Introduction
Welcome to The Dudley Group NHS Foundation Trust. This leaflet will provide you and your relatives with information about a ganglion impar block. It includes information on what a ganglion impar block is, the risks and benefits of it and what the procedure involves.

What is a ganglion impar block?
It is an injection into a group of nerves located in front of the coccyx (tail bone). It is used to improve the pain caused by irritated or inflamed nerves in your lower back.

The injection consists of both local anaesthetic and steroid which both act towards blocking the pain signals sent to the brain. The steroid also reduces swelling and inflammation which may be irritating the nerves and causing some of the pain you are experiencing.
What are the benefits?
The local anaesthetic numbs the nerves in the short term. The steroid reduces inflammation which can often provide long term pain relief. Initially for the first few days, you may experience a worsening of your pain but after this you should notice the pain relief.

The injection can relieve the pain for a few weeks or months and any recurring pain may not be as severe as before, but everyone experiences the effects in a different way.

Steroids have been used for decades for their beneficial effects. Although steroids are not licensed for this specific procedure, their use is endorsed by the British Pain Society. The steroids we use act locally and so minimise any side effects.

What are the risks and complications?
Overall, steroid injections are very safe and serious side effects or complications are rare. However, like all injection procedures there are some risks:

Common risks
- Bruise at the site of injection.
- An increase in your pain – this should only last a few days.

Rare risks
- Bleeding.
- Infection.
- A prolonged increase in pain after the procedure.
- Anaphylaxis – severe allergic reaction to drugs.
- Damage to surrounding area, such as the rectum.
- Nerve injury, either temporary or permanent.

If you experience any of these rare risks, please contact the Pain Management Helpline on 01384 244735, your GP or in an emergency dial 999.
Steroid-related issues

Compared to regular steroid use, the steroid injection used for pain procedures is associated with minimal side effects, however:

- If you have diabetes – you may experience a slight rise in blood sugar for up to two weeks so you should monitor your blood sugar very carefully. Contact your GP or diabetic nurse if you have any problems.

- If you have heart failure – you may experience increased shortness of breath due to salt and water retention. Contact your GP or nurse if you have any problems.

X-ray precautions:

- The procedure uses X-rays and these use a small amount of radiation which may add slightly to the normal risk of cancer.

Female patients – you must tell us if you are or might be pregnant. If you are not sure, we will offer you a pregnancy test.

What alternatives are there?

You do not have to have a ganglion impar block injection and your consultant will discuss alternative treatments with you appropriate to your condition. If you prefer, you can continue to take painkilling medication without having any other treatment.

How do I need to prepare for the procedure?

- You should not eat for six hours before the procedure but you can drink clear fluids up until two hours before procedure. Clear fluids means water or diluted squash and not drinks such as fruit juices, tea, coffee or milk.

- The exception to this information is if you have diabetes. If so, please eat and drink as normal and take your diabetes medication/insulin.
• Your treatment will be at Russells Hall Hospital or Corbett Outpatient Centre as an outpatient in the Day Surgery Unit (either a morning or an afternoon appointment). This will be confirmed at your clinic appointment.

• You will be at the appointment for between two to four hours.

• You will need to arrange for someone to drive you home afterwards.

• Please arrange to have someone with you overnight.

• Please note that if you have sedation during the procedure:
  - You should not drive or operate machinery for 24 hours afterwards.
  - You may not be able to co-operate during the procedure.
  - You may not remember information given to you afterwards by your doctor. Your memory may be affected for up to 24 hours after the procedure.
  - The effect of the sedation may be prolonged by other drugs you are taking.

**What do I do about medication?**

• You should take all your regular medications except blood thinning medication such as clopidogrel, warfarin, dipyridamole, rivaroxaban. We will give you instructions about what to do about these drugs when we give you your appointment for the injection.

• Please bring a repeat prescription document with you if you are taking any regular medications.

**What does the procedure involve?**

**Before the procedure**

• A doctor will discuss the procedure with you and ask you to sign a consent form.
During the procedure (duration 20 to 25 minutes)

- This is carried out in theatre while you are awake.
- You may be offered sedation (through an injection into the back of your hand) to help you to relax.
- You will lie on your stomach with a pillow under your pelvis.
- We will clean your back (bottom of spine) with an antiseptic solution which may feel cold. We will then place sterile sheets around the area for injection.
- We will inject a local anaesthetic into your back to numb the area.
- An X-ray will be used to ensure proper positioning and we may also use an ultrasound for guidance.
- We will inject the site with local anaesthetic and a steroid. You may feel some pressure and pushing whilst this procedure is being carried out but you should have no pain. If you do feel any discomfort, please tell a member of the theatre team.
- Once completed, we will place a plaster over the injection site and take you the recovery area.

After the procedure

- In the recovery area, we will observe you for 30 minutes as you might feel little a drowsy and sleepy.
- We will offer you some light refreshments and after this you can go home.
What do I need to do when I get home?
When you get home, please continue to take any regular medication. It may be necessary for you to take painkillers for a day or two. You might need someone at home to help you but you do not have to stay in bed. You can remove the plaster the next day.

You should gradually increase your level of activity. However, do not take up new exercises until your muscles have had time to adapt. Build up by your exercise levels by increasing your physical activity (for example, walking, swimming, housework) gradually every few days. The eventual aim is to get back to a level of activity that is normal for you.

By gradually increasing your physical activity, you will allow your back muscles to regain some of their lost strength and help them support your spine. If you do not strengthen your back muscles, any benefit from the injections will be very short term, as the injection is not a cure in itself, it just relieves pain.

What happens after having the injection?
Some patients will experience immediate pain relief. However, it usually takes 24 to 72 hours for the effects of the steroid medication to take effect and it may be up to one week before the maximum benefits are felt. Very often more than one injection is necessary to achieve a good level of pain relief.

Some patients will experience mild pain from the procedure that will ease in a very short amount of time. On rare occasions, patients have experienced a prolonged increase in pain after the procedure.

How you respond to the injection will be monitored by you on a pain monitoring chart which we will give you to take home. Your further treatment plans will be based on this.
If you have any questions, or if there is anything you do not understand about this leaflet, please contact:

**Clinical nurse specialists on the Pain Management Helpline:**
01384 244735 (9am to 5pm, Monday to Friday)
Russells Hall Hospital switchboard number: 01384 456111

**This leaflet can be downloaded or printed from:**
http://dudleygroup.nhs.uk/services-and-wards/pain-management/
If you have any feedback on this patient information leaflet, please email patient.information@nhs.net

This leaflet can be made available in large print, audio version and in other languages, please call 0800 073 0510.

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