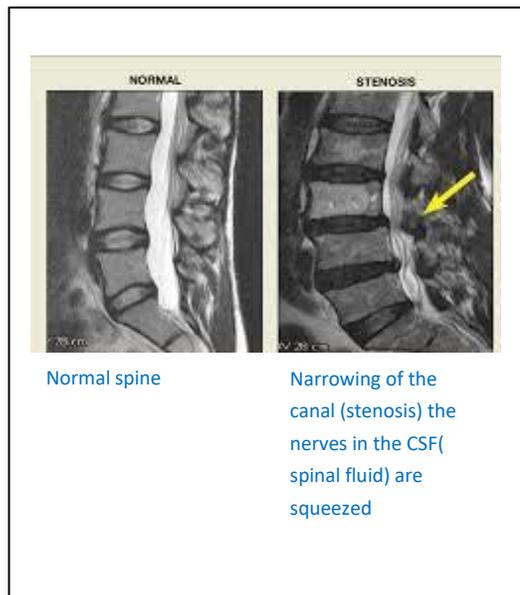
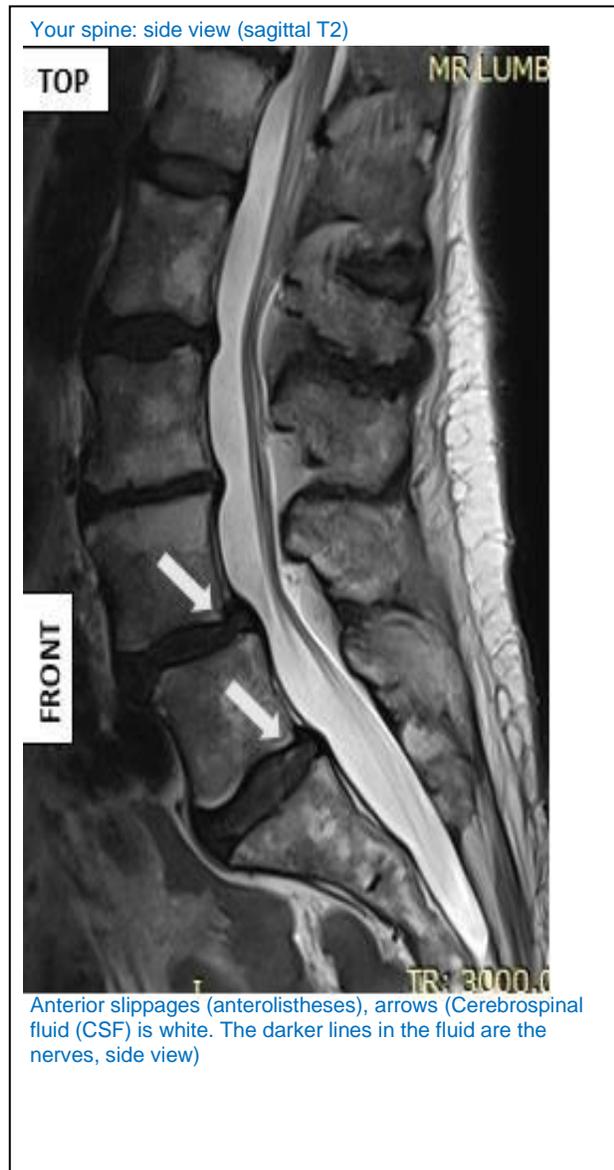


### Concerns and questions:

1. The anterolisthesis, lateral recess and central spinal stenosis may possibly require spinal fusion surgery with screws and rods! (Page 2)
2. Very concerned that hip pain was due to hip degeneration and may need hip replacement surgery! (Page 8)
3. Possible hip and or spine surgery and constant pain significantly increased level of anxiety, considering seeing a psychiatrist.
4. Pain made sleeping very difficult. Could not lay on left side or get comfortable and would only sleep for one to two hours at a time.
5. Could not function properly as a volunteer because of the pain, eventually quit.
6. Misses going to the gym

1. Yes, you do have an anterolisthesis (slippage of your vertebra) at two levels but neither is causing significant central spinal stenosis or significant recess stenosis to compress any nerves to give you nerve pain. It is not the cause of your leg pain so surgery should not be necessary.
2. The slippage of your vertebra will cause facet degeneration which can produce back and/or hip and or leg pain above the knee but not usually the knee. But almost all of your facets are degenerated and if one or several are causing your pain it will be difficult to determine the source or sources. Note, when facets sufficiently degenerate the small nerve to it is no longer functioning and the pain is relieved.
3. It is your right hip that is degenerated, not your left. You may at some point in the future need right hip replacement surgery but not now, there is no pain. You were advised to take turmeric with curcumin which may help the right hip degeneration or slow it down. Your left hip looks fine and is unlikely the cause of your left hip pain.
4. The diagnosis given of iliotibial band syndrome would explain all the pain you have, the lateral knee pain, lateral leg pain and the hip pain. If you also have back pain, then maybe your facet is causing that. If no back pain, then it's not the facets.

**Anterolisthesis:** your x-ray and MRI report states that you have two levels of anterior slippage of the vertebrae (anterolistheses) and mild spinal stenosis (narrowing).

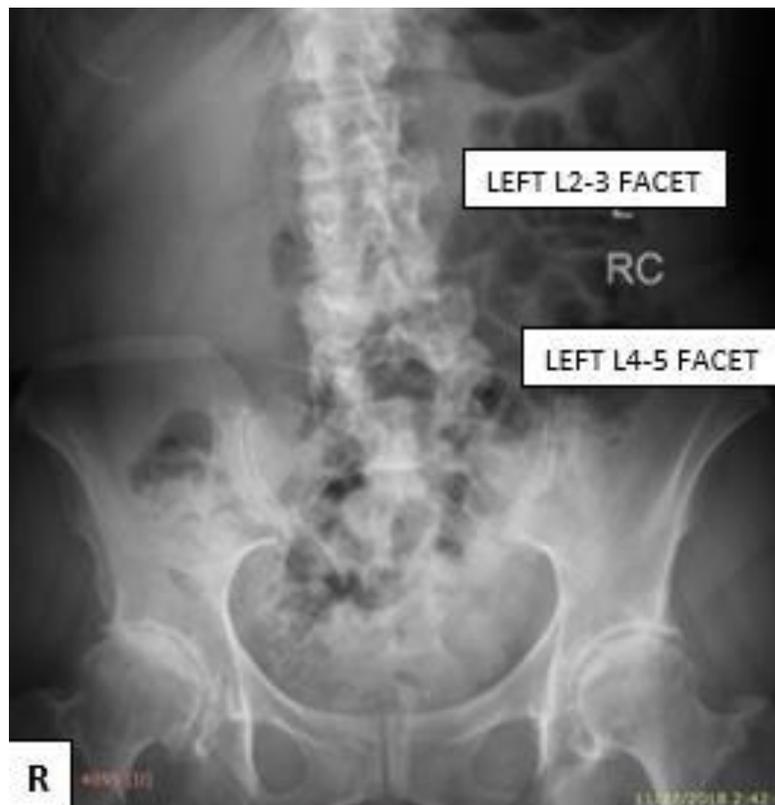


When there is an anterior slippage of the vertebra the facet joints in the back of the spine will degenerate. When the facets sufficiently degenerate, the pain disappears.

## Facet degeneration as a possible cause of your pain:

Though your left hip, buttock and side of leg pain may be caused by your facet degeneration, it generally doesn't cause side of the knee pain. It is unlikely that all of your pains are coming just from facet degeneration! Almost all of your facets are degenerated. Any one or a combination of them can cause some of your pain. Deciding which ones to treat may be difficult.

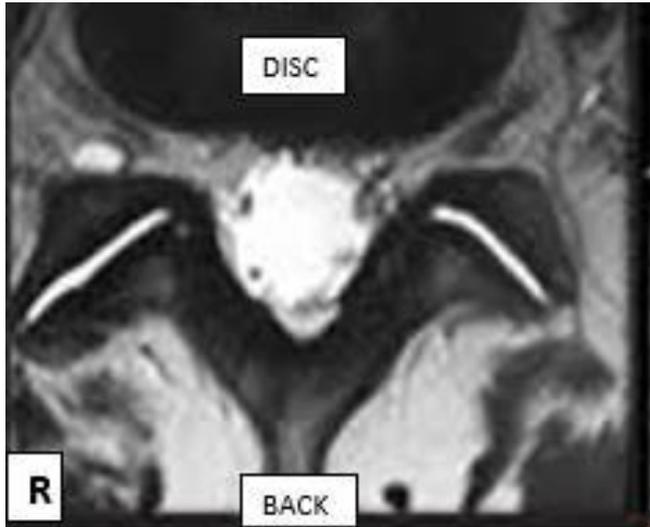
Your hips x-ray frontal view



Facet degeneration with enlargement (hypertrophy) of the left L2-3, L3-4 and L4-5 and right l4-5:

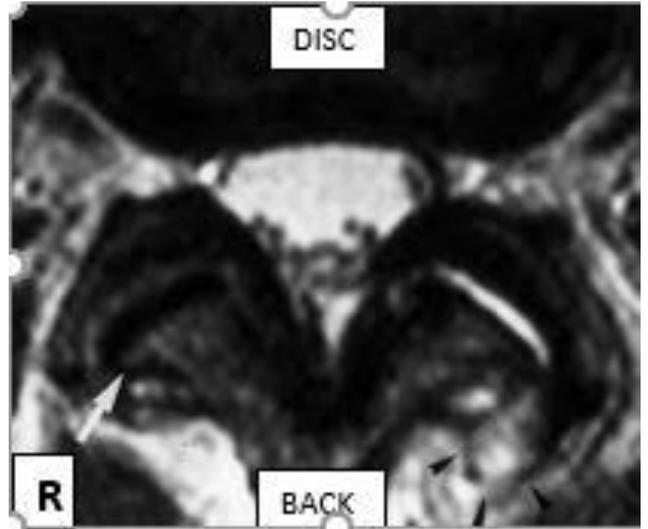
Generally, when facets enlarge this much, they usually no longer produce pain because the facet does not move, or the nerve is also degenerated and no longer produces pain signals.

MRI cross sectional (axial) view



Normal facets: The bright lines are normal cartilage and fluid in the joint between the bone

MRI cross sectional (axial) view



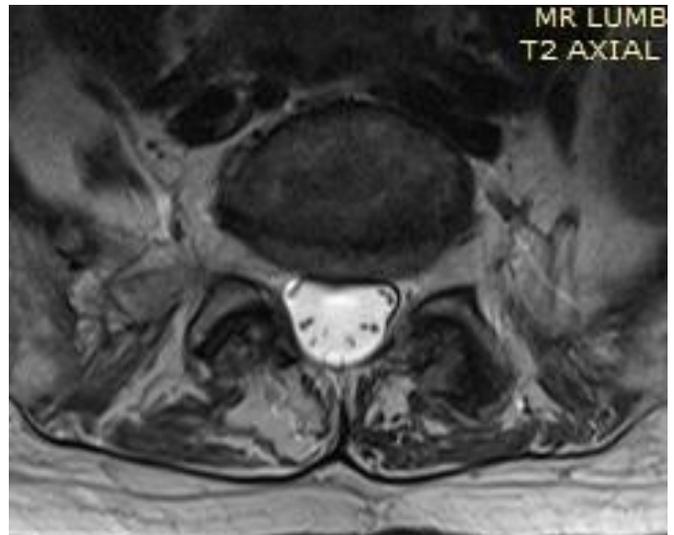
Degenerated right facets, arrow, black line is bone on bone, no cartilage

CT cross sectional (axial) view



Thickened degenerated right facet with gas in the joint, black line

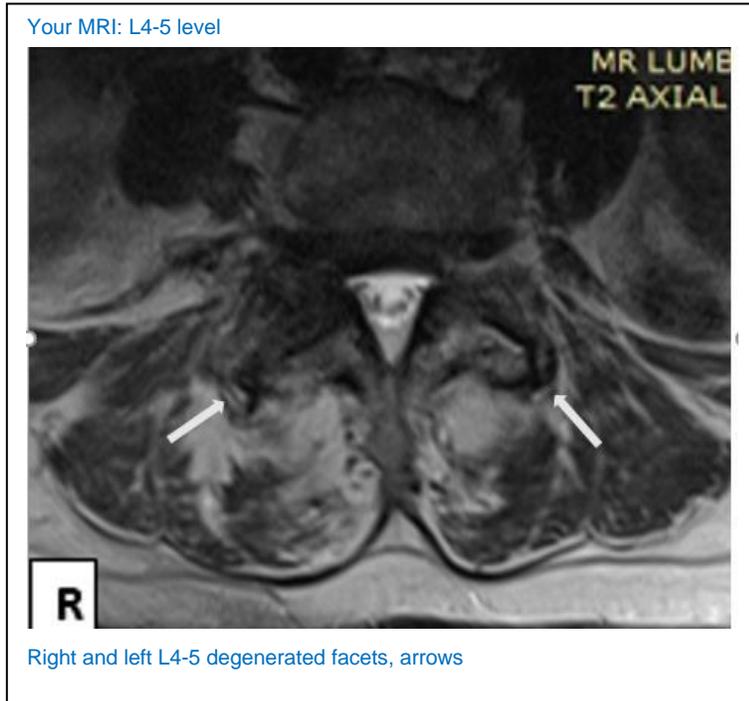
Your MRI: L5-S1 level



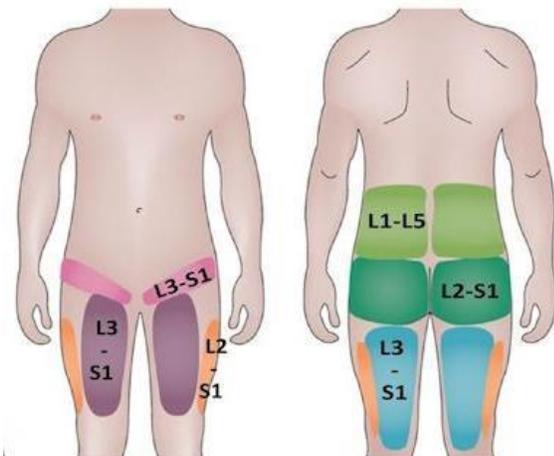
Right and left degenerated facets, there are no normal bright lines

Both your left L5/1 and right and left L4/5 facets are degenerated and enlarged

(hypertrophied). The thick black lines are “bone on bone”, no bright cartilage, arrows. The L3/4 and L2/3 facets (not shown) are also degenerated, so you don’t know which level, if any or combination of levels are causing the pain, (R: right)



If your facets were causing your pain, it is usually referred to these sites depending on which facet joint is the cause. **Note, referred pain does not usually go to the knee**



Sites of facet referred pain

## What treatments are available?

### Physical therapy

**Medications:** Some patients may require oral anti-inflammatory medications or topical patches, creams, salves or mechanical bracing. Sometimes muscle relaxers are prescribed for muscle spasms.

**Steroid joint injections:** A facet joint injection is a minimally invasive procedure that involves an injection of a corticosteroid and an analgesic-numbing agent into the painful joint. Steroids can reduce the swelling and inflammation of the nerves. The pain relief can last from days to years, allowing your condition to improve with physical therapy and an exercise program. If you experience a recurrence of pain, the procedure can be repeated.

**Nerve radiofrequency ablation:** If steroid joint injections are successful but pain recurs frequently, an ablation procedure to burn the small nerves of the joint capsule may be recommended. First, a diagnostic [nerve block test](#) is performed to determine which nerves are to be treated. Anesthetic is injected along the nerve to “block” pain (Fig. 4). If the block is successful, a radiofrequency ablation will likely provide more lasting pain relief.



Facet joint

A nerve ablation procedure is performed like the nerve blocks. Once the needle is in place, an electrode is inserted, and a radiofrequency current destroys some of the medial branch nerve fibers carrying pain signals in the joint (Fig. 5). Pain relief may last from 9 months to more than 2 years. It is possible the nerve will regrow through the burned lesion that was created.

While facet joint arthritis can't be reversed, there is evidence that exercise, lifestyle changes and careful management of your back pain can contribute to better quality of life.

## You were told your right hip is degenerated

Your hips: Frontal x-ray of pelvis and hips



Right hip

left hip

Yes, your right hip is degenerated (narrowed joint space, arrow) but not significantly to warrant a hip replacement now. More importantly, it no longer is painful and has not been painful for almost a year! Your left hip joint is fine, (short arrow)

It is your left hip and buttock that now hurt. There is no left hip degeneration on the x-ray. The left hip is fine and is unlikely the cause of your hip pain. If there is any degeneration not visible on the x-ray, an MRI would be needed to show small erosions of the cartilage, labral (lip) tears and/or subtle bone changes, all of which would not be visible on x-rays.

You were advised to take turmeric curcumin with bioperene for your hip arthritis.

## Efficacy of Turmeric Extracts and Curcumin for Alleviating the Symptoms of Joint Arthritis

<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5003001/>

### Discussion

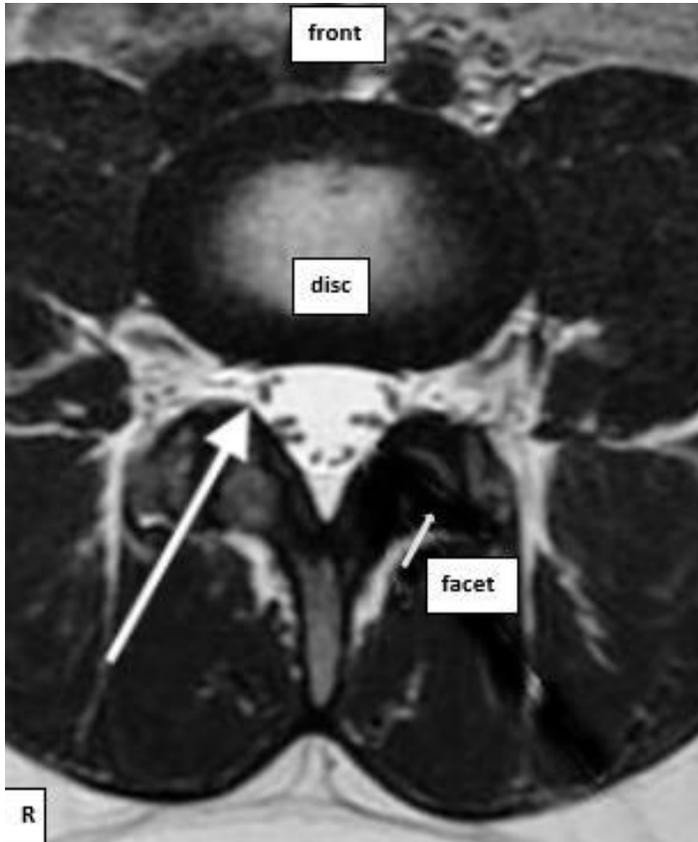
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Although the exact biochemical cause of osteoarthritis remains unknown, it is associated with inflammation in articular cartilage, which can cause abnormal joint structure in the knee and hip and it is accompanied with pain. The most common treatments are analgesics and NSAIDs.<sup>5</sup> However, the drugs have serious adverse events in the gastrointestinal tract and cardiovascular system.<sup>6</sup> Therefore, herbal treatments that can mitigate the pain and inflammation have been investigated as potential primary or adjunct therapies for relieving arthritis symptoms. This systematic review and meta-analysis provided scientific evidence that **8–12 weeks of standardized turmeric extracts (typically 1000 mg/day of curcumin with bioperine) treatment can reduce arthritis symptoms** (mainly pain and inflammation-related symptoms) and result in similar improvements of the symptoms as ibuprofen and diclofenac sodium. Therefore, turmeric extracts and curcumin can be cautiously recommended for alleviating the symptoms of arthritis, especially osteoarthritis. However, the sample sizes (45–124) of the studies included in this review were insufficient to be conclusive, and some studies represented moderate quality. **Further high-quality RCT (random clinical trials) studies with more subjects are needed to confirm the therapeutic efficacy of turmeric and curcumin for arthritis.**

Turmeric curcumin may be helpful or may slow the progression of the right hip degeneration. The left hip is not degenerated on the x-rays, so it is unlikely to help the left hip pain.

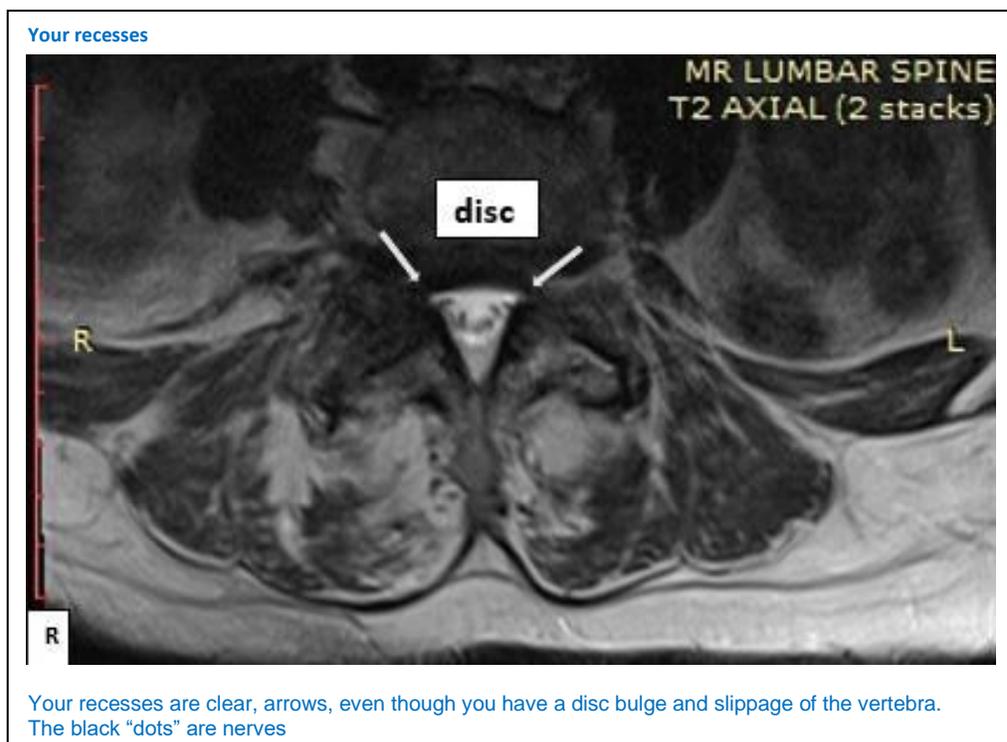
Your report states you have lateral recess stenosis right more than left (which can compress a nerve and cause leg pain). But your leg pain is on the left.

Normal lateral recess- cross sectional, axial MRI,



Normal recess. Black "dots" are nerves

Lateral recess stenosis is caused mainly by facet joint overgrowth and disc bulge which can cause squeezing or pinching of the nerve roots as they exit the spine through the foramen, “doorway”. Slippage of one vertebra upon another may make it worse.



**Your pain doctor diagnosed you with iliotibial band syndrome as one of the causes of your pain.**

The iliotibial band is just fibrous tissue that covers the outside of the knee, the outside of the lateral leg muscles and the outside of the hip and pelvis. If it is irritated or inflamed, it can cause pain along its course from the knee, side of the leg to the hip and pelvis.

The most important treatment is to stop the activity that caused the pain. In your case, cycling at the gym. Rehabilitation therapy as your doctor suggested should also help. If it is inflamed, patients often report pain while lying in bed on the affected leg, one of your complaints and while crossing their legs, stretching an inflamed tissue.

