

Dengue haemorrhagic fever in pregnancy: appraisal on Thai cases

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Dengue infection is a major public health problem, affecting children worldwide particularly in the southeast Asia region. Up to 2 to 3 epidemics of dengue per year have been reported¹. The classical form of this infection has an incubation period of 5–8 days following by the onset of fever, violent headache, chill and rash developing after 3–4 days. The fever usually lasts 4–7 days and most people have a complete recovery without any complication^{2–4}. However, dengue haemorrhagic fever (DHF), a severe form usually brings high fatality.

About 50% of dengue infections are reported in the adult patients (15 yrs of age) and it had been increased for the past 3 to 5 years, therefore, some pregnant women may also be susceptible to dengue⁵. Although Thailand has high prevalence of DHF in pregnancy it is rarely reported. In this present paper, the author has reported a literature review of the reports of DHF in pregnancy in Thailand in order to summarise the characteristics of this infection among the Thai pregnant patients.

This study was designed as a descriptive retrospective study. A literature review of the papers concerning DHF in pregnancy in Thailand was performed, using the database of published works cited in the Index Medicus and Science Citation Index. The author also reviewed the published works in all 256 local Thai journals, which are not included in the international citation index. The literature review focused on the years 1981 to 2005. The key word for searching is “pregnancy” and “dengue”.

According to the literature review, seven reports on DHF in pregnancy were recruited for further study. The details of clinical presentations of the patients (such as clinical manifestation, diagnosis, treatment, and discharge status) were studied. The demographic data of all cases including age were reviewed as well.

According to this study, there have been at least 11 reports^{6–15} in the literature of 14 cases of DHF in pregnancy, of that no case was lethal. All except one case (23 wk pregnancy) had term pregnancy on presentation. Average age of the patients was 23.6 ± 8.2 yr.

Concerning the clinical manifestations, all had fever and some had other manifestations (Table 1). From physical examination, all had hepatosplenomegaly and petichiae. At the time of diagnosis, complete blood count could demonstrate thrombocytopenia and haemoconcentration in all the cases.

All the cases had got conservative treatment by fluid replacement. In addition, one case had got platelet transfusion but the antiplatelet developed and the transfusion was discontinued. All had got full recovery with one week. Considering 13 cases with term

Table 1. Clinical presentation of DHF in pregnancy

Presentation	Frequency
Fever	7
Shock	2
Epigastric discomfort	1

pregnancy, 11 had normal delivery and one had cesarean section due to fetal distress indication. The postpartum complication can be seen in two cases as one postpartum bleeding and one postpartum anaemia. Considering the newborn, one from 13 newborns died of congenital encephalocele. The infantile dengue infection can be seen in 6 of 12 live newborns. Concerning the other one case without term pregnancy, the patient had normal delivery and normal newborn on follow-up.

More cases of dengue infection in pregnancy can be found due to the increasing incidence during adulthood. Considering the clinical manifestation, the fever is the most common manifestation. This manifestation is similar to general population¹⁶. The haemoconcentration as well as thrombocytopenia are the two hallmark laboratory aberrations in the patients. It should be suspected when a pregnant woman presents with symptoms and signs like in a non-pregnant. The triad of high fever, haemoconcentration and thrombocytopenia can be the clue for diagnosis of DHF in pregnancy.

This study showed that conservative treatment should be conducted unless there are any complications. Appropriate fluid replacement can provide good maternal outcome. Considering the newborn, the good outcome can be seen. The death case in the series does not directly relate to the infection. The transmission of dengue to newborn would be confirmed in two cases implying the importance of vertical transmission of dengue¹⁵. Conclusively, DHF in pregnancy is similar to non-pregnant in the context of clinical presentation, treatment and outcome.

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