

Standard Operating Procedure

Topical Nasal Corticosteroid Spray

Appropriate treatment of allergic rhinitis and non-allergic rhinitis may improve the quality of life for many patients. Particularly in regards to sleep quality, cognitive function and reducing the number of days taken off school and work.

Appropriate treatment of allergic rhinitis and non-allergic rhinitis may improve the quality of life for many patients. Particularly in regards to sleep quality, cognitive function and reducing the number of days taken off school and work.

Using a topical nasal corticosteroid spray is recognised as a first line treatment to control nasal congestion for both allergic and non-allergic rhinitis. This type of spray is often referred to simply as a steroid nasal spray. Steroid nasal sprays are used for both persistent and seasonal rhinitis. Rhinitis caused by perennial allergens such as the house dust mite are more likely to cause persistent symptoms and require continuous long-term treatment especially when a patient has symptoms such as nasal blockage (1,2).

If a nasal steroid spray alone is insufficient to control symptoms then adding an intranasal antihistamine is more effective than adding an oral one. Products containing intranasal antihistamine combined with a steroid provide optimal symptom control (3).

Systemic absorption of nasal corticosteroid sprays depends on the bioavailability of the drug. Long term use of corticosteroid nasal sprays is considered relatively safe, but it is advisable to use a spray with a low systemic bioavailability when patients require continuous treatment for extended periods (2,4).

The application of a steroid nasal spray is localised to the affected area. The spray works by reducing inflammation and associated symptoms of increased mucus production and possibly sneezing. It does not work immediately and can take up to two weeks before a patient perceives the benefit from using a steroid nasal spray. In seasonal allergic rhinitis (hay fever) treatment should begin two weeks before symptoms are expected to start (4, 5) therefore ensuring the efficacy of the spray by the time the trigger allergen is in the air.

It has been shown that nasal douching before the use of a steroid nasal spray will enhance efficacy and generally improve symptomatic control (6).



Nasal Corticosteroid Sprays			
Generic Name	Proprietary name	Can be prescribed for	Bioavailability
Triamcinolone Acetonide	Nasocort	Over 12 years- two sprays each nostril OD (up to BD) Children 6-11 years- one spray each nostril OD (up to BD) Children 2-6 years- one spray each nostril OD Should not be used for longer than 12 months in children under 12 years.	46%
Beclometasone Dipropionate	Beconase	Over 6 years- two sprays each nostril BD	44%
Budesonide	Rhinocort Aqua	Over 12 years- two sprays each nostril BD	31%
Flunisolide	Syntaris	Over 14 years- two sprays each nostril BD Children 5 to 14 years- one spray each nostril BD (up to TDS)	20-30%
Fluticasone & Azelastine	Dymista MP-AzeFlu	Over 12 years- one spray per nostril BD	1.86%
Mometasone Furoate	Nasonex	Over 12 years- two sprays each nostril OD (up to BD) Children 6 to11 years- one spray each nostril OD	0.46%
Fluticasone Propionate Fluticasone Furoate	Flixonase, Nasofan Avamys	Over 12 years- two sprays each nostril OD (up to BD) Children 4-11 years- one spray each nostril OD Avamys - from 6 years	0.42%
Mometasone furoate with olopatadine	Ryaltris	Over 12 years- 2 sprays each nostril BD	<1%



How to use a nasal spray

Before use

- Shake the bottle before use, and remove cap
- You will need to prime the nasal spray if it is new, or if you have not used it for 2 weeks or more (see manufacturer instructions for how to do this).

Step 1



Clear the nose by gently blowing or by performing nasal douching.

This prepares the nasal area by removing mucus that otherwise prevent the medicated spray it from reaching the nasal lining

Step 2



Bring your head forward, placing your chin on your chest

This position closes off the back of the throat and allows the spray to reach the correct area inside the nose

Step 3



Hold the spray in the opposite hand to the nostril in which you are about to apply the spray. For example, use the left hand to apply the spray in the right nostril and the right hand for the left nostril.

This ensures you aim the spray at the correct angle, pointing it away from the septum which has only a thin layer of membrane and can be easily damaged.

Step 4



Place the end of the spray bottle just inside the nostril aiming away from the septum pointing to the ear or eye. This will ensure the spray is aimed toward the fleshy turbinate's inside the nose which are often the main area of inflammation in the nose.

Step 5



Activate the spray. You may breathe in gently and steadily through your nose. Do not sniff hard.

Not sniffing hard reduces the risk of the medication being swallowed or 'tasted'.

Step 6



Breathe out through your mouth. Put the bottle into the opposite hand and repeat steps 4,5 and 6 in the other nostril.

- If you need to administer two sprays into each nostril, repeat steps 3 to 6 again.
- Once you have finished, wipe the nozzle so that it is clean, and put the cap back on
- It may take a few weeks before you notice any improvement in your symptoms. Please always use your nasal spray as prescribed by your doctor or pharmacist.



References

- 1. Romano, M.R. et al. The impact of perennial allergic rhinitis with/without allergic asthma on sleep, work and activity level. Allergy Asthma Clin Immunol 15, 81 (2019). Full text document The impact of perennial allergic rhinitis with/without allergic asthma on sleep, work and activity level | Allergy, Asthma & Clinical Immunology (springer.com)
- 2. Scadding, G.K. et al. BSACI guideline for the diagnosis and management of allergic and non-allergic rhinitis (Revised Edition 2017; First edition 2007). Clinical and Experimental Allergy 47, 7 (2017). Full text document BSACI guideline for the diagnosis and management of allergic and non-allergic rhinitis (Revised Edition 2017; First edition 2007) Scadding 2017 Clinical & Samp; Experimental Allergy Wiley Online Library
- 3. Klimek L, Berger WE, Bousquet J, Keith PK, Smith P, Sole D, Scadding G, Kuhl HC, Nguyen DT, Kopietz F, Koltun A. MP-AzeFlu in Moderate-to-Severe Allergic Rhinitis: A Literature Review. Int Arch Allergy Immunol. 2021;182(11):1026-1035. doi: 10.1159/000516417. Epub 2021 Jun 3. PMID: 34082425.
- 4. Joint Formulary Committee. British National Formulary (online) London: BMJ and Pharmaceutical Press Nose | Treatment summaries | BNF | NICE https://bnf.nice.org.uk/treatment-summaries/nose/ (Accessed August 2023)
- 5. National Institute for Health and Care Excellence (NICE) (2022) Corticosteroids topical (skin), nose, and eyes: Scenario: Intranasal corticosteroid treatment. Available at Scenario: Intranasal corticosteroid treatment | Management | Corticosteroids topical (skin), nose, and eyes | CKS | NICE (Accessed August 2023)
- 6. Saxena, RK. Et al. Role of Nasal Douching in chronic allergic rhinitis. Tropical Journal of Ophthalmology and Otolaryngology 4, 2 (2019). Full text document Microsoft Word Ophthalmology April June 2019-New- 1.docx (semanticscholar.org)