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Elastography: A useful method in depicting liver hardness

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Palpation continues to be of great value in modern medicine, both practiced by doctors and as a technique for self-examination. However, palpation is limited to a few accessible organs, and the interpretation of the information sensed by the fingers is highly subjective.

Recently, elastography has emerged as an option in several commercial ultrasound systems, and is starting to prove clinically valuable in many areas. Elasticity measurements have been reported to be useful for the diagnosis and differentiation of many tumors, which are usually harder than normal surrounding tissues. Recently, transabdominal real-time elastography was proposed as a new method for noninvasive staging of liver fibrosis.

A research article to be published on April 14, 2010 in the World Journal of Gastroenterology addresses this question. The elastography study was lead by Professor Adrian Săftoiu and Dr. Dan Ionuţ Gheonea at the Research Center of Gastroenterology and Hepatology, University of Medicine and Pharmacy, Craiova, Romania. The aim of the study was to assess whether computer-enhanced dynamic analysis of real-time elastography movies was better able to characterize and differentiate between different degrees of liver fibrosis.

The results of the study concluded that real-time elastography is certainly a very useful method in depicting liver hardness, although it has been tested incompletely in large multicenter studies, and should be compared with other noninvasive methods (e.g. blood markers, transient

elastography).

The authors suggested also an improvement in the examination methodology, which should take into account previous observations made by different authors (e.g. better transducers, improved elastography software) to establish real-time elastography as a new revolutionary method that can replace liver biopsy for assessment of different stages of fibrosis in patients with chronic hepatitis.

More information: Gheonea DI, Săftoiu A, Ciurea T, Gorunescu F, Iordache S, Popescu GL, Belciug S, Gorunescu M, Săndulescu L. Real-time sono-elastography in the diagnosis of diffuse liver diseases. World J Gastroenterol 2010; 16(14): 1720-1726, www.wjgnet.com/1007-9327/full/v16/i14/1720.htm

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