What is a Greater and Lesser Occipital Nerve Block?

Greater and Lesser Occipital Block is an injection of local anesthetic next to the greater and lesser occipital nerves, which are located just beneath the scalp in the back of the head. Since these nerves are outside the skull, this block does not involve brain surgery.

What is the purpose of it? The injection blocks both the greater and lesser occipital nerves. This block is useful in diagnosing and treating occipital neuralgia, relieving or reducing pain in the back of the head in the scalp and used also to treat Migraine and Cluster headache. The block may also be used to provide surgical anesthesia in the occipital region. The block may be done on either the left or right side of the back of the head, or both.

How long does the injection take? The actual injection takes only a few minutes.

What is actually injected? The injection consists of a local anesthetic (like lidocaine or bupivicaine). When treating occipital neuralgia or other painful conditions, steroid medication (triamicinolone-Aristocort, methylprednisolone-Depomedol, or Celestone-betamethasone) is added to the local anesthetic.

Will the injection hurt? The procedure involves inserting a needle through the skin beneath the scalp and moving the needle in a fan-shaped pattern to block both occipital nerves, so some discomfort is involved. However, we may numb the skin in the injection area with a local anesthetic spray.

Will I be "put out" for this procedure? No.

How is the injection performed? It is done while you sit with your head bend forward, The injection site will be marked with a marker.

What should I expect after the injection? Immediately after the injection the back of your head may feel warm. In addition, you may notice that your pain may be gone or lessened considerably, you also may feel numb in the back of the head and occasionally in top of the head.

What should I do after the procedure? You should have a ride home. We advise patients to take it easy for a day or so after this procedure. Perform normal activities as you can tolerate them.

Can I go to work the next day? Unless there are complications, you should be able to return to your work the next day. The most common thing you may feel is soreness in the back of your head at the injection site.
How long will the effects of the medication last? The local anesthetic wears off in a few hours. The cortisone starts working in about 3 to 7 days and its effect can last for several days to a few weeks.

How many injections do I need to have? If you respond to the first injection, you will be recommended for repeat injections. Usually, a series of such injections is needed to treat the problem. Some may need 2 to 4 and some may need 10 or more. The response to such injections varies from patient to patient.

What are the risks and side effects? This procedure is safe. However, with any procedure there are risks, side effects and the possibility of complications. The most common side effect is pain – which is temporary. Since the scalp is highly vascular, having many tiny blood vessels near the surface of the skin, bleeding is common and to reduce it an icepack may be used after the procedure. The other risk involves bleeding, infections, spinal block and injection into blood vessels and surrounding nerves, hair loss at site of the injection, fainting. Fortunately, the serious side effects and complications are uncommon.

Who should not have this injection? If you are allergic to any of the medications to be injected, if you are on blood thinning medications (e.g. Coumadin, or Heparin), if you have an active infection going on near the injection site, or if you are, or could be pregnant you should not have the injection.