OP006

Comparison of patterns of liver involvement in DF and DHF

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Introduction and objectives: Liver involvement commonly occurs in dengue infections, which may lead to acute liver failure. However, as the factors leading to liver injury are not clear, we initially set out to determine the natural history of liver involvement in acute dengue infection.

Method: 31 adult patients with confirmed acute dengue infection were recruited during day 3 -5 of the illness and all liver function tests, dengue NS1 antigen levels and the extent of fluid leakage was measured daily until discharge from hospital. 16 out of these patients had DF and 15 had DHF.

Results: Serum AST levels, AST/ALT ratio, indirect bilirubin and GGT levels were significantly higher in patients with DHF than DF throughout the course of the illness, whereas alkaline phosphatase and direct bilirubin levels were similar. AST, AST/ALT ratio and GGT levels rose until day 7 of illness in patients with DHF and decreased from day 7 onwards. As expected, the serum albumin levels were lower in DHF than in DF and became normal during day 6-7 of illness. Although dengue NS1 antigen levels were significantly associated with the lymphopenia and thrombocytopenia, it did not show any association with liver enzymes. The changes liver enzymes did not correlate with the extent of fluid leakage.

Conclusion: Acute liver injury, tends to worsen till day 7 and gradually improves thereafter. Since it does not appear to be associated with the degree of fluid leakage or the degree of