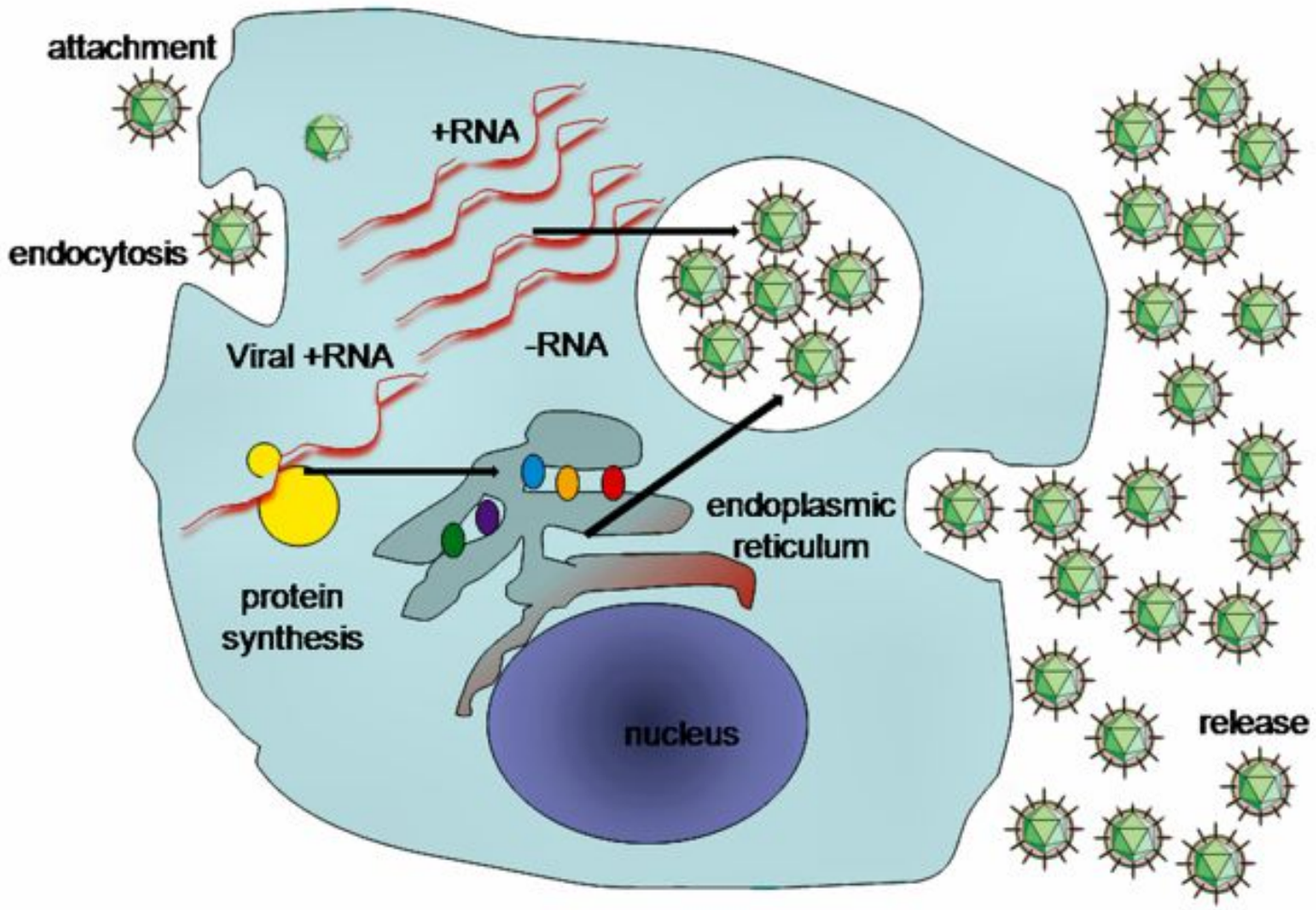
Group: 12-025-02

Rubella

Rubella, also known as German measles or three-day measles, is an infection caused by the rubella virus. This disease is often mild with half of people not realizing that they are sick. A rash may start around two weeks after exposure and last for three days. It usually starts on the face and spreads to the rest of the body. The rash is not as bright as that of measles and is sometimes itchy. Swollen lymph nodes are common and may last a few weeks. A fever, sore throat, and fatigue may also occur. In adults joint pain is common. Complications may include bleeding problems, testicular swelling, and inflammation of nerves. Infection during early pregnancy may result in a child born with congenital rubella syndrome (CRS) or miscarriage.



Rubiviruses



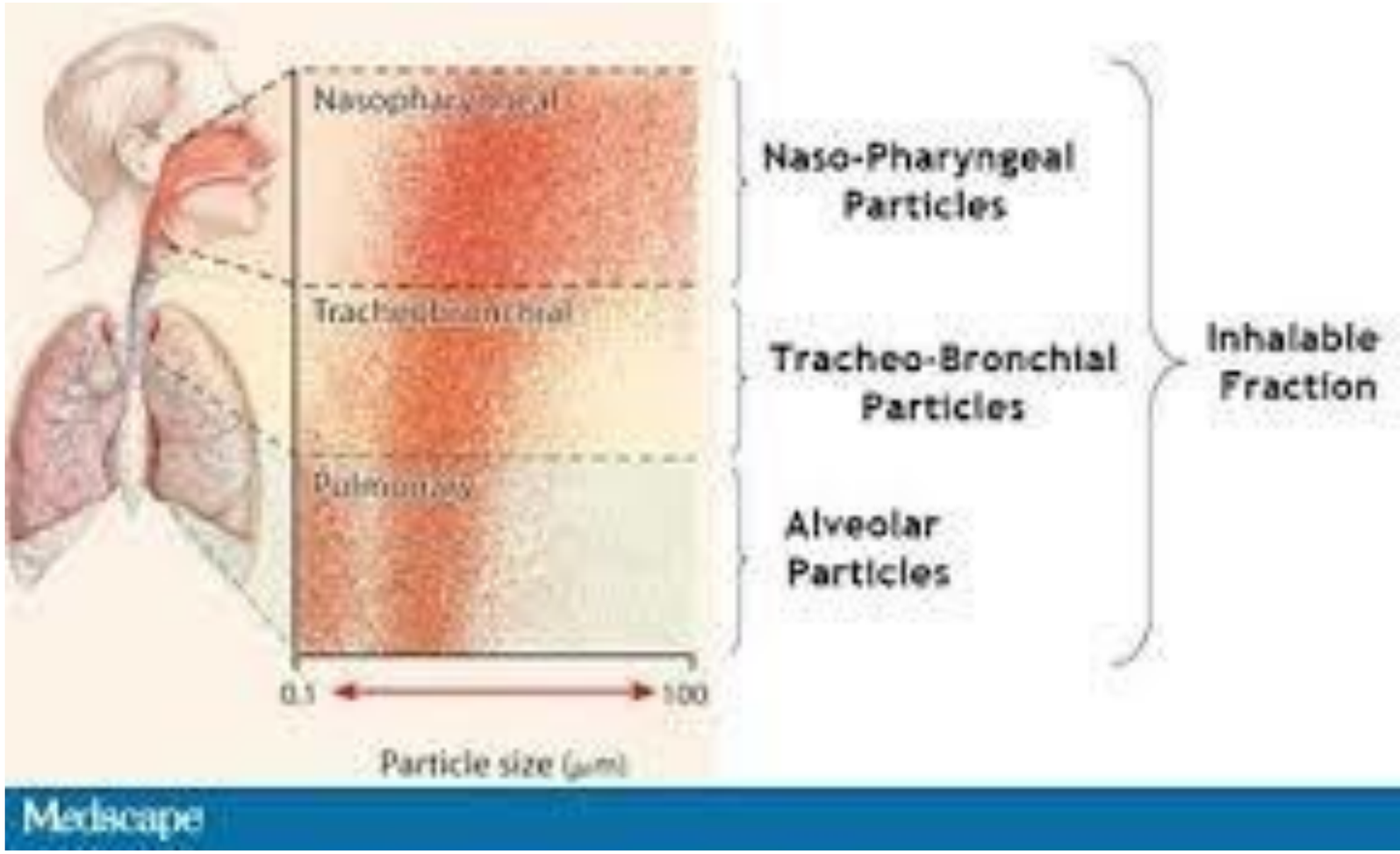
Acquired Rubella

- Host : Humans

- Virus enters body via **respiratory** route

  a) replicates asymptomatically in URT in the nasopharyngeal mucosa

  b) gains *access* to lymphatic system and subsequently enters bloodstream



Medscape, 2015

- 2 week incubation period (12-18 days)

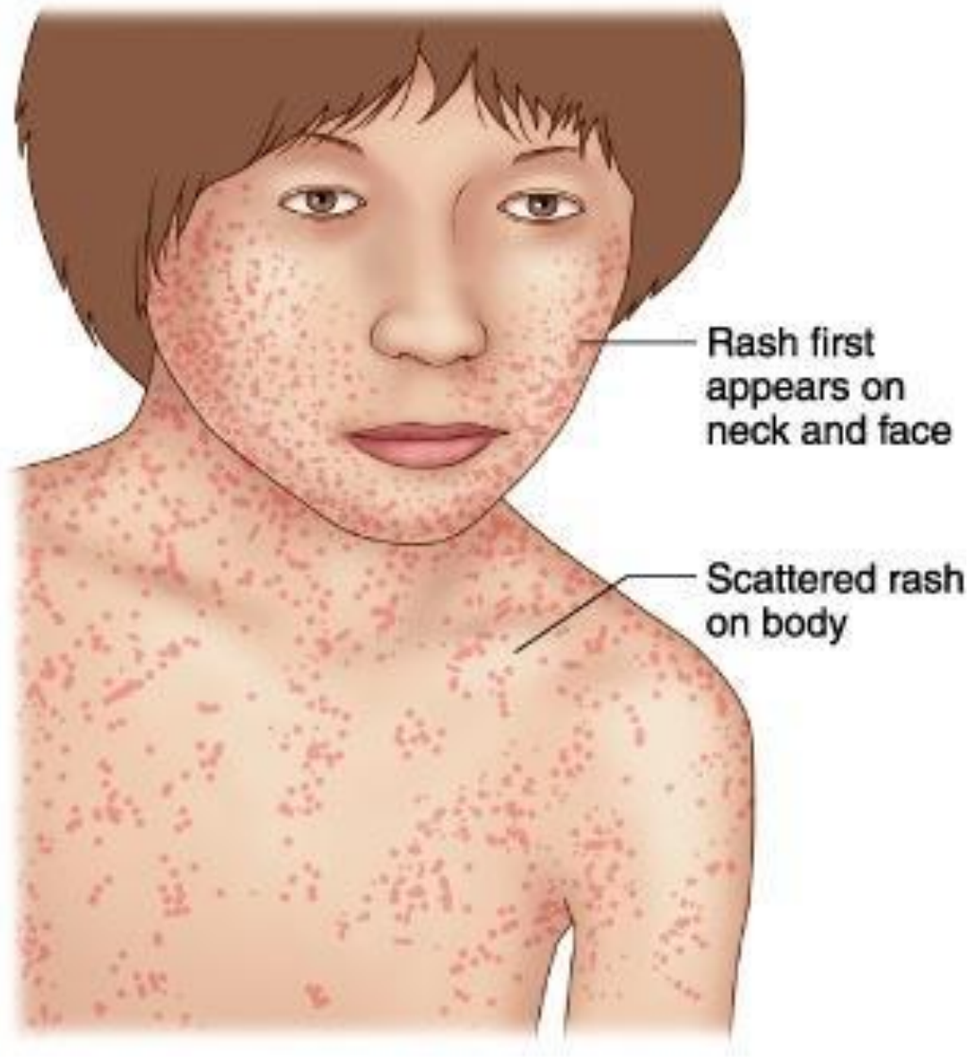
Clinical Presentation

- **Rubella production in the pharynx precedes the appearance of symptoms and continues through the course of the disease.**

- **Fever and rash occur later. Patients are infectious for 7 days before and after rash appears.**

- **The onset of lymphadenopathy coincides with viremia**

- **The person is infectious as long the virus is produced in the pharynx.**



Signs and Symptoms

Rash: maculopapular, non-confluent

Rash extends from face to the trunk and limb

Rubella has symptoms that are similar to those of flu. However, the primary symptom of rubella virus infection is the appearance of a rash (exanthem) on the face which spreads to the trunk and limbs and usually fades after three days (that is why it is often referred to as three-day measles). The facial rash usually clears as it spreads to other parts of the body. Other symptoms include low grade fever, swollen glands (sub occipital & posterior cervical lymphadenopathy), joint pains, headache, and conjunctivitis.[10]
The swollen glands or lymph nodes can persist for up to a week and the fever rarely rises above 38 °C (100.4 °F). The rash of German measles is typically pink or light red. The rash causes itching and often lasts for about three days. The rash disappears after a few days with no staining or peeling of the skin. When the rash clears up, the skin might shed in very small flakes where the rash covered it. Forchheimer's sign occurs in 20% of cases, and is characterized by small, red papules on the area of the soft palate.

Diagnosis

- Isolation of rubella virus from clinical specimen (e.g., nasopharynx, urine)
- Positive serologic test for rubella IgM antibody
- Significant rise in rubella IgG by any standard serologic assay (e.g., enzyme immunoassay)

Prevention

Rubella infections are prevented by active immunisation programs using live, disabled virus vaccines. Two live attenuated virus vaccines, RA 27/3 and Cendehill strains, were effective in the prevention of adult disease. However their use in prepubertile females did not produce a significant fall in the overall incidence rate of CRS. Reductions were only achieved by immunisation of all children.

The vaccine is now usually given as part of the MMR vaccine. The WHO recommends the first dose be given at 12 to 18 months of age with a second dose at 36 months. Pregnant women are usually tested for immunity to rubella early on. Women found to be susceptible are not vaccinated until after the baby is born because the vaccine contains live virus.

Treatment

There is no specific treatment for Rubella; however, management is a matter of responding to symptoms to diminish discomfort. Treatment of newborn babies is focused on management of the complications. Congenital heart defects and cataracts can be corrected by direct surgery.

Management for ocular congenital rubella syndrome (CRS) is similar to that for age-related macular degeneration, including counseling, regular monitoring, and the provision of low vision devices, if required.

References

http://www.cdc.gov/rubella/index.html

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PLAN

1. Introduction
2. Main part:
-clinical presentation
- signs and symptoms
-diagnosis
-treatment
3. Conclusion