

Home » tube » Study Suggests (Incorrectly?) Steroid Nasal Spray Use Does Not Help with Eustachian Tube Dysfunction

## Study Suggests (Incorrectly) Does Not Help with Eustachian Tube Dysfunction

Posted by Fauquier  
at 5/17/2011 / ENT / 6 COMMENTS

A 2011 [study](#) was published on a randomized, placebo-controlled, double-blind prospective clinical trial (the best kind of research) to determine whether [Nasacort AQ steroid nasal spray](#) can resolve [eustachian tube dysfunction](#) as well as ear symptoms related to this disorder. Eustachian tube dysfunction at its mildest would cause symptoms of ear clogging much akin to the way the ears fill up when flying or driving up the mountain. At its worst, can lead to fluid buildup in the ear as well as [chronic ear infections](#).

In the study population of 91 patients, they found that use of a [steroid nasal spray](#) did NOT help...

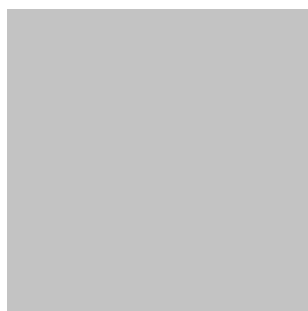
HOWEVER, after reading the paper, there is a major flaw to how the study was conducted which would significantly affect study outcomes. Mainly, [how the nasal spray is used](#) would strongly affect whether it will help or not.

According to the paper, patients were instructed to simply administer "2 metered sprays in each nostril once daily (55 µg per spray)..."

Nothing else.

Unfortunately, this type of administration is bound to fail, mainly because using a nasal spray in this manner is inadequate when addressing [eustachian tube dysfunction](#).

First of all, the eustachian tube openings are at 90 degrees to the face, so the steroid nasal spray bottle needs to be directed towards the back of the head and not towards the eye. This needs to be specifically mentioned/demonstrated as it is not intuitive for most patients (and even doctors). The first picture is INCORRECT! The second picture is correct use. Read more [here](#) why directionality is important.





Second, a [Valsalva maneuver](#) (blow air out the nose while keeping the nares pinched) must be performed after nasal spray administration in order to force the nasal spray medicine up into the eustachian tubes in order for the medication to affect the region of concern. Without a Valsalva, the [nasal spray medicine](#) sits in the nasal cavity which would help with sinus problems, but not the ears which is the area of complaint. Valsalva needs to be done regularly throughout the day during treatment.

Why is this maneuver important? It's like pouring draino (steroid nasal spray) into a clogged toilet, but then not using a plunger (Valsalva maneuver).

In any case, there are other studies that have found steroid nasal sprays to be helpful for eustachian tube dysfunction as listed under references.

Read more about eustachian tube dysfunction [here](#).

**References:**

[Management of Eustachian Tube Dysfunction With Nasal Steroid Spray](#) . Arch Otolaryngol Head Neck Surg. 2011;137(5):449-455. doi:10.1001/archoto.2011.56

[The role of topical nasal steroids in the treatment of children with otitis media with effusion and/or adenoid hypertrophy](#). Int J Pediatr Otorhinolaryngol. 2006;70(4):639-645.

[Oral or topical nasal steroids for hearing loss associated with otitis media with effusion in children](#). Cochrane Database Syst Rev. 2006 Jul 19;3:CD001935.

Labels: dysfunction , eustachian , nasal spray , steroid , tube

## 6 COMMENTS :

**Anonymous**

September 6, 2015 at 11:29:00 AM EDT

Wow. I have suffered with ETD for 30 years. Seriously. Obviously, over the years I have received prescriptions for the nose sprays, but like you say, they have never done a thing for my ears. Nothing...not a single thing. The only effect they have had is that they made my throat raspy for days. Not once in 30 years has a doctor told me that you have to administer the spray in a certain way and definitely nobody mentioned the Valsalva Maneuver as a requirement. I am grateful for this information. Thank you. I would assume this would even be temporarily beneficial with OTC sprays like Afrin. It makes total sense now that you have explained it. Without the spray actually getting inside the ET, it is useless. Again...thank you. I am going to start using it this way TODAY.

Reply



**Unknown**

November 12, 2015 at 12:24:00 PM EST

What is the correct dosage for nasal sprays for ETD

Reply

**Anonymous**

November 27, 2015 at 12:50:00 AM EST

Whatever your ENT tells you. Thats a personal answer.

Reply

**Anonymous**

April 10, 2016 at 5:24:00 PM EDT

Thank you so much for this information! I understand the stuff going on inside my head (excluding brain) much better.

Reply



**Philip Cochrane**

April 27, 2016 at 9:44:00 PM EDT

I have found that nasal sprays cause ear infections. The spray does an incredible job of preventing itching and swelling and running of the nose, but the body still produces histamines and the result is increased swelling in tube, the sinus cavity, and then I get really bad ear infections. The kind that need injections, and oral steroids and antibiotics to cure. When I stop using the nasal spray, the rate of occurrence of the ear infections drops as a function of a half life decay of about 3 months.

Reply

**Anonymous**

January 27, 2018 at 3:30:00 AM EST

That "study" is nonsense. Nasal spray is the only thing that's unblocked my Eustachian tubes. Even if it's only temporary. The doctor said to try pseudoephedrine (which you can no longer buy otc, real helpful!!). But when I tried it it didn't seem to do anything. So I have no other choice but to stick with Flixonase nasal spray. It works even if I spray it straight up into the nose.

Reply

Please be aware that our office rarely if ever replies to comments. [Click to read why](#)

[← Newer Post](#)

[Home](#)

[Older Post →](#)

**V I D E O : W h a t C a u s e s a C l o g g e d**



Extraordinary 3D & 2D animations  
specializing in the medical and  
scientific fields. Custom CGI  
videos to bring clarity to the most  
difficult concepts.

Check us out at:  
[www.O2Labz.com](http://www.O2Labz.com)

#### COPYRIGHT

Copyright 2004-2016 by Dr. Christopher Chang. All Rights Reserved. This information may not be copied or used for any purpose without the express consent of Dr. Christopher Chang.



Custom 3D & 2D animations for  
medicine and science

[www.O2Labz.com](http://www.O2Labz.com)