

High Prevalence Of Advanced Hepatic Fibrosis As Detected By Transient Elastography In Chronic Hepatitis C Patients Referred For Anti-viral Treatment In SE England

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Background and aims

- Transient elastography (TE) is a valuable non-invasive tool for assessment of hepatic fibrosis
- Validated in all forms of chronic liver disease
- Our aim was to assess characteristics of patients referred for TE at a large teaching hospital with special emphasis on hepatitis C virus (HCV) infection

Methods

- Consecutive individuals referred for TE (Fibroscan®, Echosens 402 Touch) from May 2012 to May 2013
 - HCV positive for consideration of antiviral treatment
 - Non-HCV referred at discretion of Gastroenterologists/Hepatologists/HIV team
- Scans performed by three trained hepatitis nurses

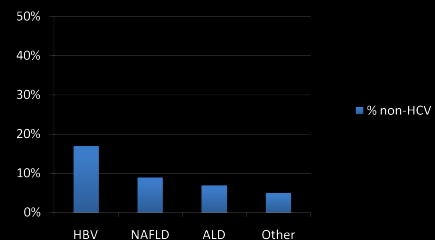
Methods

- Both M and XL probes used
- Assessment of CAP (controlled attenuation parameter)
- Those with at least 10 acceptable measurements and success rate $\geq 60\%$ included
- Data presented as mean \pm SD, median (range) or percentage
- Binary logistic regressions performed

Results

- 633 patients, 65% males, mean age 48.5 ± 11.9 yrs
- Majority (n=395, 62%) had HCV
- Those with HCV were more likely to have
 - higher ALT 54(33-92) vs. 31(20-51)iu/l
 - normal imaging (54.4% vs.37.8%) (p<0.01)

Results



Results

- Median liver stiffness measurement (LSM), controlled attenuation parameter (CAP) and LSM \geq F3 fibrosis (metavir) similar in HCV and non-HCV groups ($p>0.05$)
 - 6.8 (5.2-12.0) vs. 6.2 (4.9-11) kPa
 - 233 (203-267) vs. 245 (208-289)
 - 32.4% vs. 29%

Results

- In non-HCV cohort referral for TE at discretion of referring Gastroenterologist/Hepatologist
- ? More likely to refer if advanced fibrosis expected

Results

- 147 (23.2%) underwent liver biopsy
- Concordance between LSM \geq F3 fibrosis and histological \geq F3 fibrosis in 120 cases (81.6%) $\kappa=0.517$, $p<0.01$
- There was agreement between CAP \geq 250 and histological \geq grade 2 steatosis (72.1%), $\kappa=0.429$, $p<0.01$

Results

- Independent predictors of \geq F3 fibrosis($p<0.01$)
 - Serum alkaline phosphatase
 - Thrombocytopenia
 - INR
 - Absence of HBV

Conclusions

- TE valuable non-invasive screening tool for hepatic fibrosis
- Chronic HCV infection most common indication for referral for TE (65%)
- Likely to change in the future as with advent of DAA aim for HCV eradication in the next 10 years

Conclusions

- ~ One-third with chronic HCV have advanced (Metavir \geq F3) fibrosis at time of referral
- Factors contributing to this?
 - Delayed diagnosis/Hepatology referral
 - Non engagement
- Development of community HCV treatment models (as begun in Brighton in December 2013)