

# Baclofen as an adjunct pharmacotherapy for the maintenance of abstinence in alcohol dependent patients with established liver disease Lynn Owens <sup>1</sup>, Abi Rose <sup>2</sup>, Munir Pirmohamed <sup>1</sup>, S. Williams <sup>3</sup>, Paul. Richardson <sup>4</sup> <sup>1</sup>Inst. Translational Medicine, <sup>2</sup>Dep. Psychological Sciences, <sup>3</sup>Medical School, University of Liverpool,

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#### Introduction

**Introduction:** Alcohol induced liver disease is the predominant cause of alcohol-related mortality in the UK. Therefore abstinence based treatments are essential. Up to 70% of patients receiving alcohol treatment relapse within 6 months [1], NICE attribute much of this failure of treatment to underutilisation of pharmacotherapy and recommend this be made available [2]. However, current licensed pharmacotherapies are contraindicated for patients with ALD. Baclofen has shown efficacy in the promotion of abstinence in patients with severe alcohol dependence [3, 4] including those with ALD [5], without exhibiting any of the complications or side effects elicited by current pharmacotherapies. Therefore the primary aim of this study was to measure the effectiveness of Baclofen in maintaining abstinence in this difficult to treat group.

Effective treatment for ALD must establish and maintain abstinence, and the most effective treatment for alcohol dependence tends to be a combination of psychosocial treatment and pharmacotherapy. However, current pharmacotherapies for alcohol dependence are contraindicated in ALD, meaning that this group of high risk patients are unable to benefit from potentially life saving treatments.

Baclofen (GABA<sub>B</sub> agonist) is a contemporary pharmacotherapy that has been shown to be safe, and effective in reducing craving [1, 2] and withdrawal symptoms [3] in ALD. However, there is a lack of evidence for its effectiveness and tolerability in acute hospital and ambulatory settings.

AIM: To measure the effectiveness of baclofen in maintaining abstinence in patients with evidence of ALD

### Method

An observational prospective clinical audit was performed.

Patients with liver disease and concomitant alcohol use were commenced on Baclofen at 10 mg three times daily (TDS), and titrated according to tolerability and response up to 30 mg TDS. Primary outcome measures were severity of physical dependence, as determined by SADQ score, and weekly alcohol consumption.

## Results

Of the 149 patients commenced on Baclofen 100 (67.1%) remained engaged in treatment for 6 months. There was a significant reduction in alcohol consumption (P < 0.0001 95% CI for difference 18 to 20) with 81 of the 149 patients (54.3%) maintaining total abstinence, 20 (13.4%) continued to drink and 48 (32.2%) were lost to follow-up and assumed to have returned to drinking. There was a significant reduction in the presence of physical dependence (c2 = 77.4 P < 0.0001) as categorised by SADQ.

These were compared at baseline, and 6 months. Setting: Acute Hospital Trust Participants: 149 patients referred to Hepatology for investigation of abnormal liver function and heavy drinking



#### Conclusion

Baclofen has a positive impact on alcohol consumption in this very difficult to treat, high risk patient group. A RCT is needed to confirm the benefit of baclofen in this patient group. Baclofen has a positive impact on helping to achieve and maintain abstinence from alcohol

consumption in patients with ALD, a very difficult to treat, high risk patient group.

Patients who attended follow-up, adhered to the treatment regime and significantly decreased their alcohol consumption, and demonstrated an improvement in liver biochemistry.

These results are promising, however, an RCT is needed to investigate the utility and efficacy of baclofen in this patient group, in acute hospital settings, and to determine the mechanisms of baclofen effectiveness.

**References** 1. Raistrick, D. 2006, NTA 2. NICE, *Alcohol use disorders: CG115*, 2011 3. Addolorato, G. 2012. 4. Muzyk, A. 2012.

5. Leggio, L. 2010.