

DENGUE IN CENTRAL MALAYSIA: CLINICAL DESCRIPTION OF
21 ISOLATION DOCUMENTED CASES

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OBJECTIVE : To describe the clinical and laboratory features of 21 well studied, isolate proven cases of acute dengue in central Malaysia.

BACKGROUND and METHODS : In a study of the etiology of fever among palm oil and rubber plantation works in central Malaysia conducted by the KL-USAMRU, twenty-one patients were identified by AFRIMS, Department of Virology as having serologically and isolate proven dengue infections. (See other sections of this annual report). As part of the KL-USAMRU protocol, information regarding the demographic characteristics, signs and symptoms, and routine laboratory data was collected and stored on computer. This data is presented here in tabular form.

RESULTS : Two of the 21 patients were seen in January 1977 (one D2, one D3) and the other 19 between September 1977 and February 1978 (one D2, 18 D3). There were no appreciable differences between the D2 and D3 patients nor between the early 1977 versus the late 1977-1978 patients, so all patients are analyzed in one group.

Demographic characteristics are presented in Table 1.

Symptoms are presented in Table 2. The average patient presented on the fourth (4.3 ± 2.4) day of symptoms. Other than fever, physical signs were essentially absent. Three patients had mild and one moderate conjunctival injection, two had mild rashes, and five had mild pharyngitis. Jaundice, cyanosis, abdominal tenderness, hepato or splenomegaly, lymphadenopathy, meningismus, or abnormal chest findings were totally lacking. The mean temperature was $101.3 \pm 1.5^{\circ}\text{F}$.

Routine laboratory studies are presented in Table 3.

Table 1. Demographic Characteristics

I. Race :	
Malay	5
Indian	8
Chinese	8
II. Sex :	
Male	14
Female	7
III. Average age (mean + 1 S.D.) : 25.2 ± 7.8	
IV. Occupation :	
Rubber tapper or other rural worker	5
Office, shope employee, or other urban worker	6
Military	2
Housewife or student	6
Unemployed or unknown	2

Table 2. Symptoms (0 = absent, 1 = slight, 2 = moderate, 3 = severe)

<u>Symptom</u>	<u>Mean score (± 1 S.D.)</u>
Fever	1.6 ± 0.6
Rigors	1.1 ± 1.32
Headache	0.9 ± 0.3
Chills	0.8 ± 0.8
Muscle pain	0.7 ± 0.5
Back pain	0.6 ± 0.5
Cough	0.3 ± 0.5

Retrobulbar pain, photophobia, abdominal pain, vomiting, diarrhea, dysuria, chest pain, sputum, rash, all less than 0.2 mean score.

Table 3. Laboratory Studies

<u>Test</u>	<u>Result (Mean ± 1 S.D.)</u>
Platelet count	160 ± 61 x 10 ³ /mm ³ (all ≥ 100,000)
WBC	3.9 ± 1.9 x 10 ³ /mm ³ (14/21 < 4 x 10 ³)
Differential WBC count	
% Neutrophils	61 ± 16%
% Lymphocytes	37 ± 16%
Malaria smears	0/21 ^a
Widal serology	0/21
C-reactive protein	2/19
Urine :	
Sugar ≥ 1 ⁺	0/20
Albumin ≥ 2 ⁺	4/20
≥ 3 ⁺	0/20
Blood	0/20
Urobilinogen ≥ 1 ⁺	4/20
≥ 2 ⁺	0/20
Blood cultures	0/19

a. Number positive/number tested