

HEADACHE Toolbox

Occipital Nerve Blocks

Many patients with chronic headache report that their pain typically arises from the neck or, more specifically, the base of the skull. Often that pain arises on one side or the other and extends forward to involve the top of the head, the temple, the forehead, the eye or some combination thereof. These are termed *cervicogenic* (ie, "born of the neck") headaches.

Residing in those areas of the skull base are the *occipital nerves*. Irritation/inflammation of those nerves may cause a specific type of "neuralgiform" pain: *occipital neuralgia*. More commonly, however, those nerves serve as major "on-ramps" to the "superhighway" upon which travel the pain signals that produce migraine and other types of headache. If one can block traffic on these busy on-ramps, then it may be possible to halt the flow of pain signal on the superhighway and thus—at least temporarily—halt head pain.

Such is the logic of occipital nerve blocks (ONBs) for suppression of chronic headache. The blocks themselves are relatively simple to perform. Your physician will use a small needle to inject a solution into the area around the nerves; the composition of that solution differs according to physician experience and preference but most often contains a long-acting local anesthetic and a steroid anti-inflammatory drug. Insertion of the needle is not especially



painful, but infusion of the solution may cause temporary discomfort.

Pain relief can occur with startling rapidity, frequently within 15 minutes of the block(s). For those who experience relief, the duration of the therapeutic response varies widely: a day or so up to weeks . . . even months.

When the procedure is performed by an experienced healthcare provider, complications of ONBs are quite rare. Because these are sensory nerves, you may experience some temporary numbness over the regions supplied by the nerves. Because the local anesthetic may diffuse into areas close to the lower brain stem and upper spinal cord, transient (hours at most) difficulty speaking or swallowing have been reported. And, as with all steroid therapy, caution should be taken to minimize the amount of steroid injected over any given period of time.

Occipital nerve blocks are not for everyone, but for selected patients they can prove a more effective means of suppressing chronic headache than any oral medication.

Frequently asked questions:

1. How long will it take? Typically no more than a minute or two; the procedure usually is performed in a regular examination room and does not require any preparation on the patient's part.

- 2. Can I resume my activities afterwards?

 Absolutely; you should have no problem driving afterwards and may carry on with your day as you would otherwise.
- 3. If I gain significant but only very brief relief, should I have the procedure repeated?

 Unfortunately, your HCP cannot predict with confidence whether a given ONB will be effective or—if effective—how long the benefit will last. If your treatment response is

dramatically positive but short-lived, it probably makes sense to give it at least one more try.

John F. Rothrock, MD Editor-in-Chief, *Headache* Director Headache Treatment and Research Program University of Alabama Birmingham, AL, USA