Botox for Chronic Migraine

<table>
<thead>
<tr>
<th>No Pain</th>
<th>Mild Pain</th>
<th>Moderate Pain</th>
<th>Severe Pain</th>
</tr>
</thead>
<tbody>
<tr>
<td>NRS 0</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>VDS</td>
<td>Slight Pain</td>
<td>Mild Pain</td>
<td>Severe Pain</td>
</tr>
<tr>
<td>FPS-R</td>
<td>Pain as bad as it could be</td>
<td></td>
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What is Chronic Migraine?

Chronic migraine is a subtype of migraines that affects 2% of the general population. People with a type of migraine called “episodic migraine” can turn into chronic migraine (about 3 out of 100 cases per year). With appropriate treatment, chronic migraine can be turned back into episodic migraine. People with chronic migraine have more than 15 headache days per month. At least 8 of those days would meet the international headache society’s (IHS) criteria for migraine.

SUMMARY OF MIGRAINE CRITERIA:

1) 5 or more episodes

2) Headache last 4 hours to 3 days without treatment (or poor response to treatment)

3) Headache has at least 2 of the 4 features sometimes
   a) One sided
   b) The pain feels like a heartbeat (throbbing, pulsating)
   c) The pain is moderate to severe
   d) The headache makes you avoid your normal day-to-day activities, go to bed, or gets worse with activity/exercise

4) During you headaches get either:
   a) Nausea (sick to your tummy) with or without vomiting and / or
   b) Light + Noise sensitivity (i.e. you prefer being in a dark quiet room)

5) Your headaches are not due to another cause (e.g. your exam is normal and your doctor has not identified any worrisome features when asking about headaches)

MIGRAINES CAN HAVE AURAS BEFORE OR DURING MIGRAINE OR WITHOUT THE HEADACHE!

1) **Visual aura:** sparkles, zigzags, vision loss, spots, distortions, flashes
   1) Can be one or both sides of your vision
   2) Typically last 5 minutes to 1 hour

2) **Sensory aura:** numbness or tingly sensations in face, arms, or legs
   1) Can be one or both sides of your body
   2) May start in one place and move to another place
   3) Typically last 5 minutes to 1 hour

3) **Language aura:** can range from difficulty finding a word to inability to speak
   1) If this occurs in isolation without any other symptoms or with lack of sensation, weakness call 911 as this symptom can occur in stroke as well. This is particular true is there are no associated migraine symptoms.

   ***You may have one type of aura or a combinations of the 3***

You are higher risk for chronic migraine if you are female, have a genetic risk, previous head/neck trauma, lower education or income, high life stress, younger age, frequent headache, scalp is tender, mood or other psychiatric disorders, other chronic pain, need lots of pain medication, snore, drink lots of caffeine, overweight, sleep problems, and poorly controlled headaches.
What is Botox?

Botulinum toxin type A, also known as OnabotulinumtoxinA, is made by a bacteria called Clostridium botulinum. It main function as a toxin is block nerves from communicating with muscles causing weakness. The medication Botox is made from this toxin.

In migraine, pain is cause by two sets of nerves:
1) Trigeminal nerve
2) Upper cervical nerves

The trigeminal nerve allow you to feel touch, temperature, and pain of your face and sinuses. The upper cervical nerves do the same for your upper neck and back of the head. Botox is injected into muscles near these nerve’s endings. It blocks the release of some the chemicals that produce more migraine features. It also get brought into the nerve endings, and transported along them to further prevent release of chemicals that help produce migraine. Botox also has a secondary actions in that its ability to relax muscles, reduces muscle tension.

WHO SHOULD NOT GET BOTOX?

1) Botox is contraindicate for patients with a condition called myasthenia gravis

2) If you are pregnant or planning to become pregnant, please discuss your plans with your doctor. Botox is category C, which means the safety is unclear but does appear to increase the risk of harm base the current literature. It may be a reasonable option to prevent use of other less safe medication in certain circumstance. Speak to MotherRisk (http://www.motherisk.org/prof/updatesDetail.jsp?content_id=1067) for further information.

3) Do not simultaneously get Comestic botox

4) If you get Botox done in other regions of your body, there is a maximum total dose per 3 months that needs to be checked by your doctors.

WHAT ARE THE SIDE EFFECTS?

1) If you are squeamish with needles, than you may feel lightheaded or nauseous. If this occurs, inform your doctor. You may need a break to lie down, try slow breathing exercises, and get fluids

2) As the medications involves injections, there is pain involved from the needle and/or medication going in. Occasionally patients have report mild irritation or itching after the injection

3) Following the injection, you may have a headache or neck pain triggered. Treat this pain as you would your normal pain.

4) There are injection done near the eye. Do not rub/wash this area until later later in the day. There is a risk of a droopy eyelid if the medication gets into the wrong muscles. This effect could last up to 3 months. It is very rare.

5) There are injections done in the forehead. Do not rub/wash this area until later later in the day. If the medication is too low in the forehead muscles and your anatomy is higher risk, there may be heaviness of the eyebrow causing a fullness in the eye region that can last up to 3 months. It is recommended that injections are done above the forehead wrinkles to avoid this possibility. It is very rare when done this way.
What does the getting Botox involve?

- **31 INJECTIONS SITES BASED ON THE PRE-EMPT PROTOCOL FOR CHRONIC MIGRAINE**
- **THE STANDARD PROTOCOL USES 155 UNITS OF BOTOX**
  THE INJECTIONS ARE DONE INTO THESE SITES. IT TAKE ABOUT 10 MINUTES.
- **EXTRA INJECTIONS CAN BE DONE ACCORDING TO THE “FOLLOW THE PAIN” PROTOCOL**
- **SOME PRACTITIONERS CAN INJECT OTHER REGIONS SUCH AS THE MASTERS FOR JAW PAIN**
What should I expect?

1) You will not have an immediate effect. In fact you may get a headache triggered. Track your headache in a headache diary to see change over time.

2) A response if consider having your headaches reduced by half

3) 50% of patients respond to the first injection

4) 75% of patients respond to the third injection

5) The KNC Headache Clinic recommends stopping after the third injection if you have not had a clear effect or to review that you are not over-using pain medications that are preventing a response

6) Initial the Botox injections are recommended to be done every 12 weeks (3 months)

7) As you come up to your appointment time, you may notice that you get a wearing off effect the first few times. This effect will hopefully improve with your future treatments. When this improves, your treatment date can then be moved further for example to 4 or 5 months with the goal of weaning you off the Botox injections.

WHAT HAPPENS IF I DON’T RESPOND?

1) Set up an appointment with your doctor to re-discuss diagnosis and management

2) Ensure that you are tracking the amount of pain medications you are using. Overuse of medications like Tylenol, Advil, Triptans, and Opioids will reduce the chance of responding to prophylactic medications including Botox

3) Ensure you have discuss lifestyle optimization with your doctor as there may be multiple behaviours related to sleep, diet, caffeine, activity level, and stress exposure that could be working against your recovery

4) Ensure you have been tracking your headache over time to see if any changes (good or bad) have occurred, and review these with your doctor

5) If Botox is not working for you, reconsider if any of the medications that you did not try may be an options or perhaps one you did not tolerable could be try at a very low dose with a very slow increase as your body acclimatizes to them

6) Alternatives to medications for chronic migraine are new technologies like vagal nerve stimulation. Talk to you doctor to see if this is an option for you. Unfortunately this option is not yet covered in Canada, and costs around $700, but there is a free trial period.

7) While frustrating if none of these options seem to work for you, do know there are exciting therapies on the horizon for migraine that you may be candidate for! These medications will target a chemical called calcitonin gene-related peptide (CGRP). They are in the final phase of research, and will hopefully be clinically available soon!