

# Autonomic blocks

## Introduction

This leaflet gives you information about autonomic blocks and the side effects associated with the treatment.

## What is an autonomic block?

Some pain syndromes are associated with abnormal function in a part of the nervous system called the autonomic nervous system (ANS). This controls bodily functions that are outside our conscious control such as gut function or regional blood flow. It is the part of our nervous system that makes our hearts race and our hairs stand on end when we are frightened.

The autonomic nervous system can be targeted at a variety of sites (called a ganglion or a plexus) outside the spine:

- Stellate ganglion – controls ANS function in the face and upper limbs
- Coeliac plexus – controls ANS function in the upper gut
- Lumbar sympathetic ganglia – control ANS function in the legs
- Ganglion Impar – controls ANS function in the pelvis

Injections at these sites may be used diagnostically - to investigate and help us better understand your pain. The injections can also be used therapeutically (to help with the pain) to produce a period of time where your symptoms are greatly reduced.

## What is injected?

In a diagnostic injection, local anaesthetic is injected. Sometimes a steroid such as methylprednisolone is added.

The doctor will use X-rays or sometimes a CT scan to help guide them to the correct position. Contrast (a dye which shows up on X-rays) is also used. This helps to make sure that the injection goes in the correct place. This can help with accuracy and also reduce any risk.

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Department

**Pain  
Management**

Review due

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## Patient Information

The steroid acts only around the area where it is injected; there is some evidence that it may help to extend the effects of the local anaesthetic. For 30 out of every 100 people who have this injection the pain may not go away.

Using a steroid in an injection like this does not have the same side effects as taking long-term steroids.

If you have diabetes and are given steroids as part of the treatment, you may notice that your blood sugar levels are higher than usual for a day or two.

In a therapeutic injection, an agent which dissolves the nerves such as phenol or alcohol may be used. Because this produces lasting effects which cannot be undone, these procedures are usually performed near the end of life.

### Are there side effects?

Some patients are allergic to the contrast dye used. This is more common in patients who are allergic to iodine. You must tell your consultant if this applies to you. The risk of a severe allergic reaction to the drugs used is rare.

Most of these injections cause flushing, which may make you feel faint or even sick. Your blood pressure will be measured after the injection for a period of time.

### Specific risks

**Stellate Ganglion** – normally, the eye on the side of the injection will become bloodshot and the eyelid droopy for a few hours. You may notice nasal stuffiness on the side of the injection for a short period. Sometimes the arm or face will become flushed and warm which will last for a few hours.

There is a small risk of causing a punctured lung (about 1 in every 1000 patients).

**Coeliac plexus** – discomfort during the injection is common. After the procedure changes in your bowel function including diarrhoea is common, but usually settles over 48 hours. Puncture injuries of nearby structures (blood vessels, lungs) are reported and happen in about 1 in every 20 patients. These rarely require further intervention.

## Patient Information

There are rare reports of spinal cord injury including paralysis following this procedure.

**Lumbar Sympathetic Block** – may cause numbness or weakness of the legs along with temporary changes in bowel, bladder or sexual function. This usually resolves in 2 to 3 days. There is a small risk of permanent nerve damage to lumbar nerve roots which may cause pain, numbness or weakness of a leg.

**Ganglion Impar** – temporary changes in bladder, bowel or sexual function is possible; perforation of the rectum (bowel) is also possible but rare.

## Where is the procedure done?

The procedure is carried out in the Chedworth Suite at Cheltenham General Hospital. An appointment will be sent to you by the pain clinic secretaries.

## On arrival

- You may be asked to put on a hospital gown
- You will be asked to lie on an X-ray trolley
- X-rays images (pictures) may be used to guide the needle
- The area to be injected will be cleaned with antiseptic
- The consultant will numb the area with local anaesthetic
- You may feel some discomfort during the procedure. This is normal but you should speak to your consultant about it if you are worried

## How long will I be in hospital?

The procedure will take about 10 to 15 minutes but you may be on Chedworth Suite for a couple of hours, so please come prepared for this.

After the injection the nurses will check your blood pressure and pulse every 5 minutes for 30 minutes. The injection can lower your blood pressure which might cause you to feel light headed and dizzy if you sit up too soon.

Once it is safe to do so you will be offered a drink then you will be allowed home shortly afterwards.

## Patient Information

### Can I eat and drink?

You may eat and drink as normal, unless your consultant advises you otherwise.

### Can I take my usual medication?

Take your prescribed medication as usual on the day of your treatment.

**Blood-thinning medication, such as clopidogrel, apixaban, warfarin etc.** These medicines are usually stopped for a period of time before the injection to reduce the risk of epidural haematoma, which is associated with paralysis. Your consultant should have addressed this with you in clinic but if you are in any doubt, please contact your consultant's secretary, the telephone number is at the end of this leaflet. It is advisable you do this at least one week before you are due to have the RF treatment.

**If you have diabetes and your blood sugar is above 15mmol/l on the day of your procedure you may not be able to have your injection.** If your blood sugars are above 15mmol/l leading up to your injection please contact the consultant's secretary for advice.

### Can I drive home?

For safety reasons you are asked not to drive yourself home. You should also have somebody with you for the rest of the day.

### After the injection

In the days following your injection you may have:

- **mild discomfort** around the injection site; this is expected and should settle by itself
- **an increase in your normal pain** , this is usually temporary. You can take your normal pain relief to reduce any discomfort. If the pain is severe, please contact your GP for advice

## Patient Information

- **infection at the injection site**, this happens in up to 1 in every 100 patients is more common when steroids are used. Please contact your GP for advice
- **an allergic reaction to the injection**, which results in redness and itching around the injection site. This is not serious, although we need to know about it for future treatments
- **facial redness or flushing**, this is a normal response to steroid injection treatment
- **weakness and numbness in the limb or area that was treated**. If it was safe to do so you may have been discharged home with these symptoms. Please take care to protect the area/limb until normal sensation returns. **If normal sensation does not return or the weakness is getting worse, please go to your nearest Emergency Department and show them this leaflet.**

Any dressings can be removed after 24 hours.

## What happens next?

Your response to the injection treatment will either be assessed before you leave Chedworth Suite or you will be asked for feedback 6 weeks after the treatment. Sometimes after this procedure we will ask you for feedback sooner than 6 weeks – your consultant will let you know before you leave.

### **Please provide your email address before leaving Chedworth Suite.**

A member of our administrative team will email you in 6 weeks with a form to complete about the result of your injection treatment.

You will be asked to complete the form with your name, date of birth, hospital number and the name of your pain consultant.

You will also be asked to let us know how much pain relief was provided by the injection and what improvements you have noticed. The improvements may include being able to sleep better, able to do more physically, reduce medication or improvements in your mood and general wellbeing.

## Patient Information

**If you do not have access to email** - please telephone your pain consultant's secretary 6 weeks after the treatment. You will be asked for the same information that is requested by email.

The next step in your treatment will be decided according to your response to the injection treatment. Any further appointments will be posted to your home address.

If your pain has improved greatly, you will not need a routine follow up appointment. Instead you will be given a 6 months open appointment during which time you can contact your consultant's secretary if your pain becomes difficult to manage again.

## Contact information

For injection treatment follow up or to rearrange an appointment please contact your consultant's secretary, Monday to Friday between 8:00 am and 4:00 pm.

### **Dr Young's secretary**

Tel: 0300 422 3383

### **Dr Makins secretary**

Tel: 0300 422 2558

### **Dr Harper's secretary**

Tel: 0300 422 3383

### **Dr Bodycombe's secretary**

Tel: 0300 422 3198

### **Dr Rea's secretary**

Tel: 0300 422 2804

### **Dr Patel's secretary**

Tel: 0300 422 2558

For all other queries please contact the:

### **Clinical Nurse Specialists**

Tel: 0300 422 2976

An answerphone will be in operation at all times, please leave your name, contact number and message. We will return your call as soon as possible.

**Patient  
Information**

For urgent calls please contact your GP or NHS 111.

**NHS 111**

Tel: 111

## **Further information**

For more information about the Gloucestershire Hospitals Pain Management Service please visit the website below:

Website [www.gloshospitals.nhs.uk/our-services/services-we-offer/pain/](http://www.gloshospitals.nhs.uk/our-services/services-we-offer/pain/)

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