Incidence and clinical presentation of Congenital Syphilis, in a rotavirus vaccine cohort study in Lusaka: A case series report

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Background

Despite an otherwise successful maternal screening programme through the national antenatal attendance, we report with concern, an alarming number of infants diagnosed with Congenital Syphilis in Lusaka, Zambia.

Methods

This case series is an incidental finding from a cohort of infants enrolled in a rotavirus vaccine immunogenicity study recruiting infants from 6 to 12 weeks of age. As part of clinical care for enrolled participants, we screened mothers of children who presented with adverse events of (i) repeated coryzal illness, (ii) skin lesions, and (iii) poor weight gain for syphilis using Rapid Plasma Reagin (RPR) test.

Results

From a cohort of 214 mother-infant pairs enrolled between September and December 2018, up to 115(44.4%) of the mothers reported to have not been screening during antenatal. Of these, four (3.5%) reported to have tested positive; and only two received treatment. Six out of nine (67%) children meeting the screening criteria (i.e. coryza/upper respiratory tract infection (URTI), skin lesions and poor weight gain) had a positive RPR test result. The average age at diagnosis was 5 months, and the common presenting features included: Coryza/URTI (5/6), Skin lesions (4/6), conjunctivitis (3/6), Pallor/Anaemia (4/6), wasting defined by <-2 SD WHZ (2/6), and 4/6 were under weight (WAZ <-2SD). Regarding exposure to maternal HIV infection, two of the six infants (2/6) were exposed.

Conclusion/Impact

These findings call for attention to the syphilis problem. While it is easily treatable with penicillin, many cases remain both undetected and untreated only showing up through various clinical symptoms in the infant. Clinicians need to raise their index of suspicion and rule out syphilis when confronted with these clinical symptoms regardless of the mother's HIV status.