Are there any side effects?
Normally treatment is very well tolerated. If side effects are seen, they are usually in the first weeks following injection. Reported side effects include a skin rash, flu-like illness and tiredness but they tend to be mild and temporary and do not require treatment. Other side effects tend to result from an over relaxation of the muscle(s). Seek immediate medical advice if you develop any swallowing or breathing difficulties.

Goal of treatment:
It is important to set a goal for the Botulinum Toxin injections so that you have an aim to work towards and for the evaluation of the effectiveness of the treatment, such as, ease of wearing splints or able to open fingers to wash palm.

How can I help reduce healthcare associated infections?
Infection control is important to the well-being of our patients and for that reason we have infection control procedures in place. Keeping your hands clean is an effective way of preventing the spread of infections. We ask that you, and anyone visiting you, use the hand sanitiser available at the entrance to every ward before coming in to or after leaving the ward. In some situations hands may need to be washed at the sink using soap and water rather than using the hand sanitiser. Staff will let you know if this is the case.
This leaflet is designed for people who are being asked to consider the use of Botulinum Toxin for the treatment of focal spasticity.

What is focal spasticity?
You, a doctor or therapists have identified that you have a problem with excessive muscle activity, which is occurring as a result of damage to the spinal cord. These problems may include pain, stiffness or difficulty moving a limb. In turn, this may lead to difficulties in day to day activities such as washing, dressing, wearing a splint or walking. The botulinum toxin is injected to weaken the particular muscle that is causing the problem so that this muscle can be stretched and moved more easily.

What is Botulinum Toxin?
Botulinum Toxin (often shortened to “botox”) is a toxin produced by Clostridium botulinum. This is a type of toxin, which has muscle relaxant properties. The toxin is manufactured by several pharmaceutical companies and may be known by different names (such as Botox or Dysport). Minute quantities of Botulinum Toxin are injected directly into the affected muscle(s). Normal muscle contraction is stimulated by a chemical called acetylcholine. In some conditions affecting the central nervous system, such as spinal cord injury, too much acetylcholine is released, over stimulating the muscle and resulting in muscle spasm or increased tone. Botulinum Toxin temporarily reduces the release of acetylcholine and the muscle remains relaxed. Botulinum toxin blocks the nerve signal to a muscle, making an overactive muscle weak or unable to contract.

What does the procedure involve?
The overactive muscles are identified by physical examination. Occasionally a needle connected to an EMG (electromyography) machine may be inserted into the muscle. This registers the electrical activity of the muscle and helps to guide the correct placement of the injection. Botulinum Toxin is administered by injection into the affected muscle(s) by a trained clinician. The number of injections given depends on the number of muscles that are overactive. There may be a little pain at the injection site(s), but this should only be for a day or two.

Botulinum Toxin does not spread far from the injection site so it does not normally affect the surrounding muscles.

How long will it take?
It will take about 1 hour to complete the assessment and injections.

When will it take effect?
The Botulinum Toxin should start to work about 2 or 3 days after the injection and reach its maximum relaxing effect on the muscle(s) after 2 weeks. The reduction in the stiffness depends on how tight the muscles were before the injection, the size of the muscle(s) and how much toxin is injected.

How long does it last?
Generally the relaxing effect of Botulinum Toxin on muscles lasts until the nerve establishes a new message link with the muscle which, typically, takes 3 – 4 months. At this time the muscle may start to stiffen again and you may require further Botulinum Toxin injections.

What happens after the injection?
You should be able to go straight home following the injections. There are no special restrictions advised and you can resume normal activities straight away. The benefits of Botulinum Toxin injections can often be improved in conjunction with splinting and stretching or strengthening exercises. If it is felt to be appropriate in your case, the therapists ensure that splints or an exercise programme are in place prior to you receiving the injection. You may need to be referred to your local community therapy teams for on-going treatment.

The doctor may arrange to see you at 6 and then 12 weeks after the injections so that their effect can be measured and monitored.