



# Liver injury in Adult Dengue

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# Prevalence of Liver function tests abnormality in adults patients with dengue infection

- N = 127 adult dengue patients at Hospital of Tropical Medicine, Bangkok, Thailand
- Mean age  $26.4 \pm 11.5$  years.
- Classification of Dengue infection by WHO criteria were DF 4.7%,
  - DHF grade I 26%,
  - DHF grade II 63%
  - **DHF grade III 6%.**
- Mean duration-fever clearance time  $6 \pm 1.9$  days

# Prevalence of Liver function tests abnormality in adults patients with dengue infection

- Abnormal AST and ALT were found in 88% and 69% of patients
- High-level AST and ALT (>10x) occurred in 11% and 7%
- Abnormal AST during febrile stage was associated with bleeding
- Shock occurred in 6% after av. 5.6 days
- All patients recovered within 1 day of shock, without using vasopressor.
- Pleural effusion occurred in 1.6%.
- **No patient died.**

# Cohort : Liver injury in Adult Dengue in Pakistan : Age>14 yr

DENGUE INFECTION 699 CASES  
65% = MALE  
AGE 31.9 Yr

IPD/ exclude cirrhosis

DF 86%, DHF12%, **DSS 2%**

- **Mortality rate 2.7%**
- **Severe hepatitis 15%**
- **ARF 3.9%**
- **Encephalopathy 2.9%**
- **Bleeding 1.7%**

# Primary outcome measures according to severity of hepatitis within 2 categories ; DF-DHF in Pakistan

Diagnosis Categories	Severity of hepatitis	Death (n)	Death rate (Deaths/10 day)	H.R (95% CI;)	P value (Difference in death rate)!	LOS <sub>±</sub> SD	P value
Dengue fever (DF) (n=517)	Mild to Moderate Hepatitis (n=436)	3	0.019	2.97 (0.48,18.6)	0.283	3.50+1.54	<0.025
	<b>Severe hepatitis (n=81; 16%)</b>	3	0.093			3.96+2.27	
DHF/ DSS (n=82)	Mild to Moderate Hepatitis (n=60)	<b>3/60 (5%)</b>	0.010	<b>5 (1.3, 16)</b>	0.003	4.60+2.87	.212
	<b>Severe hepatitis (n=22; 27%)</b>	<b>9/22 (40%)</b>	0.073			5.60+3.85	