Zygapophysial (‘Facet’) Joint Injections

Why are they done?

Chronic persistent pain can arise from any one of a number of sources in your back or neck.

Sometimes it may be possible to localise this to one or more joints of the spine (these are called zygapophysial joints, or incorrectly, facet joints).

The procedure to identify such a joint is relatively simple and quite safe, but does require the use of an x-ray machine to be able to localise the location of the fine nerves to the joint with accuracy and reliability. Pain arising from these joints cannot be diagnosed by any other means (including CT scan, MRI scan or bone scan). X-ray controlled diagnostic blocks are the only means available of identifying this source of pain.

Scientific studies have shown that amongst patients with chronic low back pain, the prevalence of lumbar zygapophysial joint pain may be 15-40%, and in chronic neck pain, particularly after motor vehicle accidents, the prevalence of cervical zygapophysial joint pain is of the order of 50%.

If the procedure has been discussed with you and you would like to proceed with it, it is important to understand that it is being done to clarify the origin of your pain. It is not reliably likely to have therapeutic benefit for you (that is, reduction in your pain), as only local anaesthetic is used, and this wears off, usually between 30 minutes and 6 hours. However, if the block is successful and it breaks your pain cycle, up to a third of people having the injection, notice a reduction in the severity of pain for a period of days or weeks. However, this is not a reliable response, it is not the reason for doing the injection in the first place, and cannot be predicted beforehand.

The Procedure

You should be fully aware of why the blocks are being done: that it is for diagnostic and not therapeutic value, and the only person who can determine if it has worked is you, the patient.

Essential to the procedure is your evaluation of your pre-injection, compared to post-injection pain. To this end, we ask you to complete a somewhat detailed Pain Chart, including some diagrams of your pattern, and you must bring the completed charts to your doctor the next time in order to discuss the effectiveness of the procedure, and what the next step may be.

A minimum of two sessions of injections are usually required, in which two different (one short acting, and one long acting) local anaesthetic’s are used, and it is up to you to report whether or not you have had pain reduction and for how long it lasts. The reason for the minimum of two sessions of injections is what is called the “placebo” response rate. In any
group, people with pain (and in fact people having treatment for many medical conditions) have been shown to respond to any bland treatment at a rate of 20-40%.

We try to get around this by undertaking the same procedure on both occasions, but only varying the local anaesthetic duration without you knowing which one has been used and you reporting the duration of its effect. The option of doing a procedure with salt water may be discussed with you.

The procedure involves you lying on your side for neck pain and face-down for back pain. Guided by a special maneuverable low-dose x-ray machine a fine needle is directed to the target point at 2 or 3 locations. Radiation exposure has been described as equivalent to a 1 hour plane flight.

It is important that you realise that you may get no relief from the injection, but this is still useful information as it implies that that joint(s) is not the source of your pain. It is also emphasised that it is up to you to report the result honestly and to have no fixed expectation of the result.

Safety

How safe is it? The procedure is safe, although as with any injections, there is a very small risk of infection, bleeding or allergic reaction. There is some radiation exposure from the x-rays. The main side effect is some soft tissue soreness from the needles, but this usually wears off within hours. The procedure can be thought of as similar to a dental injection.

After the Procedure

There may be some local soft tissue soreness from having had needles in the back or the neck. Please feel free to use simple analgesics or ice for this, but try and differentiate this pain from your normal underlying pain problem for which you had the injection.

Please carefully consider the relief or non-relief of the underlying pain and diligently complete the Pain Charts. Has some part of your pain completely gone, and if so for how long? This documentation is very important for discussions later on concerning the effectiveness of the injections.

If relief occurs you should carefully attempt to move into some activities of daily living that are normally restricted by pain, but within reasonable limits and record these movements and activities for future discussion.

You should bring your completed Pain Chart to your next appointment, as this will guide further discussions or procedures.