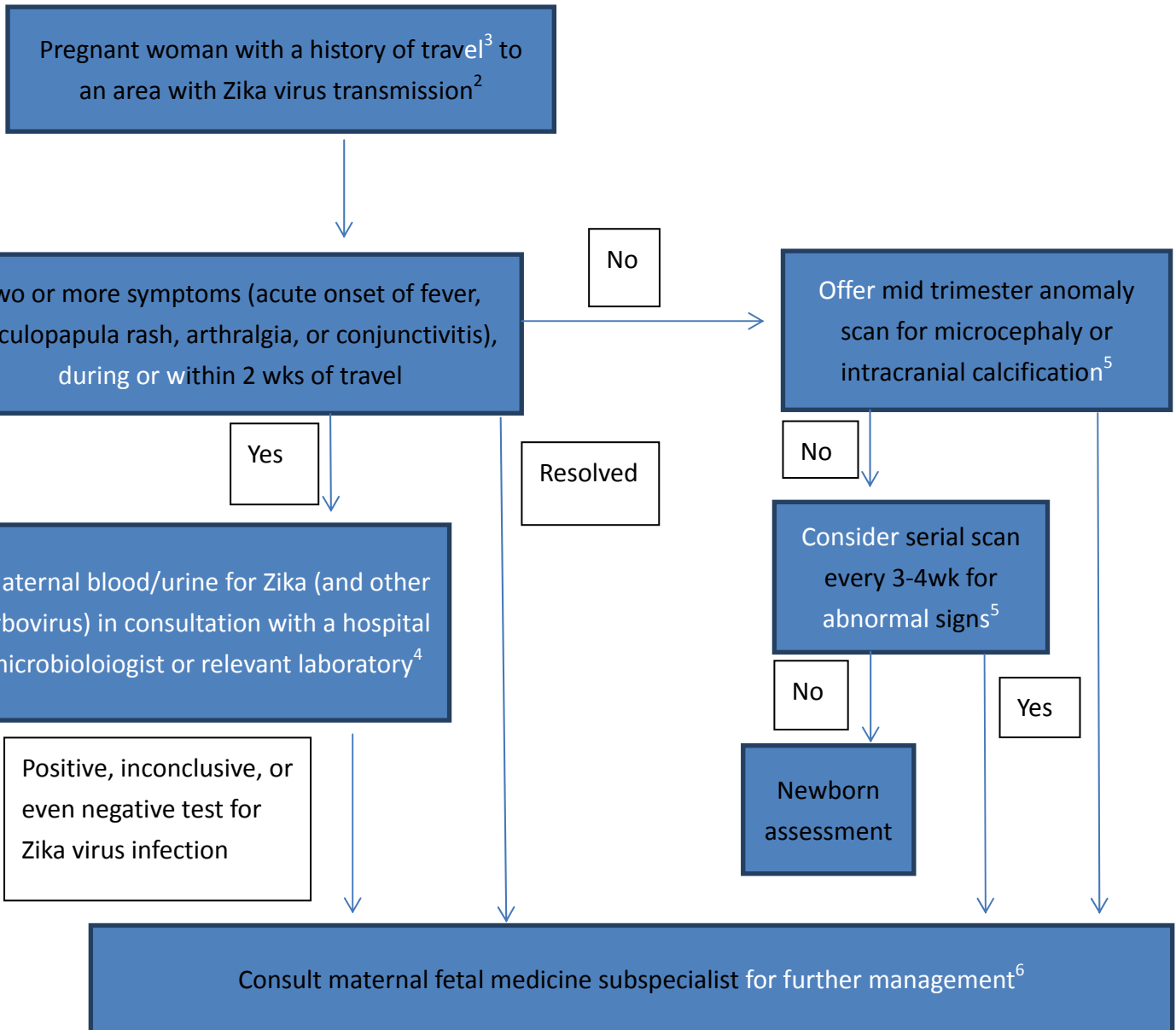


Interim guidelines¹ on the management of a pregnant woman with a travel history to an area with Zika virus transmission²
endorsed by The Hospital Authority COC (O&G) and Hong Kong College of Obstetricians and Gynaecologists on 11 February 2016



Remarks

1. This is an interim guidelines prepared by local O&G and microbiology experts after making references to the CDC, RCOG and ACOG guidelines on Zika virus.

Details of the CDC, RCOG, and ACOG guidelines can be accessed via

- <http://www.cdc.gov/mmwr/volumes/65/wr/mm6502e1.htm>
- <http://www.cdc.gov/zika/hc-providers/qa-pregnant-women.html>
- [https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/496817/Interim Zika testing algorithm for assessing pregnant women with a history of travel v2 010216 Gateway.pdf](https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/496817/Interim_Zika_testing_algorithm_for_assessing_pregnant_women_with_a_history_of_travel_v2_010216_Gateway.pdf)
- <http://www.cdc.gov/mmwr/volumes/65/wr/mm6503e3.htm>
- Update: Interim Guidelines for Health Care Providers Caring for Pregnant Women and Women of Reproductive Age with Possible Zika Virus Exposure — United States, 2016. MMWR Morb Mortal Wkly Rep 2016;65(Early Release):1–6. DOI: <http://dx.doi.org/10.15585/mmwr.mm6505e2er>
- Practice Advisory: Interim Guidance for Care of Obstetric Patients During a Zika Virus Outbreak. <https://www.acog.org/About-ACOG/News-Room/Practice-Advisories/Practice-Advisory-Interim-Guidance-for-Care-of-Obstetric-Patients-During-a-Zika-Virus-Outbreak>
- This interim guideline will be updated when more understanding of the disease becomes available.

2. For checking which areas with Zika virus transmission, please refer to the updated list by CHP website (<http://www.chp.gov.hk/en>).

3. History of travel counted from four weeks before conception

4. Laboratory Test

- RNA of Zika virus can be identified by reverse transcriptase-PCR (RT-PCR) in blood or urine. RT-PCR can give a negative result if test is done > 7 days after the onset of disease as the period of viraemia has passed. Zika virus may be detectable for a longer period of time in urine than in blood. Please seek advice from hospital microbiologist (for HA) or relevant laboratory (for private) before carrying out the test for Zika virus and other viral diseases (like Dengue fever) that may cause similar symptoms. O&G doctors in private practice may choose to refer the patient to HA hospital if there is difficulty in arranging the necessary test.

- RT-PCR testing for asymptomatic pregnant women is not recommended in the absence of fetal microcephaly or intracranial calcifications.
- Currently, serology for Zika is not available in Hong Kong.

5. Role of fetal USG

- 80% of infected women are asymptomatic.
- Routine mid trimester scan is a common practice and may pick up microcephaly and intracranial calcification at that gestation.
- As microcephaly and intracranial calcifications may exhibit in late pregnancy, serial scan can be considered.
- Fetal microcephaly is suspected when the head circumference is \leq mean -2SD with corresponding gestational age
- The sensitivity of prenatal ultrasound for detection of microcephaly depends on many factors including the timing of maternal infection relative to the timing of screening, severity of microcephaly, patient factors, and gestation age.
- There were other reported abnormal brain anomalies including corpus callosal and vermian dysgenesis, enlarged cisterna magna, severe unilateral ventriculomegaly, agenesis of the thalami, cataracts, intracranial and intraocular calcifications.

6. Maternal Fetal medicine (MFM) subspecialist involvement

- All the at risk pregnant women with symptoms will be referred to a MFM subspecialist for the further management. A MFM subspecialist is more capable of detecting subtle abnormalities other than calcification and small head as both of them are late signs. For pregnant women with symptoms but a negative Zika test, they are still at higher risk because the possibility of other infection. Paediatric consultation after delivery is recommended.
- To evaluate possible congenital Zika virus infection in newborns of mothers with positive or inconclusive RT-PCR result, Zika virus identification can be performed on cord blood, umbilical cord and placenta after delivery or fetal loss. Please discuss with a hospital microbiologist or relevant laboratory for arrangement.

Role of amniocentesis

- The sensitivity and specificity of detecting Zika virus RNA in amniotic fluid in diagnosing congenital infection is unclear.
- A positive Zika virus RT-PCR result from amniotic fluid is suggestive of intrauterine infection. The positive predictive value of a positive result for fetal abnormality is not known.
- A negative Zika virus RT-PCR result from amniotic fluid may prompt a work up for

other causes of microcephaly (e.g. other infections like toxoplasma, rubella, parvovirus and CMV, genetic disorders).