

## **Botulinum Toxin (Botox) Treatment**

This leaflet is designed to give you some information about the therapy for which you have been referred. Your doctor may have already explained what Botox therapy involves, but you will probably still have some questions.

**If after reading this leaflet you have any fears, queries or concerns, you will have the opportunity to discuss any of these issues on the day of the appointment with a consultant.**

### **THE INDICATION FOR BOTOX THERAPY**

Botulinum toxin is injected into muscles to temporarily weaken them. It is used when muscles are overactive, particularly in the group of conditions called **dystonia** or in spasticity. Overactive muscles may cause spasms, tremor (shaking), stiffness and pain.

The toxin works by blocking the connection between nerves and muscles. As a result the injected muscles become weaker and may thin out a little. With time, however, this recovers back to normal. The effect of the treatment is not permanent, but lasts for months. This means that you need to return for treatment

### **HOW MANY INJECTIONS ARE GIVEN?**

We usually use an EMG machine to help us guide the injections. This machine registers the electrical activity of the active muscle through the same needle we use for injections.

In this way, we can help ensure that Botox is only injected into the muscles we want to weaken. Botulinum toxin injections produce no more discomfort than ordinary injections. The number of injections per session depends upon the number of muscles that are overactive.

### **HOW LONG DOES THE APPOINTMENT TAKE?**

On your first visit we will take a detailed history of your particular problem, assess the involuntary movements and their effect on your speech, chewing and swallowing, clinically and with the help of an EMG machine. A video recording may be performed for future comparisons.

We will also explain any questions that you may have with respect to the botulinum toxin injections. It may take 1-2 hours altogether to complete this detailed assessment on your first visit but usually only 20-30 minutes thereafter, depending on how many muscles we need to inject.

## **WHAT HAPPENS AFTER AN INJECTION?**

Botulinum toxin takes 1-3 days to begin to work and usually reaches its peak effect after around 1-2 weeks. Some muscles and some people respond faster than others. There is no need to do anything different after an injection.

## **HOW WEAK WILL THE MUSCLES BECOME?**

We usually aim for a modest amount of weakness which is manageable and not disabling-we do not want to make things worse! The desirable amount of weakness depends a little on the strength of the muscle contractions that we are treating. How weak you become depends on how sensitive you are to the toxin and how much is injected.

Because we do not know exactly how sensitive you are at the first injection, we usually use an average dose to begin. After that, we see how you respond and next time give more or less accordingly. It sometimes takes a few treatments to find the best combination of muscles and dose of toxin. *Remember though that the weakness is only transient and will wear off.* If after the first injection there is not enough weakness it may be possible to give a "top-up".

## **HOW FREQUENTLY DO I NEED TREATMENT?**

The injections are usually given every 3-4 months for dystonia. The effect may last longer in some people, up to 6 months or more, but it is unusual. Usually the benefit wears off as some strength of the muscle recovers.

## **WHAT ARE THE SIDE EFFECTS?**

The muscles may be a bit sore for a few days. The main side effect however is weakness of the muscles injected and less often of those just next to them, which in rare instances might cause mild temporary swallowing difficulties. However, we usually do not see any improvement unless some weakness is produced. The weakness wears off over 2 to 3 months and responds to reducing the dose.

Other side effects include a skin rash, flu-like illness with general aches and pains and tiredness starting 7-10 days after the injection and lasting a few days. These are very uncommon and do not usually require specific treatment.

## **WHAT ABOUT LONG TERM EFFECTS?**

Some people have been treated with botulinum toxin for over 15 years with no problems.

Around 5-10% of people treated become immune to the toxin after many months or years so that it no longer works. To reduce the risk of this, we give the lowest dose possible, as infrequently as possible.

**DO THE INJECTIONS HELP EVERYONE?**

No. Some people do not have the kind of problems that respond to botulinum toxin but we can only find this out by seeing you and possibly by trying injections a few times. If they don't work then you don't need to continue them.

Overall, most people do get some benefit from the injections.

**FOR HOW LONG DO I NEED TO HAVE THE INJECTIONS?**

That largely depends on your particular condition and how well it works for you. Botulinum toxin does not *cure* the problem, it only helps to control it.