Epidurals and Injections for Back Pain

- An epidural is an injection that delivers painkillers and steroids directly into the bottom of your spinal canal. Other types of injection can also be used to treat back pain.

- There is very mixed evidence about whether epidurals or other injections can help people with lower back pain. Currently, the evidence is that they have no benefit for simple back pain and have rare, but occasionally serious side effects, however they can be helpful in mild or moderate sciatica.

- Epidurals may not have any benefit for people with neck pain (cervical spine pain).

Different types of injection can sometimes be used to treat back pain in certain individuals. For example injections such as epidurals are the treatment of choice for some types of sciatica. However, for most people with long-term lower back pain, there is little evidence to say whether they are effective or not. If you experience severe and persistent pain then it may be worth considering an injection but you should first discuss your case with your doctor. Injections are usually performed by doctors with special skills in this area such as anaesthetists and many injections are used as a diagnostic procedure to determine where pain originates so it can be treated in another way.

Epidurals or Epidural Steroid Injections

The most common type of injection given to people suffering from back pain and sciatica is an epidural. Steroids or painkillers (local anaesthetics) are injected directly into the epidural space of the spinal canal at the base of your spine (caudal epidural), or in the low back (lumbar epidural). The theory behind epidurals is that drugs will numb the nerve roots and reduce any swelling (inflammation). This will allow time to build up movement and muscle support. It is similar to the injections that some women have to ease labour pain, but with different ingredients.

The injection will be given by a specialist doctor, probably an anaesthetist. You will be asked to lie on your front or side and the specialist will find the base of your spine to find the exact spot to put the injection. X-ray imaging may be used to ensure the correct positioning of the needle. Once the specialist has carefully inserted the needle it will take a few minutes for the anaesthetic or steroid solution to be injected. Usually you will only feel some pressure at the bottom of your spine, but some people do feel a sharp stabbing pain. Tell the doctor if you feel uncomfortable. Any pressure or pain should stop immediately the needle is removed. You will be asked to remain sitting or lying down for 10 to 20 minutes and then you should be able to get up and go although your legs may feel weak at first and you should not drive immediately. It is best to be accompanied if you are an out-patient.

Evidence gathered by Best Treatments (part of the British Medical Journal group) and NHS Direct is the clearest and most up to date on the subject. They have brought doctors together to study all the available evidence and their conclusion is that:

- For people with short-term back pain the evidence is confusing. One study showed that epidurals worked but unfortunately, the other research study showed that they didn’t.

- For long-term back pain there was only one review of all the evidence. This study showed that epidurals give no more benefit than dummy treatments (placebos).

- Most doctors however believe that epidural injections are helpful in some individuals with moderate sciatica from nerve compression or irritation.

Problems with epidurals are rare but can include headaches or fevers, infections (epidural abscess) and/or worse pain.
Questions to Ask

1. Is the treatment done as a day case and can I drive home?
2. Does the treatment require x-ray guidance?
3. Is intravenous sedation needed for this treatment?
4. Is an intravenous drip needed for this treatment?
5. Do I need to fast beforehand?
6. Can I take my normal medication?

Other Types of Injection

Facet Joint Injections
These are injections of a mixture of an anaesthetic and a steroid into the joints in the spine that link vertebrae together, known as the facet joints. Although widely talked about on US health websites, research into facet joint injections has shown that they are of doubtful benefit and have occasional complications. Meningitis, infection, bleeding and damage to the nervous system are some of the rare, but serious side effects which have been described.

Trigger Point and Soft Tissue Injections
These are injections of a local anaesthetic and steroid into painful areas of muscle and their attachments to bone (like tennis elbow) that form when muscles fail to relax, known as trigger points. Trigger points can cause referred pain (pain in other areas such as the buttocks and legs). There is little evidence to support the use of trigger point injections as the evidence cannot say whether they are effective or not. Infections, damage to the nerves and bleeding are some of the rare side effects. However many clinicians find them useful.

Nerve Blocks
Are injections of local anaesthetic and/or steroids around nerves in the spine to numb the nerve and reduce inflammation. The nerve root is temporarily blocked and if the pain consequently stops, that nerve can be identified as the cause of the pain. For this reason it is often used as a diagnostic method to determine the source of pain as well as a pain relief option. Nerve blocks appear to be effective in some short-term cases but there is little evidence of their effectiveness in the wider population and on a long-term basis. Side effects include stiffness and numbness of the legs and back, infections and bleeding.

Prolotherapy
This involves the injection of an irritant solution into the connective tissues/ligaments of the back to stimulate their growth in order to strengthen them in weakened areas. There is little evidence regarding the efficacy of prolotherapy.

Advice is available from your local Primary Care Trust or GP

Relevant Information

- BackCare Information Sheet - Drugs for Pain Relief
- BackCare Booklets – Basic Back Care, Managing Back Pain