

WHAT IS TO BE DONE WHEN TRANSIENT ELASTOGRAPHY IS NOT FEASIBLE?

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OBJECTIVES AND BACKGROUND

The aim of this study was to find an alternative to Transient Elastography when its' application is impossible or when no valid and reliable measurements can be obtained through its usage.

MATERIALS AND METHODS

Liver stiffness values were assessed with transient elastography [TE- (Fibroscan)], 2D shear wave elastography (SuperSonic Shear Imaging-SSI) and point shear wave elastography (pSWE) using VTQ and ElastPQ, in a cohort of 90 patients with chronic liver diseases. With the help of linear regression, we made a multivariate analysis in order to test the relationship between TE and the other three methods (ElastPQ, SSI, VTQ). Given the very well correlated factors, we consider them predictors for our model.

RESULTS

The model conducted with all the used factors- ElastPQ+SSI+VTQ compared with TE explained the 90.7% of the model variability (R=0.907). We tempted the probability to exclude the factors one by one. SSI+VTQ explained 90% of the model variability (R=0.90). ElastPQ+VTQ explained 77% of the model variability (R=0.77) and SSI+ElastPQ explained 89% of the model variability (R=0.89).

CONCLUSIONS

SSI in combination with ElastPQ or VTQ is as good as the TE single use. Therefore, these combinations can be applied when TE can't be performed or is not valid.

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