INAHTA Briefs

Issue 2009/066

Title **FibroScan**

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Reference Technology Review Report, 006/08.
http://medicaldev.moh.gov.my/uploads/fibroscan.pdf

Aim

To determine the safety and effectiveness (diagnostic accuracy) of FibroScan.

Conclusions and results

Good evidence shows that FibroScan correlates better with fibrotic area than existing liver fibrosis markers, suggesting that FibroScan can be used as an alternative to liver biopsy in assessing liver fibrosis, as it is safe and offers sufficient diagnostic accuracy.

Real-time elastography is a new and promising sonography-based noninvasive method for assessing liver fibrosis in patients with chronic viral hepatitis. In combination with simple laboratory values, real-time elastography can further improve the discrimination of different fibrosis stages, which plays a decisive role in managing patients with viral hepatitis.

The review showed good evidence of effectiveness in using FibroScan. Since these are early results, more research is needed. Most of the studies conducted to date were small, focused on a subset of patients with chronic liver disease, failed to consider the full range of noninvasive tests, and arrived at differing thresholds for discriminating among the degrees of fibrosis. It was also unclear whether the studies were independent of industry involvement. Future studies on larger patient cohorts are necessary for improvement and to validate the elasticity scores and discriminating power of the FibroScan.

Recommendations

The potential for noninvasive fibrosis staging is promising, but it remains unclear which technology or combination of technologies will be most useful. It could be compelling to use FibroScan more frequently based on its rapid and noninvasive nature. However, the degree to which FibroScan can replace liver biopsy remains unclear.

Methods

The literature was systematically reviewed. PubMed, ProQuest, and MEDLINE via EBSCO were searched as were websites of HTA agencies and societies, and the articles retrieved were cross-referenced accordingly. Cross-sectional studies and studies on diagnostic accuracy were assessed.

Further research/reviews required

Further clinical research is warranted to provide additional evidence of effectiveness in using FibroScan to diagnose liver fibrosis and to validate the elasticity scores and discriminating power of FibroScan.

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ISSN 1654-501X