

CASE REPORT: A SECOND ATTACK OF DHF IN A THAI BOY 3 YEARS  
AFTER RECOVERY FROM A PREVIOUS ATTACK

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OBJECTIVE : To record the details of a documented second attack of DHF.

BACKGROUND : A question regularly posed by parents of children with DHF in Bangkok is will their child be susceptible to similar attacks in the future. We record here a documented case of a second attack of DHF in a single child.

CASE REPORT : The main clinical features of the two cases are summarized in Table I; both attacks were relatively mild (Gr II and Gr II-III respectively) and show few differences in clinical manifestations. A mild rash was noted late in the course of the first illness; no rash other than petechiae was noted in the second attack.

Although virus isolations were attempted during both illnesses, no viruses were isolated. The HAI serologic results are summarized in Table 2; the first attack shows a definite four fold rise typical of a primary response, while in the second a high fixed titer is found, typical of the response seen in flavivirus immune individuals. The serum from the first illness was not available for testing PRNT antibodies at the time of the second illness; the rapid rise in titer against D2 during the first illness suggests that this may have been a D2 infection.

However, as noted elsewhere in this annual report, 1979 was almost a pure D2 year in Bangkok (53 of 55 isolates were D2), thus statistically suggesting that the second infection was also possibly D2. Without isolates and without sera from the first attack, the sequence of the type of dengue virus infections in this boy can not be determined by existing techniques.

Table 1. Clinical summary : Comparison of first and second attacks of DHF

	<u>First Attack</u>	<u>Second Attack</u>
Date	24 Oct. 1976	30 Nov. 1979
Age	11 yrs.	14 yrs.
Prodrome	High fever for 4 days	High fever for 4 days
Fever drop just prior to admission	+	+
Petechia	+(extremities)	+(neck, trunk)
Bleeding	+++epistaxis +black stool	0 +gum bleeding
Hepatomegaly	1cm	1cm
Blood pressure	90/70	100/87
Rash	+(late)	0
Hematocrit admission	42	48
maximum	50	48
discharge	39	38
Platelets/oil field	1-2	2
WBC	5000	7800
Treatment	IV fluids	IV fluids
Grade	II	II-III

Table 2. HAI serology results in a patient with two attacks of DHF

<u>DHF Episode # 2</u>	<u>HAI Titer Against :</u>				
	<u>D1</u>	<u>D2</u>	<u>D3</u>	<u>D4</u>	<u>JE</u>
30 Nov. 79	2560	5120	2560	2560	640
7 Dec. 79	10240	5120	40960	10240	1280
<u>DHF Episode # 1</u>					
15 Oct. 76	<20	40	20	<20	<20
22 Oct. 76	160	320	320	320	160