



The Orofacial Pain Center

Joan C Wang, DDS, MS

*Diplomate, American Board of Orofacial Pain
Fellow, American Academy of Orofacial Pain*

2551 N Clark Street Suite 404 Chicago IL 60614

(773) 873-6372

Sphenopalatine Ganglion (SPG) Block.

The **Sphenopalatine Ganglion (SPG)** is a group of nerve cells that is linked to the trigeminal nerve, the main nerve involved in headaches and facial pains. The SPG is located in the back of the nose, carries information about sensation, including pain, and also plays a role in autonomic functions, such as tearing and nasal congestion.

The link between the SPG and the trigeminal nerve is important in head and face pain. If you apply local anesthetics (or numbing medications) to block or partially block the SPG, this can be helpful in reducing head and facial pain.

There currently are 3 FDA cleared, commercially available catheters for use. I chose to use the **TX360 Device** in my office because of its accuracy and patient comfort.

SPG Block Procedure.

The day of the procedure you should be able to travel to the office and drive home afterwards. No sedating medications are needed for the procedure. Before and after the procedure, your blood pressure and heart rate will be checked.

With the TX360 device, you will remain seated during the procedure. The device will be placed into one nostril and the catheter pushes the numbing medication through the syringe, and then the catheter will be taken out. This will be repeated in the other nostril. The entire procedure takes between 10-20 seconds. You will be asked to remain for observation for approximately 15 min after the procedure.

During the procedure you may feel mild pressure, feel like you need to sneeze, a brief mild discomfort or irritation like "something is in my nose." You may also experience a brief or quick burning sensation or have a bad taste in your mouth as some of the numbing medication may drip into the throat.

SPG Side Effects.

The most common side effects are all temporary, including numbness in the throat, low blood pressure, and nausea. If you do experience throat numbness, this should not last more than a few hours and is related to swallowing a small amount of the numbing medication. During this time, it is safest if you avoid eating or drinking anything to avoid the risk of choking. Nasal bleeding or infection has been reported in some cases. Rarely, a temporary increase in pain has been reported.

How Often Can I Have This Procedure Done?

SPG blocks can be repeated as often as needed to reduce pain. One study reports reduced frequency and severity of chronic migraine pain over a six month period if the procedure was done twice a week for six weeks (a total of 12 procedures).

Like many other procedures in pain management, the SPG block is likely to work best when combined with a comprehensive treatment plan.

Pain Physician. 2013 Nov-Dec;16(6):E769-78.

A novel revision to the classical transnasal sphenopalatine ganglion block for the treatment of headache and facial pain

[Kenneth D Candido](#)¹, [Scott T Massey](#), [Ruben Sauer](#), [Raheleh Rahimi Darabad](#), [Nebojsa Nick Knezevic](#)

Background: The sphenopalatine ganglion (SPG) is located with some degree of variability near the tail or posterior aspect of the middle nasal turbinate. The SPG has been implicated as a strategic target in the treatment of various headache and facial pain conditions, some of which are featured in this manuscript. Interventions for blocking the SPG range from minimally to highly invasive procedures often associated with great cost and unfavorable risk profiles.

Conclusion: SPG block with the Tx360® is a rapid, safe, easy, and reliable technique to accurately deliver topical transnasal analgesics to the area of mucosa associated with the SPG. This intervention can be delivered in as little as 10 seconds with the novice provider developing proficiency very quickly. Further investigation is certainly warranted related to technique efficacy, especially studies comparing efficacy of Tx360 and standard cotton swab techniques.