

Rubefacients and miscellaneous topical analgesics

Rubefacients are topical preparations intended to relieve local pain in muscles, joints and tendons by counter-irritation.¹ The body of evidence for these products does not support their use.^{2,3} Therefore, they are not recommended as a treatment option for osteoarthritis² or for prescribing in general.⁴ Other miscellaneous topical analgesics containing benzydamine⁵ (contained in Diffiam® cream), mucopolysaccharide polysulphate³ (contained in Movelat® products, along with salicylic acid), or cooling ingredients, also lack a robust clinical evidence base and should not be prescribed.

The recommendations in this briefing do not apply to the prescribing of rubefacients for relieving muscle pain associated with methadone withdrawal or the prescribing of topical non-steroidal anti-inflammatory drugs (NSAIDs) or capsaicin cream.

Key recommendations

- People prescribed rubefacients and miscellaneous topical analgesics (benzydamine, mucopolysaccharide polysulphate and cooling gels/sprays) should have their therapy reviewed.
- Discontinue prescribing these products on FP10/GP10/WP10.
- Provide people with information about the reasons behind this change i.e. the lack of clinical evidence that they are effective.
- Do not automatically substitute with topical NSAID preparations.
- Ensure that people with ongoing symptoms have the opportunity to have a review to discuss alternative management options that are based on the best available evidence and the latest guidance.
- If people still wish to use a rubefacient (or one of the specified miscellaneous products), they should be advised that they can purchase an over-the-counter (OTC) product as self care with the support of the community pharmacist.
- Do not initiate new prescriptions for these products.
- No routine exceptions have been identified.

Rationale for discontinuation of prescribing

NHS England classify rubefacients (excluding topical NSAIDs and capsaicin) as items that should not be initiated for new patients, and which prescribers should be supported in deprescribing.⁴ Similar guidance has been issued in NHS Wales.⁶ NICE guidance on the management of osteoarthritis states that rubefacients should not be offered as a treatment option, as the evidence base does not support their use.²

A Cochrane review published in 2014 investigated salicylate-containing rubefacients for acute and chronic musculoskeletal pain in adults.³ The authors concluded that the evidence does not support the use of these products for acute injuries or chronic conditions. Note that in three of the 17 studies mucopolysaccharide polysulphate (as well as a salicylate) was present in the product formulation.



In a Cochrane review on topical NSAIDs for acute musculoskeletal pain, three of the 61 studies included relate to topical benzydamine (the active ingredient in Diffiam® cream). The review found that whilst a number of topical NSAID formulations demonstrated significantly higher rates of clinical success than placebo, benzydamine did not.⁵

Costs and savings

- In England, Scotland and Wales in excess of £2.5 million is spent (NHSBSA February to April 2021 and Public Health Scotland January to March 2021) on rubefacients and miscellaneous products (containing benzydamine or mucopolysaccharide polysulphate, and cooling sprays/gels).
- **An 80% reduction in the current prescribing of these products could release savings of approximately to £1.8 million across England, Scotland and Wales. This equates to £2,606 per 100,000 patients.**

References

1. Rubefacients and topical analgesia (Analgesics Anti-inflammatory Drugs and Antipyretics - Analgesia and Pain). Buckingham R (ed), Martindale: The Complete Drug Reference. [online] London: Pharmaceutical Press. Last updated 07/09/10. <http://www.medicinescomplete.com> accessed 21/11/2020.
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3. Derry S, Matthews PRL, Wiffen PJ et al. Salicylate-containing rubefacients for acute and chronic musculoskeletal pain in adults. Cochrane Database of Systematic Reviews 2014, Issue 11. Art. No.: CD007403. DOI: [10.1002/14651858.CD007403.pub3](https://doi.org/10.1002/14651858.CD007403.pub3).
4. NHS England Items which should not routinely be prescribed in primary care: Guidance for CCGs. Version 2, issued 27/06/19. <https://www.england.nhs.uk/wp-content/uploads/2019/08/items-which-should-not-routinely-be-prescribed-in-primary-care-v2.1.pdf>
5. Derry S, Moore RA, Gaskell H et al. Topical NSAIDs for acute musculoskeletal pain in adults. Cochrane Database of Systematic Reviews 2015, Issue 6. Art. No.: CD007402. DOI: [10.1002/14651858.CD007402.pub3](https://doi.org/10.1002/14651858.CD007402.pub3).
6. All Wales Medicines Strategy Group. Items Identified as Low Value for Prescribing in NHS Wales – Paper 3. February 2020, updated December 2020 and May 2021. <https://awmsg.nhs.wales/files/guidelines-and-pils/items-identified-as-low-value-for-prescribing-in-nhs-wales-paper-3-pdf/>

Additional resources available	 Bulletin	https://www.prescqipp.info/our-resources/bulletins/bulletin-287-rubefacients/
	 Tools	
	 Data pack	https://data.prescqipp.info/views/B287_Rubefacients/FrontPage?iid=1&isGuestRedirectFromVizportal=y&embed=y

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