DERBYSHIRE JOINT AREA PRESCRIBING COMMITTEE (JAPC)

Chloral hydrate position statement- off label use

JAPC has considered the latest advice from MHRA on chloral hydrate and worked with local specialists to ensure patients are managed safely, and in a way practical for the individuals requiring treatment. This position statement outlines local considerations, traffic light classification, and guidance for the use of chloral hydrate in different indications.

1. Use for insomnia in patients with neurodevelopmental disorder - RED

In line with the MHRA position, chloral hydrate use for insomnia should be limited to patients with a suspected or confirmed neurodevelopmental disorder, with a maximum duration of 2 weeks. This is prescribed and managed by secondary care.

Existing patients

Where a patient with neurodevelopmental disorder is currently receiving long-term chloral hydrate for the management of insomnia:

- They should be **reviewed by specialist** and a plan made for discontinuation of the drug.
- Due to risks associated with sudden cessation of chloral hydrate, this will usually require a gradual, controlled discontinuation.
- **Do not stop abruptly** if patients have been taking the drug regularly for over 2 weeks.

2. Use in the management of intrusive movement and motor disorders in children and young people –GREY after consultant/specialist initiation

It may be appropriate to use chloral hydrate off-label to manage distressing symptoms in patients with movement and motor disorder when all other therapies have failed; or when rapid stabilisation of symptoms is required. This may include:

- Acute, time-limited regular use to manage symptom exacerbations: this must be under very close, specialist supervision.
- Longer term (duration over 1 month) use
    - Regular (daily or more frequently) use in children and young people with severe intrusive movement and motor disorders, preventing the initiation and maintenance of sleep; or
    - Longer term “when required” use, or repeated short courses for break through symptoms as part of a symptom management plan.

Chloral hydrate use in these scenarios should be carefully managed, and only prescribed in primary care when ALL the of conditions set out below are met:-

- Treatment is initiated by a specialist consultant with relevant expertise (paediatric neurology, neurodisability, and/or palliative care).
- Informed consent to use chloral hydrate obtained and documented.
- Ongoing use is under the supervision of the initiating consultant, who must regularly review the patient, being alert to signs of inappropriate use, and aiming to deescalate wherever possible.
- Specialist to provide a written treatment and emergency escalation plan to the family and GP, which includes supervising clinical team contact details and maximum doses above which the patient should be reassessed by the relevant specialist team. (see appendix 1)
- Where chloral hydrate is required, the standardised concentration of **500mg in 5mL** is recommended by NPPG.

Background

Chloral Hydrate Oral Solution is licensed in children aged 2 years and over for the short-term treatment of severe insomnia, which is interfering with normal daily life, and where other therapies (behavioural and pharmacological) have failed, as an adjunct to non-pharmacological therapies. Cloral betaine tablet is licensed for the same indication for adult and children aged 12 years and over.

In October 2021, the Medicines and Healthcare products Regulatory Agency (MHRA) published a drug safety update, further restricting the paediatric indication for chloral hydrate and cloral betaine:-

- use of these medicines in children and adolescents is not generally recommended and should be under the supervision of a medical specialist
- the paediatric indication has been further restricted to only children and adolescents with a suspected or definite neurodevelopmental disorder – this reflects current clinical practice
- for all patients, treatment should be for the shortest duration possible and should not exceed 2 weeks
- repeated courses are not recommended and can only be administered following medical specialist re-assessment
- following prolonged treatment, slowly taper the dose before discontinuation – abrupt discontinuation can lead to delirium

MHRA states that no new safety concerns were identified in the latest national review of paediatric indication for chloral hydrate and cloral betaine. However, in view of known carcinogenicity data in animals and because of concerns regarding the lack of long-term studies, a risk in humans in long-term use cannot be excluded on the basis of available data.

As such, the Commission on Human Medicines (CHM) recommended that the paediatric indication of all chloral hydrate and cloral betaine products should be restricted to use only in children and adolescents with suspected or definite neurodevelopmental disorders, where the benefits of short-term use outweigh any potential risk.

Following above MHRA advice, the Neonatal and Paediatric Pharmacist Group (NPPG) in conjunction with the British Academy of Childhood Disability (BACD) and the British Paediatric Neurology Association (BPNA) issued a position statement aimed to help clarify around the off-label use of chloral hydrate in the management of children and young people with movement disorders. The position statement also provides recommendations for appropriate discontinuation of chloral hydrate used for treatment of insomnia in the absence of movement and motor disorders.

Off-label use for sedation in children

Not for primary care. Chloral hydrate is used off-label for sedation in children, for example in intensive care units and before diagnostic procedures. The immature metabolism of infants and neonates results in a prolonged half-life of metabolites in these groups, with an increased risk of undesirable effects. This factor and the lack of long-term studies to demonstrate safety should be taken into account when considering prescribing in this population.

Produced in consultation with

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Reference

Position statement - Off label use of Chloral Hydrate. Neonatal and Paediatric Pharmacist Group (NPPG) in conjunction with the British Academy of Childhood Disability (BACD) and the British Paediatric Neurology Association (BPNA). https://www.bacdis.org.uk/articles/chloral-hydrate-position-statement [accessed 10/1/2022]
Chloral hydrate, cloral betaine (Welldorm): restriction of paediatric indication. MHRA drug safety update https://www.gov.uk/drug-safety-update/chloral-hydrate-cloral-betaine-welldorm-restriction-of-paediatric-indication [accessed 18/11/2021]
Summary of Product Characteristics Welldorm Elixir https://www.medicines.org.uk/emc/product/4687/smpc [accessed 18/11/2021]
Summary of Product Characteristics Welldorm Tablets 707mg https://www.medicines.org.uk/emc/product/4688/smpc [accessed 18/11/2021]

Document Update	Date
Removal of ' Although unlicensed, it is included in Drug Tariff Part VIIIB and is a cost-effective option.'	May 2022

Appendix 1 Example chloral hydrate treatment plan in the management of intrusive movement and motor disorders in children and young people

1. Patient details	Name, DOB, Address, carer/ guardian including contacts
2. Indication and duration	Management of intrusive movement and motor disorders Specify:-
3. Prescription detail	Name of drug, medication form, maximum issue duration. □ Regular use- specify dose □ 'when required' use- specify symptom and dosage
4. Maximum dose	Maximum dose per month or continuous days of treatment (above which the patient should be reassessed by the relevant specialist team)
5. Specialist team	Name of specialist consultant and contact details
6. Specialist review	Specify frequency and date

□ Consent to use chloral hydrate obtained

□ Above treatment is recommended at the lowest effective dose at lowest frequency and for the shortest period possible

Consultant Name, designation_____

Consultant Signature & Date _____