

INTRODUCTION

Liver fibrosis is the excessive accumulation of extra cellular matrix (ECM) proteins resulting from chronic liver diseases (*Hyub Han & Yoon 2008*).

The prognosis and management of chronic liver diseases largely depend on the extent and the progression of liver fibrosis (*Castera, et al., 2008*).

Furthermore, recent evidence indicates that even advanced fibrosis is reversible. Spontaneous resolution of liver fibrosis can occur after successful treatment of the underlying disease. Therefore, there is a need for reliable, simple and noninvasive methods to assess liver fibrosis (*Bataller & Brenner, 2005*) and (*Grigorescu, 2006*).

Liver biopsy still considered the "gold standard" to evaluate the stage of liver fibrosis. Although liver biopsy is a generally accepted procedure, its use has several limitations, e.g. risks associated with procedure (e.g. bleeding), sampling error, and intra-or interobserver variability (*Cadranel et al., 2000 and Colloredo et al., 2003*).

Several noninvasive serological markers have been reported to predict the presence of fibrosis in patients with chronic liver disease with considerable accuracy. However, most of these markers require complicated calculations, and therefore application in clinical practice is difficult (*Grigorescu, 2006*).

The latest technological advance in this setting is the

measurement of liver stiffness by means of transient elastography (TE) (*Castera, et al., 2008*).

Transient elastography is a new and promising sonography-based noninvasive and rapid bedside method for the diagnosis and quantification of hepatic fibrosis (by measuring liver stiffness) in patients with chronic liver disease. It was originally developed to detect solid malignancies in soft tissues such as breast cancer and prostate cancer or to detect thermal lesions resulting from radiofrequency ablation (*Al-Ghamdi, 2007*).

Dominguez, et al., (2007) and *Hyub Han & Yoon (2008)* Suggested the efficacy of transient elastography, in patients with chronic liver diseases.