

2<sup>nd</sup> Global Congress and Expo on

# Pediatric Cardiology & Healthcare

September 22-24, 2016 Las Vegas, USA

## Bacille-Calmette Guerin vaccine-induce hip tuberculosis in an infant: A case report

**Jazel O Manarang**

The Royal Hospital, Oman

Tuberculosis (TB) remains to be a significant global health burden. The WHO Expanded Program of Immunization (EPI) recommends the Bacille-Calmette Guerin (BCG) vaccine to protect against hematogenous spread of primary tuberculous and other more severe types of TB infection in infants. However, a number of cases have been published reporting its share of complications such as regional lymphadenitis, localized abscesses and osteomyelitis. We describe a case of eight month old boy with hip osteomyelitis from BCG vaccination, the first documented case in Oman. He was presented with one-month history of intermittent fever associated with limitation of range of motion (ROM) in the right hip area. He received up to date EPI vaccination and denied exposure to persons with TB infection. He was initially treated for bacterial septic arthritis until Mycobacterium BCG strain has been detected on GeneXpert. Tuberculosis (TB) is a bacterial infection caused by Mycobacterium tuberculosis. Lungs are the most common site to be involved but can affect any part of human body. On literature review, BCG vaccine can as well cause uncommon but significant complications in some infants, including osteomyelitis. Articular TB infection is largely a clinicoradiologic diagnosis. Clinical suspicion can be supported by radiological imaging in addition to culture and genomic studies to confirm the diagnosis. Chemotherapy is recommended for all patients with active disease. Supplemental surgical intervention is restricted for those with disease process complications. Although the BCG vaccine may be associated with complications, the potential morbidity and mortality from tuberculosis outweighs them. In children with symptoms suspicious of TB infection, timely diagnosis and immediate treatment are necessary to ensure the best outcome for the patient.

jazel\_carillo@yahoo.com

## Caregiver compliance to confirmatory testing for G6pd deficiency at a tertiary government medical center

**Maureen B Teves and Arvin D Escueta**

Jose R Reyes Memorial Medical Center, Philippines

**Background:** Glucose-6-Phosphate Dehydrogenase (G6PD) deficiency is an inherited condition that can lead to a spectrum of symptoms if exposure to offending agents is not prevented. The newborn screening is a useful tool that detects the presence of this condition, as is the confirmatory test. Non-compliance to confirmatory testing has been attributed to lack of time, poor understanding of the procedure and lack of money.

**Objective:** To determine the compliance to confirmatory testing of patients who tested positive for G6PD Deficiency via Newborn Screening Test at a tertiary government medical center between the years 2013 to 2014.

**Methods:** This is a retrospective cross-sectional study conducted among patients who were born and underwent newborn screening at a tertiary government medical center on January 2013 to December 2014. We conducted a follow-up survey using structured questionnaires over the phone to assess the compliance of the parents and caregivers to confirmatory testing.

**Results:** Out of the 3,570 infants who were delivered at the medical center, 143 (4%) were positive for G6PD deficiency on newborn screening test. We were able to track 62 patients, of which 39 (62.9%) were able to comply with confirmatory testing. The most common reasons for non-compliance to confirmatory testing were the following: "busyness/lack of time" (47.83%), uninformed (21.74%), and lack of funds (21.74%).

**Conclusions:** Reasons for non-compliance are lack of time, lack of knowledge and financial constraints. This shows that there is a need to improve the patient education programs of medical centers, particularly on the newborn screening program.

maurentevesmd@gmail.com