James Paget University Hospitals NHS
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NASAL DOUCHING RECIPE AND INSTRUCTIONS

You will need the following:

1/2 teaspoon of canning, pickling or sea salt. Not table salt!

1/2 teaspoon of bicarbonate of soda.

240 mls of sterilized water, boiled and cooled.

Nasal sinus rinse bottle.

Use a sinus bottle with tip facing up to irrigate your nose. Bend your head far forward over a tub or sink. Place the tip of the bottle just inside your nostril and flush your nose with a moderate amount of force. Repeat this twice on each side. Repeat the entire sequence two to three times daily. You will soon find a pattern of tilting your head that achieves the best effect, especially after sinus surgery.

If you have been prescribed nasal steroid sprays, use them five to ten minutes after you have irrigated your nose.

NOTE: It is best not to store saline mixture overnight. If you need to, then refrigerate.

Also, make sure to clean your syringe/bottle after each use with soap and water and then air dry.

Refills of bottles and sachets are available from Neil Med:
https://webstore.neilmed.com/uk/order_uk.php#
(Please note that Mr Philpott **does not** receive any royalties or incentives from Neil Med)

ADDED MEASURES

1. Johnson & Johnson Baby Shampoo or Neil Med SinuSurf – if we have asked you to add shampoo/surfactant to your irrigations, please add 2 drops to the rinse bottle (and do not shake!)
2. Pulmicort nebules – if we have asked you to add Pulmicort to your irrigations, use one 2ml nebule (0.5mg/2ml) and empty the contents in the solution you have made above and simply irrigate with the combined mixture. Don't let any pharmacist sell you a nebulizer – you don't need it (at least not for your sinuses)!

   Both of the above additions can be added into the same bottle with the mixture above.

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SAFETY OF PROLONGED USE OF STEROIDS VIA IRRIGATIONS:

The abstract below is taken from a recent publication in the American Journal of Rhinology & Allergy which shows that there are no significant effects on the rest of the body from using these topical irrigations containing steroids. The full article can be accessed on-line through the journal's website.

The effects of serum and urinary cortisol levels of topical intranasal irrigations with budesonide added to saline in patients with recurrent polyposis after endoscopic sinus surgery

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ABSTRACT

Background: *The delivery of topical intranasal corticosteroid sprays has traditionally been the primary method of treating recurrent nasal polyposis. An emerging treatment for polyposis is budesonide nasal irrigations. Delivered at concentrations nearly 100 times greater than found in prescription nasal sprays, there have been little studies on the effects of budesonide irrigation on the adrenal axis. Therefore, we investigated whether irrigation with budesonide solution was associated with any increase in serum cortisol and 24-hour urinary cortisol levels.*

Methods: *Patients who previously had undergone endoscopic sinus surgery and were not taking prednisone for 3 months were prospectively enrolled in this study. Patients irrigated twice daily with 0.5 mg/2 mL of budesonide mixed with 240 mL of saline solution. Serum cortisol and 24-hour urinary cortisol were collected before drug administration and 6 weeks after continuous use.*

Results: *Ten patients completed this study. The average serum cortisol and 24-hour urinary cortisol before drug administration were 9.8 ±5.4 μg/dL and 28.1 ± 15.1 μg/24 hours, respectively. After 6-week follow-up, the average serum cortisol and 24-hour urinary cortisol were 12.8 ± 3.5 μg/dL and 16.5 ±5.6 μg/24 hours, respectively. Normal ranges for serum cortisol and 24-hour urinary cortisol are 5–25 μg/dL and 4–50 μg/24 hours, respectively.*

Conclusions: *Irrigation with budesonide, 0.5 mg/2 mL, in 250 mL of saline solution does not result in decreases of serum cortisol and 24-hour urinary cortisol levels. Based on this, we feel irrigation with budesonide solution is safe to perform in patients as an alternative to traditional aerosolized steroid sprays or systemic corticosteroids.*

(Am J Rhinol Allergy 24, 26–28, 2010; doi: 10.2500/ajra.2010.24.3418)

Key words: Adrenal suppression, budesonide, chronic rhinosinusitis, corticosteroids, cortisol, nasal irrigation, nasal polyps, outcomes, safety

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ARE STEROID RINSES BETTER THAN SPRAYS?

The abstract below is taken from a recent publication in the International Forum of Allergy & Rhinology Journal which shows that this method delivering a nasal steroid is more effective than a spray.

Corticosteroid nasal irrigations are more effective than simple sprays in a randomized double-blinded placebo-controlled trial for chronic rhinosinusitis after sinus surgery.

Harvey RJ, et al. Int Forum Allergy Rhinol. 2018.

Abstract

BACKGROUND: Persistent mucosal inflammation in patients with chronic rhinosinusitis (CRS) often results in ongoing symptoms, recurrence of polypoid mucosa, infective exacerbations, and further systemic medication despite surgical intervention. Debate exists as to the most effective topical therapy in CRS.

METHODS: The objective was to determine if corticosteroid delivered via a nasal irrigation or via a simple nasal spray would be more effective in controlling the symptoms and signs of CRS. A double-blind placebo-controlled randomized trial over 12 months was performed between 3 tertiary rhinologic clinics. After sinus surgery, all patients performed a nasal irrigation followed by a nasal spray once a day for 12 months. Groups were defined by corticosteroid (2 mg mometasone) delivered by either spray or irrigation. The primary outcomes were patient-reported symptoms: visual analogue score (VAS) and 22-item Sino-Nasal Outcome Test (SNOT-22), a global rating of sinonasal function. Secondary outcomes were also recorded from radiology (Lund-Mackay score [LMS]) and endoscopic (Modified Lund-Kennedy score [mLKS]) assessments.

RESULTS: A total of 44 patients were randomized (age 50.3 ± 13.0 years; 40.9% female). Overall, patients improved significantly from either intervention. However, the corticosteroid nasal irrigation group had greater improvement in nasal blockage (-69.91 ± 29.37 vs -36.12 ± 42.94; p = 0.029), a greater improvement on LMS (-12.07 ± 4.43 vs -7.39 ± 6.94; p = 0.031) and less inflammation on mLKS at 12 months (7.33 ± 11.55 vs 21.78 ± 23.37; p = 0.018). One-year posttreatment blockage, drainage, fever, and total VAS scores were all lower in the corticosteroid irrigation group.

CONCLUSION: In the setting of diffuse or patchy CRS disease, the use of corticosteroid delivered by nasal irrigation is superior to simple nasal spray in postsurgical patients.

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