



Surveillance of pregnant women with potential exposure to Zika virus following travel

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Objective

To describe the experience of a single fetal medicine unit in evaluating pregnant women with potential exposure to Zika virus (ZIKV) as a result of foreign travel.

Methods

One team of obstetricians, midwives, paediatricians and infection specialists developed a local pathway based on Public Health England guidance. All pregnant women with a significant travel history were referred to a dedicated fetal medicine 'Zika' clinic, offered a fetal ultrasound scan (USS) at 20, 28 and 34 weeks and screened for ZIKV infection using reverse transcriptase polymerase chain reaction (RT PCR) and/or serology if they presented with a history of clinical symptoms consistent with Zika during or within two weeks of travel. They were also screened for ZIKV infection using RT PCR and/or serology if fetal USS was suggestive of microcephaly.

Results

Between February 2016 and June 2017, 69 women with a mean age of 32 years were referred. The areas travelled to included: Central or South America (49. 2%), Caribbean (27. 5%), USA (5. 8%), South-East Asia (8. 7%) and Africa (1. 5%). Two women (2. 9%) had partners who had travelled to Zika endemic areas and detailed travel history was missing in four cases (5. 8%). Exposure (travel or sexual) in 78. 3% of the referrals was either immediately pre-conception or during their first trimester. Within our cohort, eight patients reported symptoms consistent with ZIKV infection (11. 6%) and six (8. 7%) patients reported mosquito bites. Skin rash and headache were the commonest of symptoms. Four of the symptomatic patients had travelled to Central/ South America. The time of exposure was mainly during the preconception period in 35 women (50. 8 %) and during the first trimester in 19 women (27. 5 %). Of the eight women screened for ZIKV infection, one patient had serology confirming ZIKV during pregnancy following travel in her third trimester. There was no evidence of microcephaly in any of the 69 referrals on serial fetal ultrasound scans performed. There were 55 live births, 7 miscarriages and 7 pregnant women transferred care to another hospital. In 53 babies, the head circumference (HC) measurements were lying within normal limits at birth. Only 2 female babies had their HC measurements lying just below the 3rd centile at birth. Both of these babies were negative for ZIKV infection and considered to be small for gestational age.

Conclusion

In our cohort of 69 pregnancies, only one case of maternal ZIKV infection was detected but without any fetal congenital abnormalities postnatally. The number of potentially infected patients referred to our hospital is a demonstration of the concern of perinatal Zika virus infection in the pregnant population.

