

Bumps & Babies

Bumps & Babies is a support group for women of all nationalities who are pregnant or have recently given birth. The BAMBI website calendar and Facebook pages hold current information regarding what's on. Meetings are coordinated by a medical professional who is also there to offer support. If you are a new parent to Bangkok and are looking for support regarding information on doulas, breastfeeding, child birthing classes, babywearing or postpartum depression, please feel free to ask our coordinator or visit www.bambiweb.org and look under 'Services' to find our 'Bumps & Babies' page.

Dengue Fever and Pregnancy

By Emma McNerlin (Midwife)

Know the risks associated with contracting Dengue fever, how to avoid contracting it, and how to know whether you have symptoms for the more life-threatening Dengue Hemorrhagic Fever.

As rainy season returns to Bangkok so too does the rise in mosquito populations and mosquito-borne viruses. Much has been reported about the potential risks of contracting Zika virus in pregnancy (See BAMBI News Article November 2016). Although the potential impact of Zika in pregnancy is serious; the overall risk of contracting Zika, however, is low, with approximately 600-800 reported cases per year, in a population of approximately 66 million.

Dengue fever is much more prevalent in Thailand and although it is not associated with microcephaly or birth defects (as in the case of Zika), it does carry risks in pregnancy for both the mother and baby. Recently the Thai ministry for health has announced a Dengue epidemic, with over 28,000 cases reported so far in 2019 and 43 associated deaths. Early recognition and treatment of Dengue in pregnancy are vital for improving outcomes, so it is important that all pregnant women living in or visiting Thailand are aware of the risks and symptoms of Dengue and the importance of early treatment.

Dengue Fever: The Facts

Dengue Virus is a systemic infection (it affects multiple body systems and organs) and is carried and transmitted by the Aedes mosquito (a vector). There are four different strains of the virus identified. Once exposed, you develop lifelong immunity only to the strain you were infected by. Subsequent infections from other strains may be more serious. The incubation period following exposure from a vector is 4-10 days followed by 2-7 days of symptoms.



Unlike Zika virus which is typically mild or even asymptomatic; Dengue symptoms are more severe and may also lead to the more serious condition of Dengue Hemorrhagic Fever (DHF), which even with treatment has a 1-2% mortality rate. DHF symptoms are severe and usually follow after a brief improvement in initial Dengue symptoms, therefore early inpatient treatment is vital. Symptoms of both Dengue

Fever and DHF are listed in table 1.

Diagnosis and Treatment

Dengue Fever is diagnosed from blood serology tests to detect recent antibody immune response to the virus or Molecular testing for presence of the virus in the blood. Dengue is sometimes confused with influenza, so testing is important to ensure correct treatment.

Table 1: Symptoms of Dengue Fever and DHF

Dengue Fever Symptoms	Dengue Hemorrhagic Fever (DHF) Symptoms
Acute high fever (over 39°C)	Restlessness
Severe headache	Acute and sudden fever
Joint and muscle pain	Severe abdominal pain
Nausea/vomiting and stomach pain	Bleeding or bruising under the skin
Drowsiness	Cold or clammy skin
Flat red rash over most of the body	Bleeding nose or gums
Pain behind the eyes	Large drop in blood pressure (Shock)

BAMBI is a project of the Childbirth and Breastfeeding Foundation of Thailand and welcomes speakers from all areas, presenting a wide range of information. All attempts are made to present topics of interest to BAMBI members, but those who present do so independently of BAMBI and as an organization, we remain impartial to any points of view expressed. **Coordinators:** Yaz (bumpsassist2@bambiweb.org) and Emma (bumps@bambiweb.org) **Suggested family donation:** ฿100 BAMBI-members with membership card & ฿300 for non-members. Membership can be processed and renewed during the session. **BAMBI Library:** Bumps & Babies has a significant collection of books about pregnancy, childbirth, baby care and parenting. Books can be borrowed by anyone in return for a ฿500 fully refundable deposit. Queries to be directed to: bumps@bambiweb.org

If you suspect that you may have Dengue fever, you should seek medical advice from a Tropical Disease Specialist and have blood tests to confirm infection. Treatment for Dengue fever includes fever management with acetaminophen and avoidance of NSAIDS (Anti-Inflammatory medications such as Ibuprofen) and Aspirin which increases risk of bleeding. Where Dengue Hemorrhagic Fever is suspected, in-hospital treatment and close monitoring are advised as the clinical condition can worsen quickly.

Dengue Fever and Pregnancy

Pregnant women are no more likely to contract Dengue than the general population. However, if infected while pregnant, they are at increased risk of developing the more serious complication of Dengue Hemorrhagic Fever, sometimes referred to as Dengue Shock Syndrome (Machado et al, 2013). Evidence suggests that the risk of more serious DHF increases in the third trimester. This is likely due to the changes in physiology during pregnancy.

Pregnancy can also mask the symptoms of Dengue leading to a delay in diagnosis and treatment. Pregnant women have 50% extra circulating volume of blood by the third trimester to sustain the pregnancy; bleeding related to DHF can be missed or diagnosed as other pregnancy-related conditions. In all instances of high fever in pregnancy, Dengue testing should be considered as early diagnosis and close monitoring of both mum and baby can avoid delay in treatment of serious complications. (Chaitongwongwatthana, 2017).

Pregnancy complications from Dengue: The Evidence

A recent systematic review of 16 case-controlled studies involving 6,071 pregnant women, of which 292 contracted Dengue found that Dengue infection in pregnancy was associated most commonly with increased risk of postpartum hemorrhage, preterm birth, and low birth

weight babies, and also with pre-eclampsia and emergency Cesarean birth (Paixao et al 2016). When attending a birth where the mother has Dengue, the risk of bleeding should be assessed; and blood products should always be available.

There have also been case reports of vertical transmission of Dengue from mother to baby, this risk is greatest in the weeks leading up to birth. Babies usually display symptoms of Dengue between 5-10 days after birth and serious life-threatening complications include severe jaundice, enlarged liver, internal bleeding, and fluid on the lungs. Close monitoring of babies born to mothers who contracted Dengue in late pregnancy is important, and all parents should be aware of early signs (as detailed in table 1) to avoid potentially serious complications.

Avoiding Infection

There is no cure or specific antiviral treatment for Dengue Fever. A Dengue vaccine which protects against all 4 strains (3 doses of Dengvaxia at 6 monthly intervals) is in advanced clinical trials. It has shown to be effective on people previously infected with dengue but makes those never exposed to the virus more at risk of DHF. As a live vaccine, it would not be suitable for pregnant women (WHO, 2018).

According to the World Health Organization, avoiding Dengue infection involves avoiding mosquito bites. Firstly, by controlling mosquito populations by regular and widespread fogging with insecticide in highly populated and public areas. On a personal level, covering up in light-colored long clothing, wearing repellent with at least 30% DEET concentration and avoiding or eliminating areas of standing water such as patio plants or swimming pools, and fitting screens to windows and doors.

Any pregnant woman presenting with a high fever should seek swift medical

advice and testing to rule out Dengue. Early detection and treatment improve outcomes for both mother and baby.

The content of this article is intended only for information purposes, not as medical advice. As with all health matters pertaining to pregnancy, if you are concerned that you may have contracted Dengue, please consult your doctor immediately.

Pictures by Erop Kameliev on Unsplash

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About the Author

Emma McNerlin

Originally from Ireland, Emma is a UK-trained midwife who worked in the maternity unit at a busy NHS hospital just outside London. Emma moved to Bangkok with her husband in 2014; they have an 11-year-old son, Toby. Volunteering with BAMBI Bumps and Babies since August 2015, Emma regularly conducts sessions on pregnancy, birth, breastfeeding and Infant First Aid. In her spare time, she enjoys baking and Muay Thai, and is an active member of her son's parent group at school.

