FIB-4 IS SUPERIOR TO APRI AND IDENTIFIES HCV PATIENTS WITH LESS SIGNIFICANT FIBROSIS WHO COULD BE MANAGED IN PRIMARY CARE

Authors: <u>O'Beirne J^{1,2}</u> Mitchell JD¹, Sloss A¹, Kay B¹, Higgins S¹, Orme C¹, Azzam A¹.

¹Sunshine Coast University Hospital ²University of the Sunshine Coast

Introduction:

Hepatitis C virus (HCV) affects approximately 230000 Australians. Increased access to directly acting antivirals (DAA) offers the opportunity of eradicating HCV from Australia. The need for fibrosis assessment to determine need for secondary care and treatment duration using Fibroscan could represent a barrier to access. 60% of patients referred for HCV management do not have severe fibrosis (=< F2) as determined by Fibroscan in our centre. We hypothesised that use of simple non-invasive tests (APRI, FIB-4) may identify a subgroup of HCV patients that do not require assessment with Fibroscan in secondary care.

Methods:

From our HCV DAA treatment database we identified patients with complete data that had undergone Fibroscan in secondary care. We calculated FIB-4 and APRI and correlated this with the presence of fibrosis. From ROC curves we determined cut offs for F3/4 and <= F2 and calculated sensitivity, specificity, positive predictive value (PPV) and negative predictive value (NPV) for each.

Results:

499 patients were analysed (68% male, 40% F3/4). FIB-4 and APRI were calculated as per published formula. FIB-4 outperformed APRI in all analyses. The AUROC for FIB-4 for detection of F3/4 was 0.862. Optimal cut offs for sensitivity and specificity showed FIB-4 had a sensitivity of 77.2%, specificity of 80.6%, PPV 73.6%, NPV 83.5%. AUROC for the detection of milder fibrosis was 0.823. Choosing an optimal cut off with high sensitivity for detection of mild fibrosis. FIB-4 had a sensitivity of 90.4%, specificity 48.3%, PPV 78.9% and NPV 70.2%. The frequency of patients below our sensitive cut off for detection of mild fibrosis was 27% (N=131).

Conclusion:

FIB-4 can identify a significant proportion of patients without severe fibrosis who could avoid secondary care referral for fibrosis assessment thus easing access to DAA therapy.

Disclosure of Interest Statement: See example below:

No conflict of interest to declare