

# PROGNOSTIC VALUE OF ULTRASONOGRAPHY IN DENGUE FEVER COMPARED WITH CLINICAL AND LABORATORY PARAMETERS

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## **Abstract**

**Introduction :** Dengue fever is one of the common arthropode born infection, which if not managed properly can result in fatality. Complications of Dengue fever include Dengue haemorrhagic fever and dengue shock syndrome. Platelet count and haematocrit are to be monitored in patients with dengue. Ultrasonography can detect early features of plasmaleakage in dengue patients.

**Objective of study :**To analyse the prognostic value of ultrasonography in Dengue fever compared with clinical and laboratory parameters

**Methods of study :**100 dengue cases admitted in government rajaji hospital Madurai were subjected to ultrasonogram and gall bladder thickening, pericholecystic fluid ascites pleural effusion, perinephric edema, hepatomegaly and splenomegaly were looked for and there platelet count , haematocrit and pulse pressure were monitored and was asked for presence of bleeding manifestations.

Collected data was tabulated and analysed with SPSS and chi square value and P value was found

**Results :** Most common ultrasound finding is gall bladder wall thickening. Next common finding is pericholecystic fluid. Least common finding is splenomegaly. Statistically significant association was found between each of laboratory and clinical parameter and each ultrasonographic finding with a P value  $<0.001$ . There were a significant number of people (37%) who showed ultrasonographic evidence of plasmaleakage with out significant change in pulse pressure or platelet count.

**Conclusion :** Findings of ultrasonography in Dengue fever include gall bladder wall thickening, pericholecystic fluid, ascites , pleural effusion, perinephric edema, and rarely hepatosplenomegaly. Ultrasonography may show features of plasmaleakage even before there is a clinical or laboratory evidence of shock. Hence subject in a dengue fever case to early ultrasonography of abdomen and pelvis and chest can pick up an impending circulatory collapse.

**Key words:** Dengue, ultrasonography, platelet count, Haematocrit, gall bladder wall thickening