

Alimemazine

Area Prescribing Committee Position Statement

The prescribing of alimemazine is not supported by Barnsley Area Prescribing Committee (APC). Alimemazine has a grey non formulary classification.

- New patients requiring a sedating antihistamine should be commenced on chlorphenamine, hydroxyzine or promethazine as clinically appropriate.***
- Patients currently prescribed alimemazine should have their prescription reviewed and alimemazine stopped where clinically appropriate or changed to either an alternative sedating antihistamine (chlorphenamine, hydroxyzine or promethazine), a non-sedating antihistamine or alternative treatment as appropriate.***

In Barnsley, primary care expenditure on alimemazine tablets between September 2018 and August 2019 was approximately £40k.

The Medicines Management Team can support primary care prescribers in reviewing patients and de-prescribing alimemazine.

Background^{1,2}

Alimemazine is a first-generation (sedating) antihistamine, alongside chlorphenamine, hydroxyzine and promethazine. Alimemazine is licensed for the treatment of urticaria and pruritis in children over 2 years and adults. It is also licensed in pre-medication as a sedative prior to general anaesthesia in children aged 2 to 7 years. It may be used 'off license' for other indications e.g. allergic rhinitis, insomnia in children and sedation prior to CT/MRI imaging scans in paediatric patients. There are a range of sedating and non-sedating antihistamines that are significantly more cost effective than alimemazine. There is little clinical evidence to suggest that alimemazine is superior to other marketed antihistamine preparations and patients can vary widely in their response.

Rationale for switching from alimemazine to an alternative antihistamine / alternative treatment^{1,2,3,4,5,6,7,8,}

- There is **no robust clinical evidence** that alimemazine is more effective than either chlorphenamine, hydroxyzine, promethazine or any of the non-sedating antihistamines.
- NICE Clinical Knowledge Summary for urticaria advises that in patients with mild urticaria due to a known avoidable cause then the condition is likely to be self-limiting without treatment. Patients with symptoms requiring treatment should be prescribed a non-sedating antihistamine for up to 6 weeks.
- NICE Clinical Knowledge Summary for patients with allergic rhinitis advises self-management e.g. provide advice on allergen avoidance techniques and drug treatment options.

If the person has mild-to-moderate intermittent or mild persistent allergic rhinitis symptoms:

- Advise on the 'as-needed' use of an intranasal antihistamine first-line, or a second-generation, non-sedating oral antihistamine, depending on the person's age and personal preference.
 - Advise that intranasal antihistamines (azelastine) have a faster onset of action and are more effective than oral preparations.
 - Oral antihistamine options include loratadine or cetirizine, which may be available over-the-counter.

Consult the CKS for information on drug treatment for moderate to severe persistent symptoms, or where initial drug treatment is ineffective. Barnsley allergic rhinitis guidance available at:
<https://best.barnsleyccg.nhs.uk/clinical-support/medicines/prescribing-guidelines/Allergic%20Rhinitis%20Guidelines.pdf>

- NICE guidance on clinical sedation ([CG 112](#)) advises using chloral hydrate (for children under 15kg) and midazolam for under 19s who are unable to tolerate painless procedures such as diagnostic imaging.
- Sedating antihistamines should not be used long term unless clinically indicated.

Deprescribing ^{1,3,4,9}

Patients who are under the care of a specialist, should be reviewed in liaison with the specialist and alternative treatment options discussed.

- Discuss **alternative treatment options** suitable for the patient's current condition.
- This may involve self-care with an over the counter treatment option if the patient is taking alimemazine for mild to moderate hay fever. Mild to moderate hay fever/seasonal rhinitis is included within the NHS England guidance on conditions for which over the counter items should not routinely be prescribed in primary care. NHS Barnsley CCG Self-Care guidance can be found at: https://best.barnsleyccg.nhs.uk/clinical-support/medicines/prescribing-guidelines/Self_Care_Guidance.pdf
Please note the general exceptions to the guidance on page 2.
- For other indications consider a **switch** from alimemazine to either an alternative sedating antihistamine (chlorphenamine, hydroxyzine or promethazine), a non-sedating antihistamine or alternative treatment as appropriate. Refer to Appendix 1 for licensed indications and dosages for other anti-histamines.
- Hydroxyzine is contraindicated in patients with a prolonged QT interval, Torsade de Pointes and patients who have risk factors for QT interval prolongation. (See the hydroxyzine SmPC³ for further information). The MHRA recommends that the maximum adult daily dose of hydroxyzine is 100mg.⁹Promethazine is contraindicated for use in children less than two years of age because of the potential for fatal respiratory depression.
- Chlorphenamine, hydroxyzine, promethazine and the non-sedating antihistamines; cetirizine, fexofenadine and loratadine, have a green classification on the Barnsley Formulary.
- Alternatively consider **non-drug treatments**.
- **If a patient is unable to stop alimemazine, refer them to a specialist for a review. Note that it is more cost effective to prescribe the liquid formulation of alimemazine as Alfresed® syrup (see costs below).**

Costs ¹⁰

Antihistamine cost comparison (Drug Tariff May 2022 and NHS dm+d browser)

Product	Dose in adults ² (Refer to BNF and SPC for full dosage information, including for elderly patients)	Cost per 28 days treatment
Alimemazine Tartrate tablets 10mg	10mg 2-3 times daily	£225.76 - £338.64 (£112.88 for 28 tablets)
Alfreded® 30mg/5ml syrup	10mg 2-3 times daily	£92.07 - £138.60 (£99 for 100ml)
Alimemazine 30mg/5ml oral Solution sugar free	10mg 2-3 times daily	£158.72- £238.93 (£170.67 for 100ml)
Alimemazine 30mg/5ml oral Solution	10mg 2-3 times daily	£226.46 - £340.91 (£243.51 for 100ml)
Alfreded® 7.5mg/5ml syrup	10mg 2-3 times daily	£331.97 - £498.40 (£89 for 100ml)
Alimemazine 7.5mg/5ml oral solution sugar free	10mg 2-3 times daily	£469.46 - £704.82 (£125.86 for 100ml)
Alimemazine 7.5mg/5ml oral solution	10mg 2-3 times daily	£669.83- £1005.65 (179.58 for 100ml)
Chlorphenamine 4mg tablets	4mg every 4-6hrs (max 24mg in 24hrs)	£12.28 (based on every 6 hours, £3.07 for 28 tablets)

Chlorphenamine 2mg/5ml oral solution		£20.76 (based on every 6 hours, £2.78 for 150ml)
Hydroxyzine 25mg tablets	25 mg up to 3-4 times daily	£3.39 - £4.52 (£1.13 for 28 tablets)
Promethazine 10mg tablets	10-20mg 2-3 times daily	£4.16 - £12.48 (£4.16 for 56 tablets)
Promethazine 5mg/5ml oral solution sugar free	10-20mg 2-3 times daily	£15.96 - £47.88 (£2.85 for 100ml)
Cetirizine 10mg tablets	10mg daily	£0.74 (£0.79 for 30 tablets)
Cetirizine 1mg/ml oral solution sugar free		£23.74 (£16.96 for 200ml)
Loratadine 10mg tablets	10mg daily	£0.80 (£0.86 for 30 tablets)
Loratadine 5mg/5ml oral solution		£13.69 (£4.89 for 100ml)

References

1. SmPC Alimemazine <https://www.medicines.org.uk/emc/product/6649/smpc> <Accessed 28.01.20>
2. BNF chapter 3 allergic conditions <https://bnf.nice.org.uk/treatment-summary/antihistamines-allergen-immunotherapy-and-allergic-emergencies.html> <Accessed 21.05.20>
3. SmPC Hydroxyzine <https://mhraproducts4853.blob.core.windows.net/docs/1ab359c0ef0c0846f5e5dc94750137ac98052abf> <Accessed 21.04.20>
4. SmPC Chlorphenamine <https://www.medicines.org.uk/emc/product/20/smpc> <Accessed 21.04.20>
5. SmPC Promethazine 25mg tablets <https://www.medicines.org.uk/emc/product/5588/smpc> and SMPC Promethazine 5mg/5ml oral solution <https://www.medicines.org.uk/emc/product/5586/smpc> <Accessed 21.04.20>
6. NICE Clinical Knowledge Summaries Urticaria <https://cks.nice.org.uk/urticaria#!scenario> Accessed <28.01.20>
7. NICE Clinical Knowledge Summaries Allergic Rhinitis <https://cks.nice.org.uk/allergic-rhinitis#!scenario> . Accessed <28.01.20>
8. NICE CG112 guidance on Sedation in under 19s <https://www.nice.org.uk/guidance/cg112> <Accessed 28.01.20>
9. MHRA safety alert <https://www.gov.uk/drug-safety-update/hydroxyzine-atarax-ucerax-risk-of-qt-interval-prolongation-and-torsade-de-pointes> <Accessed 28.01.20>
10. Drug Tariff Online <https://www.nhsbsa.nhs.uk/pharmacies-gp-practices-and-appliance-contractors/drug-tariff> <Accessed 04.05.22>
11. BNFC chapter 3 allergic conditions <https://bnfc.nice.org.uk/treatment-summary/antihistamines-allergen-immunotherapy-and-allergic-emergencies.html> <Accessed May 2020>
12. SmPC Alimemazine syrup 7.5mg/5ml <https://www.medicines.org.uk/emc/product/415/smpc> <Accessed May 2020>

Development Process

This position statement was ratified at the Area Prescribing Committee on 8th July 2020 (minor amendment June 2022: addition of Alfresed® syrup).

Appendix 1 – Indications and dosages for antihistamines (Common indications only. For further information regarding indications and current dosages please see SmPC for a particular product or the BNF/BNFc).

Urticaria⁶

NICE advises that for people with mild urticaria with an identifiable and avoidable cause/trigger, advise that urticarial is likely to be self-limiting without treatment. For people with symptoms requiring treatment, offer a non-sedating antihistamine (for example cetirizine, loratidine or fexofenadine) for up to 6 weeks (use clinical judgement to determine the duration of treatment).

<https://cks.nice.org.uk/urticaria#!scenario>

Drug	Adult ² doses (over <u>12 years</u>) Please check SmPC or BNF for elderly patients	Paediatric doses ^{11,12}
<u>Non-sedating Anti-histamines</u>		
Cetirizine	1 tablet (10 mg) once daily	<p>Children aged 1 to 23mths: 250micrograms/kg twice daily (unlicensed use)</p> <p>Children aged 2 to 5 years: 2.5 mg twice daily (2.5ml oral solution twice daily)</p> <p>Children aged 6 to 11years: 5mg twice daily (5 ml oral solution twice daily)</p> <p>Cetirizine is available as a 5mg/5ml oral solution</p>
Loratadine	1 tablet (10 mg) once daily	<p>Children aged 2 to 12 years of age are dosed by weight:</p> <p>Body weight 30kg or less: 5ml (5mg) of the syrup once daily</p> <p>Body weight more than 30kg: 10ml (10mg) of the syrup once daily</p> <p>Loratadine is available as a 5mg/5ml oral solution</p>
<u>Sedating Anti-histamines</u>		
Alimemazine	10mg 2-3 times daily Max 100mg per day	<p>Children aged 0 to 1yrs: contraindicated for use in children less than 2 years of age due to the risk of marked sedation and respiratory depression</p> <p>Children aged 2 to 4 years: 2.5mg three or four times daily</p> <p>Children aged 5 to 11years: 5mg three or four times daily.</p> <p>Alimemazine is available as a 7.5mg/5ml oral solution (it is</p>

		more cost effective to prescribe as Alfresed® syrup)
Chlorphenamine	1 tablet (4mg) every 4 to 6 hourly. Maximum daily dose: 6 tablets (24 mg) in any 24 hours	<p>Children aged 1 to 23mths: 1 mg (2.5ml) twice daily. The minimum interval between the doses should be 4 hours. Maximum daily dose 2mg (5ml) in any 24 hours</p> <p>Children aged 2 to 5 years: 1 mg (2.5ml) every 4 to 6 hourly. Maximum daily dose: 6mg (15ml) in any 24 hours</p> <p>Children aged 6 to 11 years: 2mg (5ml) every 4 to 6 hourly. Maximum daily dose: 12mg (30ml) in any 24 hours</p> <p>Chlorphenamine is available as a 2mg/5ml oral solution</p>
Hydroxyzine	Unlicensed for use in Urticaria	Unlicensed for use in Urticaria
Promethazine	<p><u>5mg/5ml oral solution:</u> 10-20mg 2-3 times daily</p> <p><u>25mg tablets:</u> 25 mg as a single dose. Increasing to a maximum of 25 mg bd as required</p>	<p>Children 0 to 2 years Contraindicated for use in Children under 2years because of the potential for fatal respiratory depression</p> <p>Children 2 to 5 years Either 5–15mg as a single dose Or 5 mg bd Maximum daily dose 15 mg</p> <p>Children 5 to 10 years 25 mg as a single dose* Maximum daily dose 25 mg.</p> <p>Children over 10 years 25 mg as a single dose* Increasing to a maximum of 25 mg bd as required</p> <p>Promethazine is available as a 5mg/5ml oral solution</p>

*Single doses are best taken at night

Allergic Rhinitis⁷ (Hayfever)

NICE advise the use of self-management strategies followed by 'as-needed' use of an intranasal antihistamine first-line, or a second-generation, non-sedating oral antihistamine, depending on the person's age and personal preference.

<https://cks.nice.org.uk/allergic-rhinitis#!scenario>

Drug	Adult Dose (over 12yrs). Please check SmPC for elderly patients	Paediatric dose
<u>Non-sedating Anti-histamines</u>		
Cetirizine	10 mg once daily	<p>Seasonal allergic rhinitis Children aged 2 to 5 years: 2.5 mg twice daily (2.5 ml twice daily)</p> <p>Seasonal allergic rhinitis and perennial rhinitis Children aged 6 to 11 years: 5 mg twice daily (5 ml oral solution twice daily)</p> <p>Cetirizine is available as a 5mg/5ml oral solution</p>
Loratadine	1 tablet (10 mg) once daily	<p>Children aged 2 to 12 years of age are dosed by weight:</p> <p>Body weight 30kg or less: 5ml (5mg) of the syrup once daily</p> <p>Body weight more than 30kg: 10ml (10mg) of the syrup once daily</p> <p>Loratadine is available as a 5mg/5ml oral solution</p>
<u>Sedating Anti-histamines</u>		
Alimemazine	Unlicensed for use in allergic rhinitis	Unlicensed for use in allergic rhinitis
Chlorphenamine	1 tablet (4mg) every 4 to 6 hourly. Maximum daily dose: 6 tablets (24 mg) in any 24 hours	<p>Children aged 1 to 23mths: 250micrograms/kg twice daily (unlicensed use)</p> <p>Children aged 1 to 23mths: 1 mg (2.5ml) twice daily. The minimum interval between the doses should be 4 hours. Maximum daily dose:2mg (5ml) in any 24 hours</p> <p>Children aged 2 to 5 years: 1 mg (2.5ml) every 4 to 6 hourly. Maximum daily dose: 6mg (15ml) in any 24 hours</p> <p>Children aged 6 to 11 years: 2mg (5ml) every 4 to 6 hourly. Maximum daily dose: 12mg (30ml) in any 24 hours</p> <p>Chlorphenamine is available as a 2mg/5ml oral solution</p>

Hydroxyzine	Unlicensed for use in allergic rhinitis	Unlicensed for use in allergic rhinitis
Promethazine	25 mg as a single dose. Increasing to a maximum of 25 mg twice daily as required	<p>Children 0 to 2 years: Contraindicated for use in Children under 2years because of the potential for fatal respiratory depression</p> <p>Children 2 to 4 years: 5mg twice daily OR 5–15 mg as a single dose preferably at night. Or 5 mg bd. Maximum daily dose 15 mg</p> <p>Children 5 to 9 years: 5-10mg twice daily OR 10-25mg as a single dose*. Maximum daily dose 25 mg</p> <p>Children 10 years and over: 10-20mg 2-3times daily OR 25 mg as a single dose* (Increased to a maximum of 25 mg twice daily as required)</p> <p>Promethazine is available as a 5mg/5ml oral solution</p>

*Single doses are best taken at night

Sedation⁸- including sedation for diagnostic and therapeutic conditions

<https://www.nice.org.uk/guidance/cg112>

Drug	Adult Dose (over 12yrs). Please check SmPC for elderly patients	Paediatric dose
<u>Sedating Anti-histamines</u>		
Alimemazine (premedication to anaesthesia)	Unlicensed for use in adult sedation	<p>Children 0 to 23mths: contraindicated for use in children less than 2 years of age due to the risk of marked sedation and respiratory depression.</p> <p>Children 2 to 3 years: 2 mg per kg bodyweight 1 – 2 hours before the operation.(Unlicensed use)</p> <p>Children 3 to 6 years: 2 mg per kg bodyweight 1 – 2 hours before the operation</p> <p>Alimemazine is available as a 7.5mg/5ml oral solution. <u>For higher doses to reduce ethanol exposure the higher strength Alimemazine 30mg/5ml oral solution may be used.</u> (It is more cost</p>

		effective to prescribe alimemazine liquid formulation as Alfresed® syrup)
Chlorphenamine	Unlicensed for use in adult sedation	Unlicensed for use in child sedation
Hydroxyzine	Unlicensed for use in adult sedation	Unlicensed for use in child sedation
Promethazine	25 or 50 mg as a single night time dose.	<p>Children 0 to 2 years: Contraindicated for use in Children under 2years because of the potential for fatal respiratory depression.</p> <p>Children 2 to 5 years: 15 or 20 mg as a single night time dose</p> <p>Children 5 to 10 years: 20 or 25 mg as a single night time dose.</p> <p>Children over 10 years and adults: 25 or 50 mg as a single night time dose</p> <p>Promethazine is available as a 5mg/5ml oral solution</p>

*Single doses are best taken at night