

# Review of: "Reproducibility of ultrasound-guided attenuation parameter (UGAP) to the noninvasive evaluation of hepatic steatosis"

Ioan Sporea<sup>1</sup>

<sup>1</sup> University of Medicine and Pharmacy of Timisoara

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Hepatic steatosis quantification is a new parameter used in hepatology. Liver ultrasound is the classical method, but Controlled Attenuation Parameter (CAP) became a well-known method in the last years. Many disadvantages of CAP can be over-passed by fatty quantification implemented in ultrasound systems. Canon or Hitachi/Fuji systems have such modules incorporated.

Ultrasound-guided attenuation parameter (UGAP) module is a newly arrived system and some good papers using CAP or MRI-PDFF for comparison were published. These papers performed comparisons and correlations between UGAP and the reference methods and gave some cut-off values.

The present paper is important for practice because it evaluates some very important aspects, such as the intra and inter-observer reproducibility (and demonstrates that it is a highly reproducible method). Secondly, this study demonstrated that different breathing manipulation and fasting or postprandial does not influence the UGAP values. The feasibility of the method was 100% and the authors decided to perform 12 attenuation measurements (why not 10?) with an IQR/median <15% (why not 30%?)

Which are the strong points of the paper? It demonstrates that UGAP can be performed in any condition (fasting or not, during breathing or in different liver segments of the right liver) and that UGAP is a very reproducible method.

The weak points are UGAP comparison with ultrasound evaluation of the steatosis and a quite small cohort of subjects included.

Finally, this is an important paper for practice because it gives information to the practitioners on how they can use this method.