MONKEYPOX in SUDAN

Background

Monkeypox is a viral disease with a clinical presentation in humans similar to that seen in the past in smallpox patients. Smallpox no longer occurs, following its worldwide eradication in 1980s, whereas Monkeypox is still seen as a sporadic disease in parts of Africa. Monkeypox has been reported from remote villages of Central and West Africa close to tropical rainforest where there is frequent contact with infected animals. Monkeypox is usually transmitted to humans from squirrels, non-human primates and rodents (e.g. Gambian rats) through contact with the animal's blood or through a bite. The exact way of transmission is not clear and needs to be determined. There is no evidence to date that person-to-person transmission alone can sustain Monkeypox in the human population.

The death rate from Monkeypox is highest in young children, reaching about 10%.

The outbreak in Bentiu, Unity Sate, Sudan

On October 27th 2005, Médecins Sans Frontières France team in Bentiu, Unity State, Sudan, were alerted by the case of an 8 months old infant who presented a generalized vesiculo-papular rash that could resemble pox diseases. The child had fever of sudden onset, cough, coryza and enlarged lymph nodes. These symptoms had appeared 2 days before the onset of the rash. From October 27th until November 18th, an additional 18 suspected cases were identified. All of the cases evolved well and no death was reported. There has been no report of any new case since November 18th.

Specimens were sent to the WHO Reference Center for Orthopoxvirus in CDC Atlanta, USA. CDC Atlanta confirmed the Monkeypox infection on the samples of the index case. They isolate the virus and found that it was related to the DRC clade.

Treatment and Prevention

Treatment: Supportive (like any viral infection, Antibiotics…). Cidofovir [(S)-1-(3-hydroxy-2-phosphonylmethoxypropyl) cytosine, HPMPC], is the first promising anti-Orthopoxviral drug. It has since 1996 been licensed for clinical use in the treatment of cytomegalovirus (CMV) retinitis in AIDS patients. Laboratory data show that cidofovir should be effective in the therapy and short-term prophylaxis of Monkeypox in humans.

Prevention: In Endemic areas avoid contacts with monkeys or squirrels found dead in the forest. Universal barrier nursing technique should be applied to avoid the nosocomial spread

Vaccination: Vaccinia vaccine is about 85% efficacious in preventing human Monkeypox. But generalized vaccinia or eczema vaccinatum may follow Vaccination (adverse event). Vaccination contraindication include people with Vaccine component allergy, Immunosuppression, HIV seropositive patient, history or presence of eczema, other acute, chronic, or exfoliative skin conditions, pregnancy and people aged <18 yrs.