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An Informative Report on Viral Diseases Issued by the Ramallah Health Department, 1991

Found in the Birzeit Women's Charitable Society Collection, this printed informative report in English provides details about several viral diseases like measles and mumps. The report was prepared by Dr Azmy abu Khalil and published by the Ramallah Health Department under the Public Health Division in 1991.

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CIVIL ADMINISTRATION/ PUBLIC HEALTH DIVISION
RAMALLAH HEALTH DEPARTMENT

MEASLES

Definition: It is an acute communicable disease characterised by formation of Muculo-Papular rash successively over the Neck and Face, body, arms and the legs, and accompanied by high Fever.

Etiology: It is caused by a virus from the family PARAMYXO VIRUS, it is an R.N.A. VIRUS .

Epidemiology: In past epidemics tended to occur irregularly every 2-4 years intervals. Measles is very contagious, 90% of susceptible contacts acquire the disease.

Incidence: Measles is rare in the 1st 6 months of life , 40% of cases are observed before 6 years of age, 50% between 6-14 years of age, 2% after 14 years of life.

CLINICAL MANIFESTATIONS

The clinical manifestations of disease is divided in 4 stages:-

1st stage: incubation period is 10-12 days.

2nd stage: Catarrhal Stage (3 - 5) days characterised with Fever (38-40)°C Mucosites mainly conjunctivites and rhinites, Sore throat. This stage is characterised by the presence of a (KOPLIK SPOTS).

Koplik Spots: are grayish-white dots with slight reddish areolae, occasionally they are hemorrhagic. They tend to occur opposite the lower molars but may spread irregularly over the rest of the buccal mucosa.

They appear and disappear rapidly, usually within 12-18hr.

3rd stage: Exanthema, appear at the 4-5 th days of disease, the rash usually Starts as faint macules on the upper lateral Part of the Neck, behind the ears, the rash become gradually maculo - Papular, as the rash spreads rapidly over the Face, Neck upper arms, chest, after 2-3 days the rash reach the foot.

The severity of the disease is directly related to the extent and confluence of the rash.

The duration of this stage is 4 - 7 days. During this stage, Persistent cough and headache, and insomnia.

4th stage: The Convalescent stage characterised by the desquamation which started at the end of the exanthema.

COMPLICATION: The most common complication of the disease is : Pneumonia, Broncho Pneumonia, Otitis media, Encephalites, D.I.C. and Sub acute Sclerosing Pan encephalites.

Pneumonia : may be caused by the virus itself. It is interstitial Pneumonia.

Broncho Pneumonia is more frequent, it is due to bacterial infection, Particular, Pneumococcus, Streptococcus, Staphylococcus. Laringo trachites and Bronchites are common and they due to the virus alone.

Prophylaxis: Active Vaccination:

The routine vaccination against measles at 15 months of age M.M.R. Vaccine (Vaccination against Measles, Mumps, Rubella).

This vaccine is prepared from live attenuated virus.

Use of live measles vaccination is not recommended for Pregnant women and in children with treated TB, Leukemia and children who receive immuno suppressive drugs.

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MEASLES

- In child who is allergic to eggs or Neomycin.

- In all Febrile illness.

Passive Immunization: The disease can be Prevented by using specific Immuno Globulin 0,25ml/kg Im given within 5 days after Exposure.

TREATMENT: - No specific Treatment
- Symptomatic treatment = Anti pyretic and Sedative
- Bed rest and adequate fluid intake
- Antibiotics to Prevent Secondary bacterial Sopra Infection.

RUBELLA
(GERMAN MEASLES)

Definition: German Measles is an acute infectious disease caused by virus with a mild symptoms Rash Similar to mild Measles and Lympho-adenopathy.

ETIOLOGY: The disease is caused by R.N.A. Virus from the family Toga VIRUS.

EPIDEMIOLOGY: The disease can spread from the patient to other by Oral droplets or transplacentally through congenital infection.

Prior to institution of the rubella Vaccine Program, the peak incidence of disease was in children from 5 - 14 years of age. Now most cases occur in teenager and in adults. Rubella usually occurs during spring.

A single attack usually confers permanent immunity.

Epidemics occurred every 6-9 years before vaccine was available.

CLINICAL MANIFESTATION:

- 1 - Incubation Period from 14 - 21 days .
- 2 - The Prodromal Stage is very short some times un observed, it is characterised by retro auricular, post occipital, and posterior cervical adeno pathy.

Lympho adeno pathy is evident at least 24 hr. before the rash appears and remain for 1.W.K. or more.

The rash appear on the face and then spread quickly to the trunk, during the 2nd days the rash may assume a Pin Point appearance, resembling that of scarle fever.

The eruption usually clears by the third day.

The Pharyngeal Mucosa and conjunctivae are slightly inflamed, fever is slight or absent during the rash and persist for 1 - 3 days.

CONGENITAL RUBELLA SYNDROM

During maternal infection rubella virus can cross the placenta, infect the fetus and result in death of the conceptus, or birth of an infant with congenital Rubella Malformation.

Prior to the 8th week of gestational period 50 - 80% of Fetuses exposed to maternal Rubella become infected.

- During the 2nd trimester 10 - 20% of infants become infected.
- During the 3rd trimester, infection of the fetus is relatively uncommon.

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CLINICAL MANIFESTATION OF CONGENITAL RUBELLA

Congenital Rubella may range from subclinical to severe disease involving multiple organs and Numerus Anomalies.

- 1 - Cataract may not be recognized until after the Neonatal Period, mottled, or blotchy with black Pigmentation deposits that are variable in size and location.
- 2 - Congenital Heart Disease 46% mainly Patent ductus arteriosus, V.S.D. , Pulmonary Stenosis.
- 3 - Hearing loss 87% of Symptomatic cases.
- 4 - Central Nervous System involvement with lethargy, Irritability, bulging fontanel, disturbance of tone.
- 5 - Mental Retardation: Psychiatric disorder and cerebral disfunction
- 6 - Bone malformation.

DIAGNOSIS:

- 1 - History of maternal infection during pregnancy may suggest the diagnose.
- 2 - Rubella titer test Haemo aglutination Inhibition test and I.G.M. Test.

PREVENTION:

Vaccination : Routine vaccination of all children at 15 months of age M.M.R. Combination Measles , Mumps and Rubella Virus Vaccine (Live Vaccine) is recommended .

- Pregnant Women should not be given live Rubella Vaccine.
- Clinical Manifestation may ve follow Rubella immunization include fever,typical Lymphadenopathy, rash arthrites.
- Two unusual syndroms have been reported in association with Rubella Vaccine.
 - 1 - One with Parestesia of the hand and arm that occurs at night Lasts for up to one hour and may recur frequently duringnight
 - 2 - the2d manifested by Pain behind the knee and limitation of motion , symptoms are worst in the morning, diminishing during the day, they may last for up to 5 weeks.

Manigement of Pregnant Women exposed or acquiring Rubella:

If a pregnant women whose immune Status is un known is exposed to Rubella , an antibody test should be performed immediatly. If determined to be immune she can be reassred that the pregnancy can be continued without risk.

If she found to be susceptiple and I.G.M. is positive Abortion is indicated.

If the Pregnant refused abortion (I.S.G.) Immune Serum Globulin should be given 20 - 30 ml, I.M. Active immunization of Pregnant women is Not advised .

MUMPS

(EPIDEMIC Parotitis)

Definition: Mumps is an acute viral disease characterised by enlargement and pain of the Salivary glands mainly the parotids.

ETIOLOGY:

The virus is a member of paramyxovirus. It has been isolated from Saliva, C.S.F. fluid, blood and urine of the Patients.

EPIDEMIOLOGY: Mumps is distributed world wide and affect both sexes equally, 85% of infections occur in children under 15 years.

VIRUS has been isolated from Saliva 6 days before and up to 9 days after appearance of Salivary gland swelling.

CLINICAL MANIFESTATION: The incubation period range from 7-35 days.

The onset of disease is usually characterised by pain and swelling of one or both parotid glands. The parotid swelling is usually accompanied by moderate fever.

COMPLICATION:

- 1 - Meningo Encephalitis: Sub clinical infection of the C.N.S. occur in 65% of patients with parotitis, clinical manifestation in 10%
- 2 - ORCHITIS : Orchitis is common in adults and adolescents, usually follow parotitis within 8 days or so. atrophy of affected testicle occur in 30 - 40% impairment of fertility in about 13% of cases.
- 3 - Oophoritis Pelvic pain and tenderness in about 7% of Post Pubertal Female Patients . There is no Impairment of Fertility.
- 4 - PANCREATITIS: Epigastric pain and tenderness, fever , chills, vomiting, and elevation of serum Amylase.

TREATMENT: No specific Treatment, Symptomatic treatment , anti pyretics.

PROPHYLAXIA: PASSIVE Hyper immune Mumps Gamma Globulin is not Effective.

ACTIVE VACCINATION : Combination of Measles, Mumps, Rubella (M.M.R.) attenuated live Virus Vaccine is recommended at 15th months of age. Mumps vaccine usually Not develop fever or other clinical manifestation. Rarely Parotitis can develop 7 -10 days after Vaccination.

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