Costotransverse and Costovertebral Joint Injection Information

What are the costotransverse and costovertebral joints, and why are injections of these joints helpful?
Thoracic costotransverse and costovertebral joints are small joints located in pairs where the ribs join the mid-back. They provide stability to your mid-back and chest wall. If the joints become painful, they may cause pain in your back, ribs, chest or abdomen.

A costotransverse and/or costovertebral joint injection serves several purposes. First, by your physician’s placing numbing medicine into the joint, the amount of immediate pain relief you experience will help confirm or deny the joint as a source of your pain. That is, if you obtain complete relief of your main pain while your joints are numb, it means these joints are likely your pain source. Furthermore, time-release cortisone will be injected into these joints to reduce any presumed inflammation, which can, on many occasions, provide long-term pain relief.

What will happen to me during the procedure?
An IV will be started, so that adequate relaxation medicine can be given, if needed. After you are lying on an x-ray table, the skin over the mid-back will be cleaned with a betadine solution. Next, the physician will numb a small area of skin with numbing medicine (an anesthetic), which stings for a few seconds. Next, the physician will use x-ray guidance to direct a very small needle into the joint. Your doctor will then inject several drops of contrast dye to confirm that the medicine goes only into the joint. A small mixture of numbing medicine (an anesthetic) and an anti-inflammatory cortisone will then be slowly injected.

What should I do and expect after the procedure?
In 20 to 30 minutes after the procedure, you will move your mid-back and try to provoke your usual pain. You will report your remaining pain (if any) and also record the relief you experience during the next week in a “pain diary” we will provide. You may or may not obtain improvement in the first few hours after the injection, depending upon if the joints that were injected are your main pain source. Mail or fax the completed pain diary back as directed, so that your treating physician can be informed of your results, and can plan future tests and/or treatment if needed.

On occasion, you may feel numb or have a slightly weak/odd feeling in your mid-back for a few hours after the injection. You may notice a slight increase in your pain lasting for several days as the numbing medicine wears off before the cortisone is effective. Ice will typically be more helpful than heat in the first two to three days after the injection. You may notice an improvement in your pain two to five days after the injection. If you do not notice improvement within 10 days after the injection, it is unlikely to occur. You may take your regular medicines after the procedure, but try to limit your pain medicines for the first four to six hours after the procedure, so that the diagnostic information obtained is accurate. You may be referred for physical or manual therapy after the injection while the numbing medicine is effective, and/or over the next several weeks while the cortisone is working.

On the day of the injection, you should not drive and should avoid any strenuous activities. On the day after the procedure, you may return to your regular activities. When your pain is improved, start your regular exercise in moderation. Even if you are significantly improved, gradually increase your activities over one to two weeks to avoid recurrence of your pain.