A Rare Presentation of Chikungunya in Infant- A Case Report

Authors
Dr S.K. Valinjkar, Dr Yogesh Mokase, Dr Jyoti Singh
Corresponding Author
Dr Jyoti Singh
Department of Paediatrics, Grant Government Medical College and Sir JJ Group of Hospitals
Byculla, Mumbai-400008 Maharashtra, India
Email: singhjoty@gmail.com, 9619425666

ABSTRACT
We have discussed about an infant who contracted the disease - Chikungunya, a resident of endemic area. He had high grade fever followed by rash. His serum was tested for both Dengue and Chikungunya fever. In this case, child had only a characteristic hyper pigmentation of skin at the time of presentation. Laboratory result revealed positive for Chikungunya IgM on day 5 of illness. Laboratory confirmation is essential to ensure correct diagnosis of Chikungunya.

Keywords-chikungunya, fever with rash in infant.

Introduction
Chikungunya virus (CHIK virus in short) is an RNA virus that belongs to the Alpha virus genus of the Togaviridae, the family that comprises a number of viruses that are mostly transmitted by arthropods. Chikungunya epidemics display cyclical and seasonal trends. There is an inter-epidemic period of 4–8 years (sometimes as long as 20 years). Outbreaks are most likely to occur in post monsoon period when the vector density is very high. India reported CF in 213 districts located in 15 states/union territories. About 1.39 million suspected cases have been reported.

Case Report
A 3 months old male child, 1st bob, born of non consanguinous marriage brought by mother with c/o developing hyper pigmentation of skin all over the body since past 2-3 days along with a history of high grade fever spikes 5-6 days before appearance of hyper pigmentation. On admission CBC was done which was normal. CRP negative. CXR was normal. Opinion of Dermatologist was taken who advised to do IgM Chikungunya levels. IgM Chikungunya levels came positive.

Only supportive treatment was given and child was discharged in 5days as child was stable and had no other complaints. Child was called for follow up in OPD after 15 days, skin over the face had become normal, and skin over the rest of the body was also clearing up.
Fig 1: Hyper pigmentation of skin all over body

Discussion
Chikungunya (chik) virus is member of genus alpha virus in the family of togaviridae transmitted to humans by vector like aedesaegypti and aedesalbopictus. The word Chikungunya has been derived from a makonde word meaning "that which bends up". Chikungunya fever epidemics have been reported from several countries around the world. The disease that was silent for nearly 32 years re-emerged in the October 2005 outbreak in India that is still ongoing. the incubation period ranges from 3 to 12 days. The onset is usually abrupt and the acute stage is characterized by sudden onset with high-grade fever, severe arthralgias, myalgias, and skin rash. Swollen tender joints and crippling arthritis are usually evident. Infants present with fever, excessive crying, dermatological manifestations like maculopapular rash, nasal blotchy erythema, freckle like pigmentation over centrofacial area, vesiculobullous lesions, apnea, shock, dic, and neurological. Manifestation like seizures, disturbed level of sensorium. It is transmitted from the mother to the child. The time of greatest risk of transmission from a mother to a fetus appears to be during birth Neonatal Chikungunya is manifested by neurological, dermatological, ocular, renal and hematologic involvement. Maculopapular & vesicobullous rash with characteristic hyper pigmentation (brownie nose appearance) with peri oral hyper pigmentation is present .Diagnosis is made by Chik IgM and PCR. Viral culture is the gold standard for the diagnosis of Chikungunya fever. Reverse transcription polymerase chain reaction and real-time loop-
mediated isothermal amplification have also been found to be useful. serodiagnostic methods for the detection of immunoglobulin m and immune-globulin g antibodies against Chikungunya virus are more frequently used. Prevention by educating the community and public health officials, vector control measures appear to be the best approach at controlling Chikungunya fever as no commercially available vaccine is available for public use in india for this condition present

References