

LUMBAR FACET JOINT LESION



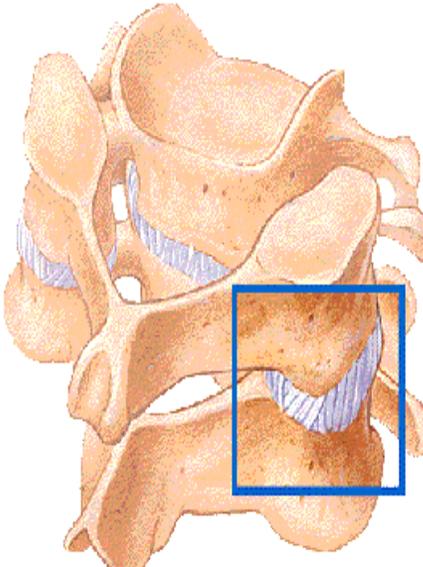
What is a facet joint?

The facet joints are small stabilising joints located between and behind adjacent vertebrae. Their role is to control the needed amount of mobility in order to turn, look round and bend forwards and backwards.

What is a facet joint lesion?

The sliding surfaces of the facet joints are covered by a low friction, moist cartilage. When facet joints become worn or torn the cartilage may become thin or disappear. This can cause the joints to become inflamed. When this occurs, a protective reflex may arise which causes the muscles which run either side of the spine to spasm.

Mechanism of Injury

An anatomical illustration of a lumbar vertebra, showing the various processes and the interlocking facet joints. A blue rectangular box highlights one of the facet joints, showing the articular surfaces and the surrounding cartilage.

Most commonly in those who perform repeated extensions (leaning backwards) or standing in one position for too long. Poor posture and traumatic injury can also cause this problem. This overloads the facet joints and causes inflammation, swelling and pain.

Facet joint inflammation may also be a result of a twisting injury in which the cartilage around the joint becomes torn. The torn portion of cartilage can then limit mobility by forming a block within the joint. As a result, pain is produced when pressure is applied to the joint.

Disc degeneration can also cause irritation around the facet joints as can arthritis as a result of previous injury or general wear and tear.

What are the symptoms of a facet joint lesion?

- You may experience pain in the back which may also radiate symptoms into the buttocks or legs.
- Acute episodes of lumbar facet joint pain are usually intermittent and generally unpredictable.
- Typically, leaning backwards is more painful than leaning forwards.
- Mobility will be limited

What will Physiotherapy consist of?

When facet joints become inflamed the muscles which run parallel to the spine contract or go into spasm as a protective mechanism. It is therefore important for your therapist to relax these muscles in order to correct abnormal curvature of the spine. Your therapist will also need to reduce the inflammation within your spine and prevent the condition from occurring in the future. This can be achieved with:

Massage encompassing a variety of techniques and is given with sufficient pressure through the superficial tissue to reach the deep lying structures. It is used to increase blood flow, decrease swelling, reduce muscle spasm and promote normal tissue repair.

Deep friction is an aggressive massage technique. It is applied across the tissue fibres. Pressure is given as deeply as possible. This technique is initially painful but can cause a numbing effect. It can be used to break down scar tissue, restore normal movement and prepare the injured structure for mobilisation or manipulation.

Mobilisation is a manual technique where the joint and soft tissues are gently moved by the physiotherapist to restore normal range, lubricate joint surfaces, and relieve pain.

Manipulation is a high speed, short movement thrust given at the end of available range. It is used to break down adhesions, remove a blockage within a joint and restore full painless movement. A click or noise may be experienced during this treatment

Ultrasonic Therapy transmits sound waves through the tissues stimulating the body's chemical reactions and therefore healing process, just as shaking a test tube in the laboratory speeds up a chemical reaction. It reduces tissue spasm, accelerates the healing process and results in pain relief.

Interferential Therapy introduces a small electrical current into the tissues and can be used at varying frequencies for differing treatment effects. E.g. pain relief, muscle or nerve stimulation, promoting blood flow and reducing swelling/inflammation.

Short Wave Diathermy emits electromagnetic waves deep into the tissues. This results in increased blood flow to the area to promote healing, gives pain relief and can produce a heating effect to soften the tissues in preparation for mobilisation/manipulation.

Other treatments that could be used

Laser Therapy emits beams of light into the tissues of the body, stimulating chemical reactions and having a similar effect to ultrasound though using light energy instead of sound energy.

Acupuncture is an oriental technique of introducing needles into the skin to increase or decrease energy flow to promote pain relief and healing.

Injection Therapy is a specialist procedure, which needs the consent of your G.P. A non-harmful steroid and/or local anaesthetic are injected directly into the injured structure. It has a dramatic effect on removing inflammation and promoting healing.

Podiatry an analysis of the foot mechanics and structure during walking or running with correction as appropriate.

What can you do to help your condition?

Analgesia / Anti-inflammatory medication– In consultation with your GP or Pharmacist these types of medication may provide significant pain relief.

Heat Packs- The application of a hot pack to the lower back may be beneficial in helping the muscles to relax, promote blood flow to the area and provide pain relief

Posture – good posture enables the muscles of the spine to act as a supporting structure and decreases the strain on the joints of the spine.

Ergonomics - ensure that all your seating is encouraging you to attain good posture and your mattress is supporting your spine adequately.

Lumbar supports- **MAY** provide some benefit but should only be used under the guidance of your therapist

Exercise Programme -N.B. Exercises may cause discomfort but should not cause pain so please consult with your therapist if you have any concerns.



Starting Position: Lie on your back on a table or firm surface. Both knees bent feet flat on the surface



Action: Cross your arms over your chest. Turn your head (trunk) to the right as you turn both knees to the left. Allow your knees to relax and go down without forcing. Bring knees back up, head to centre, reverse directions.

Starting Position: Kneel down on the floor in the "all-four's" position. Keep your head straight so that the gaze of your eyes is toward the floor.

Action: Slowly lower your trunk as far as you can so that your back is arched. Do not pull it down but let it relax as you lift your face towards the ceiling. Then round your back up at the waist as far as you can by contracting your lower abdominal muscles as you lower the top of your head toward the floor. All motion should be initiated from your lower back



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Starting Position: Lie on your back on a firm surface. Knees bent and feet flat on the table. Flatten your back to the floor by pulling your abdominal muscles up and in.



Action: Bring one knee toward your chest. Hold this position for 30 seconds. Lower your leg to the starting position. Then repeat on opposite knee

B. Bring one knee toward your chest. Straighten the knee. Hold for 30 seconds and then slowly lower the leg to the starting position. Repeat on opposite leg. **Maintain your pelvic tilt and keep your resting leg relaxed at all times. Do not hold your breath.**



Starting Position: Sit in a chair with your feet flat. Relax your shoulders and keep your head level. Your weight should be evenly distributed between your buttocks and your feet.

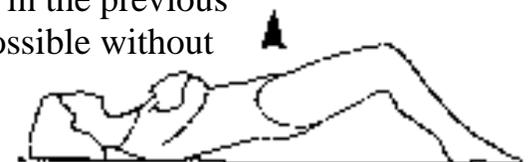


Action: Relax your neck. Curl your neck, upper back and low back slowly forward. Allow your hands to reach the floor so your palms are touching the floor. Hold for 30 seconds. Straighten up slowly so that you bring your head up last. Return to the starting position.

Starting Position: Lie on your back on a table or flat surface. Your feet are flat on the surface and your knees are bent. Keep your legs together and cross your arms over your chest.



Action: Tilt your pelvis and push your low back to the floor as in the previous exercise, then slowly lift your buttocks off the floor as far as possible without straining. Maintain this position for 5 seconds. Lower your buttocks to the floor. Do not hold breath.



What if physiotherapy does not help or resolve my condition?

It is very rare that physiotherapy does not give great benefit, in these cases a cortisone or epidural injection may be appropriate and in very extreme cases surgery is a possible option. These options can be discussed with your therapist if appropriate.