South London and Maudsley NHS Trust

James Bell
May 2011
Day 1

M 32, lives alone, data analyst

12 noon - presented CDAT seeking help
- wrong borough, referred to local service
- went home, agitated and hallucinating
- Took large dose GBL, passed out

Found by friends

6pm brought to ED – GBL OD
Background

Oldest of 3 children

Parents divorced aged 10

Began cutting and abusing drugs aged 12

Depression in adulthood
  Previous CBT
  Currently S-citalopram 30mg/day

Socially isolated, works long hours
18/12 relationship ended August 2009
Drug Use History

First drugs aged 12

Regular user of ecstasy, cocaine, ketamine, and mephedrone (trawls internet)

Previous alcohol misuse, attended AA, (found it helpful)

Currently drinks occasionally, not dependent nor problematic
GBL Use History

Use episodically 3 years

Dependent use began August 2009

3 prior presentations to ED:
- 19/10/09 hallucinations 36 hours after ceasing GBL, admitted 2 days
- 31/7/10 GBL withdrawal, held overnight in CDU
- 4/11/10 loss of consciousness, head laceration, requesting rehab - not admitted

Abstained 6 months after hospitalisation in 2009
Progress

Day 1 Midnight
Assessed by liaison psychiatry
- hallucinations, tremulous
- Dx GBL withdrawal
- Assessment: “not a suicide risk”
- Plan: “management by medical team”
Day 2

1.16am  hallucinations, agitation, ↑HR & BP
2.49am  diazepam 3mg
4.50am  diazepam 2.5mg
8.20am  diazepam 5mg
(File note “continue cautious diazepam loading”)
Day 2 (cont’d)

9.47am PC to Addictions
Advised diazepam 20mg stat and repeat in 1 hour
Addictions staff will assess

10am Reviewed by Addictions
Recommended more diazepam, + baclofen, and
transfer to Addictions IP ward

12.19pm Total 30.5mg diazepam since arrival
P118, T38.3, incontinent of urine, profuse sweating
Day 2 (cont’d)

2.10pm  Arrived AAU
    Delirium, diaphoresis, muscle rigidity with neck arching, stereotyped movements (rolling and smoking a non-existent cigarette)

Diazepam 50mg and baclofen 20mg over 2 hours

5pm  Temp 37.8 (↓), sweating less, delirium with transient lucid moments
Day 3-6

Continued diazepam and baclofen in reduced doses, continued s-citalopram

54 hours after arrival on AAU, fell into a prolonged sleep, awoke lucid with little recollection

Day 5 – CK 384 (NR<150) (not measured previously), other tests N

Day 6 discharged
Follow-up

Attended 3 scheduled follow-up appointments

One brief lapse to GBL use

Continued S-citalopram, no further medics

Requested ongoing support – advised to return to AA
GBL

GABA b agonist

• Precursor of GHB
• Produces confidence, charm, relaxation ("charisma"), sexual disinhibition
• In higher doses produces prompt sleep
• Narrow therapeutic index – risk of OD
• Usage mainly in gay males
Why do people use GBL?

1. Socialising
2. Sex
3. Sleep
GBL - dependence

- Uncommon?
- Involves dosing every 1-2 hours
- Can develop rapidly (eg after a “long weekend” of partying)
- Often occurs when drug is used for sleep
- Associated with social withdrawal, emotional blunting, compromised social role
GBL Withdrawal

Onset is rapid – 3-4 hours. Can be very severe (delirium, agitated psychosis, severe anxiety and insomnia; several cases require ICU management; some cases refractory to BZD)

UK experience – people admitted for elective detox have required ICU transfer (delirium, rhabdomyolysis)
Context for a GBL Clinic

GBL withdrawal is uncommon, but is a medical emergency.

GBL overdose and withdrawal are a significant burden on EDs.

Acute management of withdrawal, without follow-up, is probably of limited value.

Most drug services and general practitioners are not in a position to manage withdrawal from GBL.
Rationale for treatment

1. Initiate treatment before withdrawal established

2. Use high dose benzodiazepines (diazepam – rapid oral absorption and long half-life)

3. Use baclofen (GABAb agonist) in view of BZD refractory cases, and to minimize risk of rhabdomyolysis
GBL Withdrawal

Maudsley experience

>40 people had ambulatory withdrawal management

Early treatment with large doses of diazepam + baclofen

One patient required admission for delirium (not controlled with 70mg diazepam in first 24 hours)
(Approximate) Protocol

Initial assessment:

• drug use history – confirm GBL dependence, exclude concurrent dependence on other drugs
• preference for ambulatory or IP treatment
• confirm presence of a responsible adult during ambulatory withdrawal
• book for withdrawal, asking patient to take last dose of GBL 2 hours prior to attending, and to dispose of remaining supplies
• Explain outline of proposed treatment
Protocol Day1

At onset of signs of withdrawal (pulse > 90, fine tremor, and/or sweating) (may not develop for 2-3 hours)

• Diazepam 20mg

Review every 40-60 minutes

If agitation /tremor - further diazepam 20mg, baclofen 10mg

If sedation – review history
Protocol Day1-2

When patient is calm, not sedated, may go home (usually after 40mg diazepam, 10mg baclofen in total)

Dispense 50mg diazepam and 30mg baclofen (dispensing more is unwise)

Diazepam
• 10mg at 6pm, 20mg at 10pm, 10mg at 8am
• Additional 10mg if needed

Baclofen 10mg 8th hourly
Review next morning
Protocol Day2-5

Review re sleep, orientation, observations

Response is variable
“Usual” diazepam requirement
• Day 2 30-40mg
• Day 3 20-30mg
• Days 4,5 10mg at night

Baclofen 10mg 8\textsuperscript{th} hourly days 1-3, then either commence taper or if patient feels it is beneficial, continue for 1 week before tapering
Protocol Day 5+

After daily reviews for first 3 days, see weekly for 3-4 weeks

Monitor for:

- lapse /relapse
- sleep disturbance (occasionally severe)
- Anxiety and depression are common

In general, symptoms appear to improve after 3-4 weeks if patient manages to abstain
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Maudsley experience (2)

Most dependent patients reported significant impairment in social functioning associated with GBL dependence (losing contact with family and non-using friends, job losses)

Many also commented that they “liked the person they were on GBL better than the person I am without it”
Maudsley experience (3)

Severity of withdrawal appears to be a function of personality factors, and timing of treatment – delayed treatment appears much more problematic

Lapses, and relapses were not rare

Withdrawal is characterised by anxiety – for patients and staff!
Further reading

• Bell J & Collins R (2011) Gamma-butyrolactone (GBL) dependence and withdrawal Addiction 106(2); 442-447
