

# Medical Coverage Policy



## Surgical Deactivation of Migraine Headache Trigger Sites

Device/Equipment  Drug  Medical  Surgery  Test  Other

Effective Date:	10/02/2012	Policy Last Updated:	6/18/2013
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**Prospective review is recommended/required. Please check the member agreement for preauthorization guidelines.**

**Prospective review is not required.**

### Description:

Migraine is an intense and often debilitating type of headache. Migraines affect as many as 24 million people in the United States, and are responsible for billions of dollars in lost work, poor job performance, and direct medical costs. Approximately 18% of women and 6% of men experience at least one migraine attack per month. According to the International Headache Society, migraine headache is a recurrent disorder with attacks lasting 4-72 hours. Typical features of migraine headaches include unilateral location, pulsating quality, moderate or severe intensity and associated symptoms such as nausea, photophobia, and/or phonophobia.

### Treatment:

#### Pharmacological

A variety of medications are used to treat acute migraine episodes. These include medications that are taken at the outset of an attack to abort the attack (triptans, ergotamines), and medications to treat the pain and other symptoms of migraines once they are established (non-steroidal anti-inflammatory drugs (NSAIDS), narcotic analgesics, antiemetics). Prophylactic medication therapy may be appropriate for individuals with migraines that occur more than 2 days per week. In addition to medication, behavioral treatments such as relaxation and cognitive therapy are used in the management of migraine headache. Moreover, botulinum toxin A injections are a Food and Drug Administration (FDA)-approved treatment for chronic migraine (migraines occurring on at least 15 days per month for at least 3 months).

#### Surgical

Another proposed treatment of migraine headaches is surgical deactivation of trigger sites. The procedure was developed by plastic surgeon Dr. Bahman Guyuron, following observations that some patients who had cosmetic forehead lifts often reported improvement or elimination of migraine symptoms post-surgery.<sup>1</sup> The procedure is based on the theory that migraine headaches arise due to inflammation of the trigeminal nerve

branches in the head and neck caused by irritation of the surrounding musculature, bony foramen, and perhaps fascia bands. Accordingly, surgical treatment of migraines would involve removing the relevant nerve sections, muscles, fascia and/or vessels. The treatment is also based on the theory that there are specific migraine trigger sites and that these can be located in individual patients. In studies conducted by Dr. Guyuron's research group, clinical evaluation and diagnostic injections of botulinum toxin have been used to locate trigger sites. The specific surgical procedure varies according to the individual's migraine trigger site. The surgical procedures are performed under general anesthesia in an ambulatory care setting and take an average of 1 hour.

Surgical procedures have been developed at 4 trigger sites; frontal, temporal, rhinogenic, and occipital. Frontal headaches are believed to be activated by irritation of the supratrochlear and suborbital nerves by glabellar muscles or vessels. The surgical procedure involves removal of the glabellar muscles encasing these nerves. Fat from the upper eyelid is used to fill the defect in the muscles and shield the nerve. Temporal headaches may be activated by inflammation of the zygomatico-temporal branch of the trigeminal nerve by the temporalis muscles or vessels adjacent to the nerve. To treat migraines located at this trigger site, a segment (approximately 2.5 cm) of the zygomatico-temporal branch of the trigeminal nerve is removed endoscopically. Paranasal headaches may involve intranasal abnormalities, e.g., deviated septum, which may irritate the end branches of the trigeminal nerve. Surgical treatment includes septoplasty and turbinectomy. Finally, occipital headaches may be triggered by irritation of the occipital nerve by the semi-spinalis capitis muscle or the occipital artery. Surgery consists of removal of a segment of the semispinalis capitis muscle medial to the greater occipital nerve approximately 1 cm wide and 2.5 cm long, followed by insertion of a subcutaneous flap between the nerve and the muscle to avoid nerve impingement.

Current research evidence is suggestive of a benefit from surgical deactivation, but is not sufficient to form definite conclusions. There is a need for additional sham-controlled (also called placebo controlled) studies by other research groups to confirm the results of the single published trial using sham surgery. In addition, there is a need for further refinement of patient selection criteria and evaluation of any altered selection process e.g., without the use of diagnostic Botox injections in controlled studies. Thus, surgical deactivation of trigger sites to treat migraine headache is considered **not medically necessary**.

**Medical Criteria:**

None.

**Policy:**

Surgical deactivation of migraine headache trigger sites is considered **not medically necessary** for all BCBSRI products due to lack of studies demonstrating clinical efficacy.

**Coverage:**

Benefits may vary between groups/contracts. Please refer to the appropriate Evidence of Coverage, Subscriber Agreement, or Benefit booklet applicable "not medically necessary" benefits/coverage.

**Coding:**

As there is no specific CPT code for this procedure an unlisted code should be used.

When surgical deactivation of migrine headache trigger sites is reported with one of the following CPTcodes it will be considered **not medically necessary** with a diagnosis of migraine (see ICD-9 Codes below for migraine) :

- 15824
- 15826
- 30130
- 30140
- 30520
- 64716
- 67900

ICD-9-CM Code

346.00	346.01	346.02	346.03	346.10	346.11	346.12
346.13	346.20	346.21	346.22	346.30	346.31	346.32
346.33	346.40	346.50	346.51	346.52	346.53	346.60
346.61	346.62	346.63				

ICD-10-CM Code

G43.101	G43.111	G43.009	G43.019	G43.001	G43.011	G43.809	G43.A0
G43.B0	G43.C0	G43.D0	G43.819	G43.801	G43.409	G43.419	G43.401
G43.411	G43.829	G43.509	G43.519	G43.501	G43.511	G43.609	G43.619
G43.601	G43.611						

**Also known as:**

None

**Related policies:**

Botulinum toxin injection

[https://www.bcbsri.com/sites/default/files/polices/Botulinium\\_Toxin\\_Injection.pdf](https://www.bcbsri.com/sites/default/files/polices/Botulinium_Toxin_Injection.pdf)

Occipital nerve stimulation

[https://www.bcbsri.com/sites/default/files/polices/Occipital\\_Nerve\\_Stimulation.pdf](https://www.bcbsri.com/sites/default/files/polices/Occipital_Nerve_Stimulation.pdf)

**Published:**

Provider Update, August 2013

Provider Update, December 2012

## References:

**Blue Cross and Blue Shield Association Medical Policy Reference Manual.** Policy #7.01.135  
Surgical Deactivation of Migraine Headache Trigger Sites.

<sup>1</sup>Guyuron B, Kriegler JS, Davis J, Amini SB. Five-year outcome of surgical treatment of migraine headaches. *Plastic and Reconstructive Surgery*;2011;127(2):603-608.

Behin F, Behin B, Bigal ME et al. Surgical treatment of patients with refractory migraine headaches and intranasal contact points. *Cephalalgia* 2005; 25(6):439-43.

Kung TA, Guyuron B, Cederna PS. Migraine Surgery: A Plastic Surgery Solution for Refractory Migraine Headache. *Journal of the American Society of Plastic Surgeons-Plastic and Reconstructive Surgery*;January 2011:181-189.

Kung TA, Pannucci CJ, Chamberlain JL, Cederna PS. Migraine Surgery Practice Patterns and Attitudes. *Plastic and Reconstructive Surgery Advance Online Article*:  
[http://www.drjeffreyjanis.com/patientresources/migraine\\_resources/Migraine Surgery Practice Patterns and Attitudes.99743.pdf](http://www.drjeffreyjanis.com/patientresources/migraine_resources/Migraine_Surgery_Practice_Patterns_and_Attitudes.99743.pdf).

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