MEASLES
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EPIDEMIOLOGY:

• Agent - RNA Virus-Morbilli Genus, Paramyxoviridae Family
• Reservoir- Humans
• Transmission- Droplet Spread
• Period Of Infectivity - 4 Days Before & 5 Days After Onset Of Rash
• Secondary Attack Rate - 90%
• Age - 6 Months To 5 Years
CLINICAL FEATURES

• Incubation Period - 8 To 12 Days
• Prodromal Phase -
  - Fever, cough, coryza, conjunctivitis (3 ‘C’ s)
  - Koplik Spots (2nd day pathognomonic enanthem)
• Eruptive Phase -
  - Rash on 4th day starting on face & spreads downwards
  - Rash - Confluent, Erythematous, Macular. Disappears in 4-5 days with brawny desquamation
Incubation

Temp.

104° F

Peak Intensity
Symptoms + Rash

Koplik’s Spots

Conjunctivitis

Coryza

Cough

Exanthem

Desquamation
Rash of Measles —

Erythematous confluent rash that blanches on pressure seen on the face and neck
VARIANTS OF MEASLES

1. Modified Measles -
   • Occurs in Partially Immune Children
   • Milder Illness

2. Atypical Measles -
   • In Recipients of Killed Vaccine
   • More Severe
   • Hepatosplenomegaly
   • Not Contagious

3. Hemorrhagic Measles -
   • High Fever, Bleeding, convulsions
COMPLICATIONS

• Respiratory tract
  – Otitis media
  – Lymphadenitis, laryngitis, laryngotracheitis
  – Pneumonia, bronchopneumonia
  – Pulmonary tuberculosis

• Nervous system: Encephalitis, Subacute sclerosing panencephalitis

• Digestive system: persistent diarrhea, appendicitis

• Malnutrition: PEM, Xerophthalmia
DIAGNOSIS

• Mainly clinical
• Serology (IgM antibody, real-time PCR)
DIFFERENTIAL DIAGNOSIS

- Rubella - Mild, Discrete Rash
- Infectious Mononucleosis
- Miliaria – Pruritus
- Drug Rash
- Roseola Infantum - Fever subsides after the rash appears
TREATMENT

• Symptomatic –
  - Antipyretics
  - Maintain Hygiene
• Good Nutrition and Hydration
• Vitamin A supplementation
• Hospitalization in case of complicated measles
PROGNOSIS

• Self limiting disease

• Convalescence prolonged with respiratory disease

• Measles encephalopathy has 30% mortality
PREVENTION

• Measles vaccine - live attenuated vaccine offers good protection. First dose given at 9 months of age and the second dose at 15 months of age.

• Post exposure prophylaxis - Gamma globulin or MMR vaccine can be given within 72 hours of exposure.
Thank You