Baclofen as relapse prevention in the treatment of Gamma-hydroxybutyrate (GHB) dependence: an open label study.

Published: 16-01-2014
Last updated: 24-04-2024

To study the potential of baclofen as an anti-craving/relapse agent in GHB dependent patients.

Ethical review	Approved WMO
Status	Recruitment stopped
Health condition type	Other condition
Study type	Interventional

Summary

ID

NL-OMON39314

Source
ToetsingOnline

Brief title
Baclofen and GHB dependence

Condition

- Other condition

Synonym
Addiction and relapse

Health condition

Dependence and craving

Research involving
Human

Sponsors and support

Primary sponsor: Mental Health Care and Addiction Services (GGZ Nederland)/National program Scoring Results
Source(s) of monetary or material Support: Ministerie van OC&W

Intervention

Keyword: Baclofen, Craving, GHB, relapse

Outcome measures

Primary outcome

- Substance use levels, as indexed by the total number of abstinent days, the

duration of continued abstinence after detoxification and level of substance

use over a period of 3 months (Timeline Followback).

Secondary outcome

These are:

- Craving levels, as indexed by self report using a visual analogue scale (VAS)

and the Desire for Drugs Questionnaire (DDQ) adapted to GHB.

- Psychiatric symptom levels (as indexed by self report Depression, Anxiety and

Stress Scale; DASS) and Quality of life (as measured with EQoL-5D).

Study description

Background summary

GHB dependence is a growing health problem in the Netherlands. Attempts to stop using GHB are often followed by relapse in GHB use after successful detoxification. Observations from the GHB monitor 1, show that craving and loss of control symptoms, associated with GHB dependence, contribute to quick and frequent relapse (two third of the patients within three months after detoxification).
To date management of GHB dependence after detoxification consists mostly of psychosocial treatment without pharmaco-therapeutic support. However, craving

for and loss of control over GHB use might also be relieved by pharmaco-therapeutic treatment, as is the case in for example alcohol and heroin dependence. GHB is a GABA-B receptor agonist. The addictive properties of GHB are thought to be mediated by dopamine release in the mesolimbic dopamine circuitry, as is the case in other addictive substances. Baclofen, a muscle relaxant registered for the treatment of spasms and often prescribed off-label for the treatment of narcolepsy, also acts as a GABA-B receptor agonist. However, due to its specific receptor binding properties, it inhibits dopamine release in the mesolimbic circuitry. This is thought to contribute to its anti-craving properties and beneficial effects on relapse, as observed in alcohol dependent patients. As such, baclofen might be particularly suitable in the treatment of GHB dependence. Indeed, animal data have shown beneficial effects of baclofen on GHB self-administration in mice and there is some anecdotal evidence for beneficial effects on GHB withdrawal in humans.
The aim of the current study is to assess the potential of baclofen as an anti-craving agent in GHB dependent patients. We hypothesize that administration of baclofen to GHB dependent patients after detoxification is associated with reduced levels of craving for and less frequent relapse in GHB use, as compared to treatment as usual (without baclofen), without the occurrence of serious adverse effects.

Study objective

To study the potential of baclofen as an anti-craving/relapse agent in GHB dependent patients.

Study design

This study is designed as an open label clinical study with 100 GHB dependent patients (between 18-65 years old) and is planned over the course of 24 weeks. This study is a part of the National GHB Monitor 2.0. After successful detoxification of GHB, patients will receive either treatment as usual, or baclofen on top of treatment as usual, based on patient preference. Subjects can only participate after written informed consent

Intervention

Patients will receive either baclofen as medication plus TAU or TAU alone. Baclofen will be uploaded over a 2 week period to a maximum of 45-60 mg. Baclofen will be administrated 3 times daily for 12 weeks.

Study burden and risks

In the current study participants are already taking part in the GHB monitor 2.0. This study protocol has already been approved by the medical ethical board. In addition to the burden related to participation in that study,

participants of the current study will receive either TAU or TAU+ baclofen, as to their preference. Monitoring of craving, substance use, psychiatric symptoms and quality of life is part of the GHB monitor 2.0.
The additional burden of participating in this study on top of the participation in the GHB monitor 2.0, consists mainly of the burden related to baclofen administration, monitoring the effects of baclofen administration (VAS, DDQ, calendar diary to track their medication consumption, relapse and any side effects), and one extra follow-up measurement.
Based on previous studies using baclofen in the treatment of spasms and alcohol dependence, the side effects are considered to be mild and transient, related to a too rapid increase in dosage and mainly include: sleepiness and nausea.
In contrast with this burden, patients taking baclofen may benefit from participation, given the expected positive effects on craving and substance use, based on previous studies in both animals and humans using alcohol or GHB.

Contacts

Public
Mental Health Care and Addiction Services (GGZ Nederland)/National program Scoring Results

Piet Mondriaanlaan 50/52
Amersfoort 3812 GV
NL
Scientific
Mental Health Care and Addiction Services (GGZ Nederland)/National program Scoring Results

Piet Mondriaanlaan 50/52
Amersfoort 3812 GV
NL

Trial sites

Listed location countries

Netherlands

Eligibility criteria

Age
Adults (18-64 years)
Elderly (65 years and older)

Inclusion criteria

GHB dependence is the primary diagnosis, according to the DSM-IV criteria. Patients are between 18-65 years old and should be able to read and speak Dutch sufficiently

Exclusion criteria

Patients with any current physical or psychiatric safety concerns are excluded. Exclusion criteria are:
- Presence of a somatic safety concerns. These include liver cirrhosis and impaired renal function (as indicated by aspartate aminotransferase (AST), alanine transaminase (ALT), or gamma-glutamyl transferase (GGT) level >3 times the upper limit of normal (ULN); bilirubin > ULN; serum creatinine > ULN) , unstable hypertension, diabetes mellitus, and seizure disorder, including well controlled cases, currently taking anticonvulsants, insulin, or oral hypoglycemic and pregnancy.
- History or presence of a current psychiatric disorder, including any mood disorder (bipolar disorder or major depressive disorder), any psychotic disorder (including schizophrenia), and/or suicidal ideations.

Study design

Design

Study type:	Interventional
Intervention model:	Other
Allocation:	Non-randomized controlled trial
Masking:	Open (masking not used)

Primary purpose: Treatment

Recruitment

NL

Recruitment status:	Recruitment stopped
Start date (anticipated):	01-07-2014
Enrollment:	100

Type:	Actual

Medical products/devices used

Product type:	Medicine
Brand name:	Lioresal / Baclofen
Generic name:	Baclofen
Registration:	Yes - NL outside intended use

Ethics review

Approved WMO Date:	16-01-2014
Application type:	First submission
Review commission:	METC Twente (Enschede)

Study registrations

Followed up by the following (possibly more current) registration

No registrations found.

Other (possibly less up-to-date) registrations in this register

No registrations found.

In other registers

Register	ID
EudraCT	EUCTR2013-004170-94-NL
CCMO	NL40321.044.13