

# KETAMINE GUIDE FOR PRIMARY CARE

For those who work in  
Primary Care in Sheffield

**Like  
wise**



Change  
Grow  
Live

The  
Corner

Sheffield Young People's  
Substance Misuse Service



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**LETS TALK  
ABOUT  
KET**

## What is ketamine and its significance in Sheffield

There has been a rise in ketamine use nationally and locally in Sheffield in recent years. In England and Wales, ketamine use is most prevalent among young people aged 16–24 years, with use less common in older adults.

GPs should maintain awareness of the signs and symptoms of ketamine use when assessing patients, particularly younger adults. Early identification enables appropriate screening, brief intervention, harm reduction advice, and referral to specialist drug and alcohol services where appropriate.

## What are the effects of ketamine?

Ketamine is most commonly snorted (insufflated), but can sometimes be swallowed, administered rectally or injected intramuscular (and rarely intravenously). It is a dissociative anaesthetic that produces a sense of detachment from the body and surrounding environment. The acute effects typically last up to **60–90 minutes** following insufflation, although duration varies depending on dose and route of administration.

### **The main effects of acute ketamine use include:**

- Anaesthesia and analgesia
- Impaired motor coordination (e.g. ataxic gait)
- Cognitive dissociation with disruption of space and time awareness
- Depersonalisation
- Perceptual disturbances and hallucinations (more common at moderate-to-high doses)
- At high doses, a state of profound dissociation from reality (“K-hole”), which may be associated with acute cognitive impairment and memory disturbance

## Long-term effects

### Bladder and pain complications

Long term ketamine use is associated with ketamine-induced cystitis due to its destructive effect on the urothelium.



# Ketamine-Induced Cystitis (KIC)

## 1 What is it?

A bladder toxicity syndrome caused by recreational ketamine use.

### Characterised by:

- Severe frequency/urgency
- Suprapubic pain
- Tiny bladder volumes
- Sterile urine despite “UTI-like” symptoms
- Possible haematuria

Stopping ketamine is crucial – symptoms rarely improve otherwise.

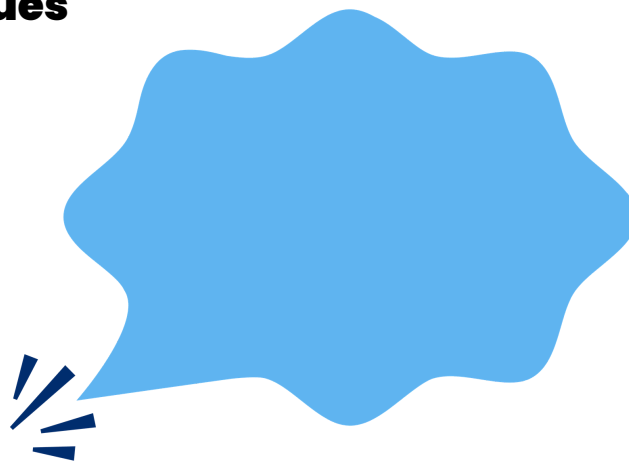
## 2 Typical Presentation Clues

### Symptoms

- Frequency (often 15–30×/day)
- Nocturia (3–10×/night)
- Urgency ± urge incontinence
- Dysuria/burning
- Suprapubic or pelvic pain
- Visible or microscopic haematuria
- Small voided volumes

### History clues

- Recurrent “UTIs” but negative cultures
- No improvement with antibiotics
- Symptoms worsen after ketamine use
- Young patients (15–35) but can sometimes be older patients
- Rapid onset over weeks–months



These symptoms may be **severe** and **progressive**. Management can be challenging, and early referral to urology is strongly recommended where ketamine-associated bladder problems is suspected.

# K-Cramps

## 1 What are K-cramps?

**Gastrointestinal pain is also common and is often referred to as “K-cramps”**

- A syndrome of **severe, episodic abdominal pain** associated with recreational ketamine use.
- Likely due to smooth-muscle spasm, biliary/hepatobiliary irritation, and intestinal dysmotility triggered by ketamine’s effects on NMDA receptors and the cholinergic system.
- Often occurs alongside ketamine-induced cystitis, but may present alone.

## 2 Typical Presentation Clues

### Symptoms

- Cramping abdominal pain (often intense, colicky)
- Pain often in **upper abdomen** or **diffuse**
- Nausea ± vomiting
- Pain that **comes in waves**
- Worse after ketamine binges or heavy use
- Normal bowel movements OR loose stools
- No fever, no peritonism

### History clues

- Young person (15–35) but sometimes can be older people
- Known or suspected recreational ketamine use
- Symptoms *may temporarily improve* after using ketamine again
- May co-occur with urinary symptoms (K-cystitis)
- No clear trigger and normal initial investigations

There appears to be a **dose–duration relationship**, with **heavier** and **prolonged** use increasing the risk of urological and hepatobiliary complications.

Referral to **secondary care services** and **addiction services** should be explored for patients with persistent pain. Many ketamine patients **self-medicate** their pain from ketamine use with more ketamine, and so clinicians should bear this in mind for an appropriate pain management strategy. **Local pain management services** should be considered early in the process (especially in view of waiting lists), but patients must want to engage and must be ketamine-free for any pain management approach to be effective.

## Blood tests

- Blood tests in suspected ketamine-related bladder or abdominal symptoms typically include FBC, U&Es, LFTs and CRP, and a normal CRP and unremarkable renal/liver function despite significant pain is a common finding. Overall, normal blood tests with disproportionately severe pain can be a helpful diagnostic clue towards ketamine-related pathology.
- Be aware U&Es are usually normal, unless there is severe dehydration from vomiting, or secondary renal involvement from prolonged bladder dysfunction or obstruction. LFTs are generally normal, though ALT/ALP elevations can occur due to hepatobiliary irritation.

## Current advice on symptomatic treatment:

### **Ketamine-Induced Cystitis (KIC)**

**Goal:** Symptom relief + harm reduction. Medications help, but **cessation of ketamine is essential.**

#### **1 Simple Analgesia**

- Paracetamol
- NSAIDs (ibuprofen / naproxen if appropriate)
- Helps with suprapubic and pelvic pain. Ensure that these are being taken regularly.

#### **2 Anticholinergics (for frequency/urgency)**

- Oxybutynin
- Tolterodine
- Solifenacin
- Useful for severe urgency, frequency, and small voided volumes.

#### **3 $\beta$ 3-agonist**

- Mirabegron
- Alternative when anticholinergics are poorly tolerated.
- Vibegron
- Alternative when Mirabegron not tolerated. Can be used first line if needed.

#### **4 Adjuncts**

- Duloxetine for persistent bladder pain. Can be used at higher doses to help with associated depression. Less side effects than Amitriptyline.
- Amitriptyline if Duloxetine not tolerated, or not on any other anticholinergics.
- Nefopam if above not tolerated.

- Consider Baclofen or Buscopan if muscle spasm or cramps are present
- Consider advising non-pharmacological treatments for pain e.g. over-the-counter Magnesium (375 –750 mg ON), Tai Chi (10 mins every day – find for free on YouTube), Mindfulness, Distraction, Box Breathing etc. [

## **Ketamine-Related Abdominal Pain (“K-Cramps”)**

**Goal: Reduce smooth-muscle spasm, nausea, and discomfort.**

### **1. Antispasmodics**

- Hyoscine butylbromide (Buscopan) – first line
- Mebeverine – alternative

### **2. Simple Analgesia**

- Paracetamol
- NSAIDs (if suitable)
- Avoid opiates – they worsen GI dysmotility and risk dependence.

### **3. Acid-suppression (if epigastric pain/dyspepsia)**

- PPIs (omeprazole, lansoprazole)

### **4. Antiemetics (if needed)**

- Ondansetron
- Cyclizine
- (Avoid routine metoclopramide in young patients.)

### **5. Adjuncts**

- **Duloxetine** for persistent bowel pain. Can be used at higher doses to help with associated depression. Less cholinergic side effects than Amitriptyline and useful when constipation main symptom.
- **Amitriptyline** can be useful when more cholinergic effects needed, or when diarrhoea is main complaint.
- **Nefopam** if above not tolerated.
- Consider **Baclofen** if abdominal wall pain is present (Carnett’s sign positive)
- Consider advising non-pharmacological treatments for pain e.g. **over-the-counter Magnesium (375 –750 mg ON), Tai Chi** (10 mins every day – find for free on YouTube), **Mindfulness, Distraction, Box Breathing etc.**

## Medications to Avoid

- Opiates → worsen bowel motility, increase dependence risk, reinforce drug-seeking
- Repeated antibiotics unless there is confirmed infection

## Essential Non-Drug Elements

- Stopping ketamine – strongest predictor of improvement
- Hydration + avoid bladder irritants (caffeine, alcohol)
- Referral to substance misuse services
- Consider urology/GI referral if red flags or severe symptoms

## Memory and mental health

- Chronic ketamine use has been associated with impairment in both short and long term memory. There are also reports of increased rates of low mood and depressive symptoms among long-term users.
- GPs should consider screening for cognitive impairment and co-morbid mental health conditions in patients with ongoing ketamine use.



## Harm reduction support

- There are several harm reduction strategies that may help reduce the risk of bladder and gastrointestinal complications associated with ketamine use. Please refer to our harm reduction guide for ketamine users for more information.
- The Corner, 1625 and Likewise provide harm reduction advice locally. Likewise also operates a Needle and Syringe Programme (NSP) for individuals who inject ketamine, offering sterile injecting equipment and associated support.
- More information about locations for harm reduction support can be found on the Likewise website: [www.likewisesheffield.org.uk/locations/](http://www.likewisesheffield.org.uk/locations/)



Download a [harm reduction leaflet here](#) for people who are using ketamine recreationally.

[www.likewisesheffield.org.uk/advice/lets-talk-about-ket/ketamine-harm-reduction-guide/](http://www.likewisesheffield.org.uk/advice/lets-talk-about-ket/ketamine-harm-reduction-guide/)

## Clinical considerations

When assessing patients, consider the following:

- Ask about whether they are using other substances alongside ketamine, including alcohol, stimulants, benzodiazepines, and opioids.
- In young people presenting with depression, memory impairment, or unexplained urinary symptoms, consider asking sensitively about substance use, including ketamine.

The Corner: Support  
for Young People  
(10 – 18)



The  
Corner  
Sheffield Young People's  
Substance Misuse Service

### Who We Are

The Corner is Sheffield's young people's (under 18's) substance misuse service. We provide advice, guidance, support and treatment to young people under 18 in the Sheffield area who are experiencing problems with drugs and alcohol.

### What We Do

We offer full assessment and treatment for substance misuse. Through our one-to-one work we deliver effective interventions which promote positive change. This can include drugs advice, information and harm reduction work as well as structured psycho-social sessions.

We also offer telephone and email advice, information and guidance to young people, their families and workers.

We offer a flexible and accessible service. We accept telephone referrals from young people, family members/concerned others and professionals, as well as accepting referrals through our website. We are happy to offer support at our city centre base, at young people's homes or any other suitable venue.

**To refer someone:**

**[www.changegrowlive.org/service/sheffield-the-corner/referrals](http://www.changegrowlive.org/service/sheffield-the-corner/referrals)**

**Contact Details:**

**0114 2752051 or email [thecorner.sheffield@cgl.org.uk](mailto:thecorner.sheffield@cgl.org.uk)**

# Likewise: Support for Adults (18+)



Likewise provide information, advice and support for drug and/or alcohol use. It offers:

- 1-2-1 support with a key worker to help someone meet their goals, whether it's cutting down or completely stopping.
- Harm reduction support- Likewise's harm reduction team run a needle syringe provision and harm reduction advice and support.
- Health and wellbeing checks – such as health care assessments
- Substitute medication for certain drugs
- Support for family members and friends with our weekly Concerned Others Drop-in
- Recovery Hub offering holistic group support from a daily breakfast club, to structured group sessions, to activities like arts and crafts. They also run a weekly Ketamine Support Group.
- Detox within the community/at home or at a rehab centre

## To refer go to:

<https://likewisesheffield.org.uk/get-help/>

## Contact details:

0114 308 7000 or email [info@likewisesheffield.org.uk](mailto:info@likewisesheffield.org.uk)

## 1625 Outreach



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1625 outreach provides drug and alcohol advice and information to young people aged 16 to 25 in Derby, Derbyshire and Sheffield. We're a free and confidential outreach service aimed at helping young adults to make informed decisions around drugs, alcohol and staying safe. We provide non-judgmental, fact-based, information and support surrounding drug and alcohol use and the associated risks. We aim to give young people the knowledge and skills to make more informed choices, to keep themselves and their peers aware, safe and well.

What we offer:

- Harm reduction advice and information (around drugs and alcohol)
- Tips and advice around staying safe on a night out
- Support with accessing other help, such as wellbeing and sexual health services
- Outreach in the community, at schools, colleges, universities and events such as festivals
- Interactive workshops in colleges and universities to keep young people informed about drug and alcohol use
- Virtual support via Instagram (DM us for advice 1625\_outreach)

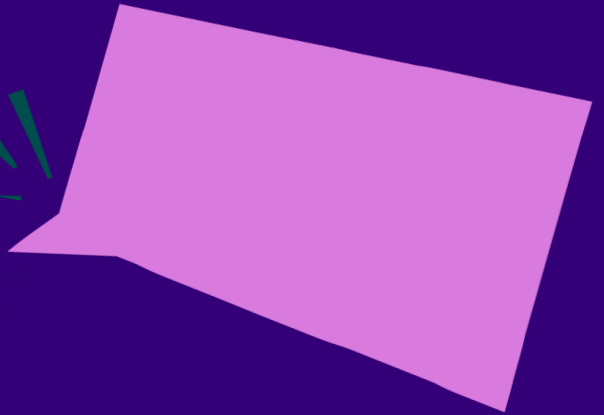
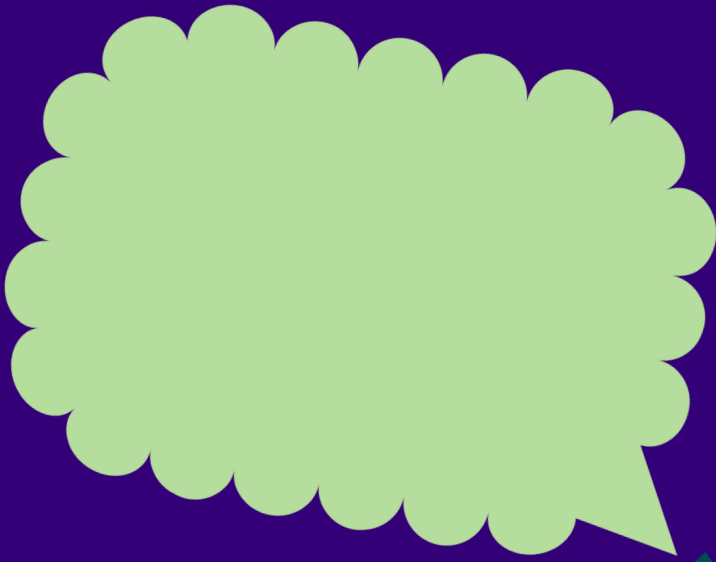
**For more information:**

**[www.1625outreach.co.uk](http://www.1625outreach.co.uk)**

**Instagram: 1625\_Outreach**

**Email: [1625outreach@cgl.org.uk](mailto:1625outreach@cgl.org.uk)**





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