

## Letter to Editor Commenting on "Patterns of Gall Bladder Wall Thickening in Dengue Fever" – Reply

We thank Dr. Beuy and Dr. Viroj for their interest in our article. We are in agreement with them on the importance of confounding factors such as chronic liver disease, chronic renal disease, cardiac failure and hepatitis which may lead to gall bladder wall thickening. We would like to clarify that positive cases of Dengue Fever without the above mentioned confounding factors were only included in our study. All cases of dengue fever with co existent diseases such as hepatobiliary diseases that may lead to gall bladder wall thickening were excluded from the study.

In our study, serial ultrasounds were performed on consecutive alternate days, which revealed change in the pattern of gall bladder wall thickening according to the severity of disease, clearly establishing gall bladder wall thickening due to dengue fever only [1].

The gall bladder wall thickening is well established and one of the most common positive sonographic finding in dengue fever in many studies done recently, particularly in severe dengue fever [2, 3]. In the present study, out of 93 patients of dengue fever without confounding factors, 54 patients had gall bladder wall thickening and out of these 54 patients, 20 patients had uniform echogenic pattern of gall bladder wall thickening [1]. In fact, most common finding in dengue fever is either normal gall bladder wall or uniform echogenic pattern of gall bladder wall thickening, because most of the patients are in category of "Dengue Fever Without Warning Signs". But, in "Dengue Fever With Warning Signs" and "Severe Dengue Fever", we found another pattern of gall bladder wall thickening, like "Honeycomb Pattern" (in 21 patients) found more in "Severe Dengue Fever" [1, 4].

Nevertheless, as mentioned by Dr. Beuy and Dr. Viroj, the confounding factors that might lead to the change of gall

bladder wall are possible. This aspect must be carefully considered before attributing gall bladder wall thickening due to dengue fever.

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## **Bibliography**

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