

# 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, <sup>4</sup>Hepatology, Royal Liverpool University Hospital Trust, Liverpool, UK

### INTRODUCTION

Alcohol dependence has a significant effect on the health and well being of the patient, their family and friends, and the costs of NHS care (~£2.7b p/a). The most common health harm from alcohol dependence is liver disease (ALD), which accounts for 64% of alcohol-related deaths in England. Despite decreases in rates of ALD in other European countries, in the UK, ALD and the number of younger people developing ALD is increasing.

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<sup>[1] [2]</sup> and withdrawal symptoms<sup>[3]</sup> 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
RESULTS

**Patients**: 75 patients presenting the hepatology services at the Royal Liverpool Hospital with a diagnosis of alcohol dependence and alcohol-related liver disease.

**Design:** An observational prospective clinical audit was performed to review the effectiveness of Baclofen.

**Treatment**: Baclofen was given at 10mg TDS, and titrated according to tolerability and response up to 30mg TDS

#### Primary outcome measures:

- 1. Severity of physical dependence (SADQ score, days abstinent)
- 2. Liver function (biochemical markers of GGT and ALT)

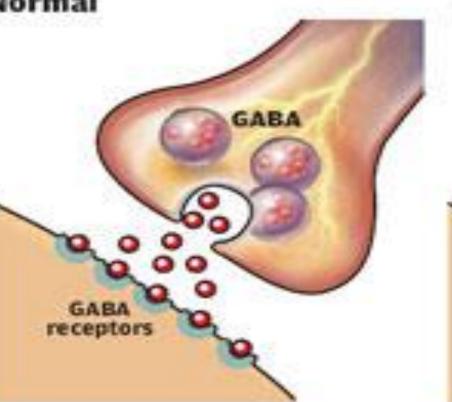
Outcome measures were taken at baseline, 1, 2, 6 weeks and 3 month follow-up.

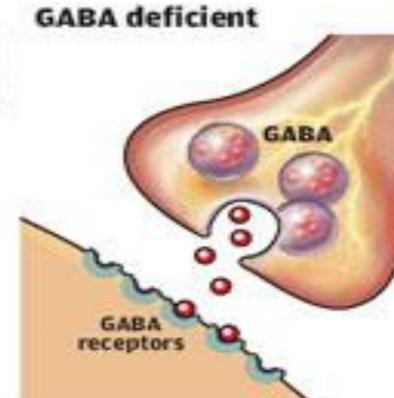
Of the 75 patients commenced on Baclofen, 57 (76%) remained on the treatment and returned for all follow-up sessions.

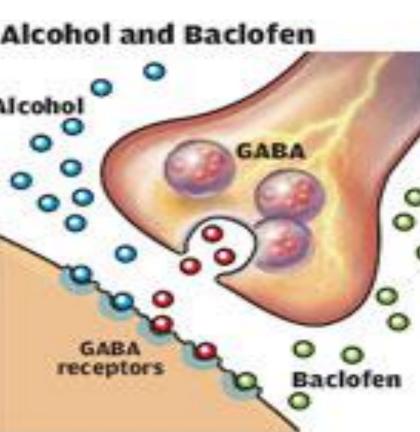
A significant **reduction in alcohol consumption** (p < 0.0001, 95% Cl for difference 20 to 26); 49 of the **57 patients (93%) maintained total abstinence**.

A significant reduction in physical dependence (Chi<sup>2</sup> = 0.5, p = 0.048) as measured by SADQ.

Biochemical data were available for 3 month follow-up for 36 (63%) of the 57 patients. A significant difference between GGT levels at baseline and at 3 month follow-up (t=3.625, p.001), indicating an **improvement in liver function** over time.







## CONCLUSIONS

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. Addolorato, G., et al., Ability of baclofen in reducing alcohol craving and intake: II--Preliminary clinical evidence. Alcohol Clin Exp Res, 2000. 24(1): p. 67-71.
- 2. Flannery, B.A., et al., Baclofen for alcohol dependence: a preliminary open-label study. *Alcohol Clin Exp Res*, 2004. 28(10): p. 1517-23.
- 3. Addolorato, G., et al., Baclofen: a new drug for the treatment of alcohol dependence. Int J Clin Pract, 2006. 60 (8): p. 1003-8.