



## Screening for significant chronic liver disease by using three simple ultrasound parameters

Submitted by Christophe Aube on Tue, 06/23/2015 - 16:44

Titre	Screening for significant chronic liver disease by using three simple ultrasound parameters
Type de publication	Article de revue
Auteur	Lignon, Grégoire [1], Boursier, Jérôme [2], Delumeau, Stéphanie [3], Michalak, Sophie [4], Lebigot, Jérôme [5], Oberti, Frédéric [6], Aubé, Christophe [7]
Pays	Pays-Bas
Editeur	Elsevier
Ville	Amsterdam
Type	Article scientifique dans une revue à comité de lecture
Année	2015
Langue	Anglais
Date	Août 2015
Numéro	8
Pagination	1466-1472
Volume	84
Titre de la revue	European Journal of Radiology
ISSN	1872-7727
Mots-clés	cirrhosis [8], Fibrosis [9], Liver [10], Screening [11], Ultrasound [12]

## Objectives

Chronic liver diseases remain asymptomatic for many years. Consequently, patients are diagnosed belatedly, when cirrhosis is unmasked by lifethreatening complications. We aimed to identify simple ultrasound parameters for the screening of patients with unknown significant chronic liver disease.

## Methods

Three hundred and twenty seven patients with chronic liver disease, liver biopsy, and ultrasound examination were included in the derivation set. 283 consecutive patients referred for ultrasound examination were included in the validation set; those selected according to the ultrasound parameters identified in the derivation set were then referred for specialized consultation including non-invasive fibrosis tests and ultimately liver biopsy if liver fibrosis was suspected.

## Results

In the derivation set, three ultrasound parameters were independent predictors of severe fibrosis: liver surface irregularity, spleen length (>110 mm), and demodulation of hepatic veins. The association of  $\geq 2$  of the three above parameters provided 49.1% sensitivity and 86.9% specificity. In the validation set, at  $\geq 2$  of the three parameters were present in 23 (8%) of the patients. Among these patients, 8 had liver fibrosis ( $F \geq 1$ ), 5 had significant fibrosis ( $F \geq 2$ ) and two cirrhosis.

## Conclusion

The generalized search of three simple ultrasound signs in patients referred for abdominal ultrasound examination may be an easy way to detect those with silent but significant chronic liver disease.

Résumé en anglais

URL de la notice

<http://okina.univ-angers.fr/publications/ua12850> [13]

DOI

10.1016/j.ejrad.2015.05.017 [14]

Lien vers le document

<http://www.ejradiology.com/article/S0720-048X%2815%2900245-4/abstract> [15]

Autre titre

Eur J Radiol

Identifiant

(ID) PubMed

26032127 [16]

---

## Liens

[1] [http://okina.univ-angers.fr/publications?f\[author\]=22648](http://okina.univ-angers.fr/publications?f[author]=22648)

[2] <http://okina.univ-angers.fr/jerome.boursier/publications>

[3] [http://okina.univ-angers.fr/publications?f\[author\]=22649](http://okina.univ-angers.fr/publications?f[author]=22649)

[4] <http://okina.univ-angers.fr/s.mic/publications>

[5] [http://okina.univ-angers.fr/publications?f\[author\]=1954](http://okina.univ-angers.fr/publications?f[author]=1954)

[6] <http://okina.univ-angers.fr/f.oberti/publications>

[7] <http://okina.univ-angers.fr/ch.aube/publications>

[8] [http://okina.univ-angers.fr/publications?f\[keyword\]=7556](http://okina.univ-angers.fr/publications?f[keyword]=7556)

[9] [http://okina.univ-angers.fr/publications?f\[keyword\]=7752](http://okina.univ-angers.fr/publications?f[keyword]=7752)

[10] [http://okina.univ-angers.fr/publications?f\[keyword\]=1235](http://okina.univ-angers.fr/publications?f[keyword]=1235)

[11] [http://okina.univ-angers.fr/publications?f\[keyword\]=1262](http://okina.univ-angers.fr/publications?f[keyword]=1262)

[12] [http://okina.univ-angers.fr/publications?f\[keyword\]=7581](http://okina.univ-angers.fr/publications?f[keyword]=7581)

[13] <http://okina.univ-angers.fr/publications/ua12850>

[14] <http://dx.doi.org/10.1016/j.ejrad.2015.05.017>

[15] <http://www.ejradiology.com/article/S0720-048X%2815%2900245-4/abstract>

[16] <http://www.ncbi.nlm.nih.gov/pubmed/26032127?dopt=Abstract>

Publié sur *Okina* (<http://okina.univ-angers.fr>)