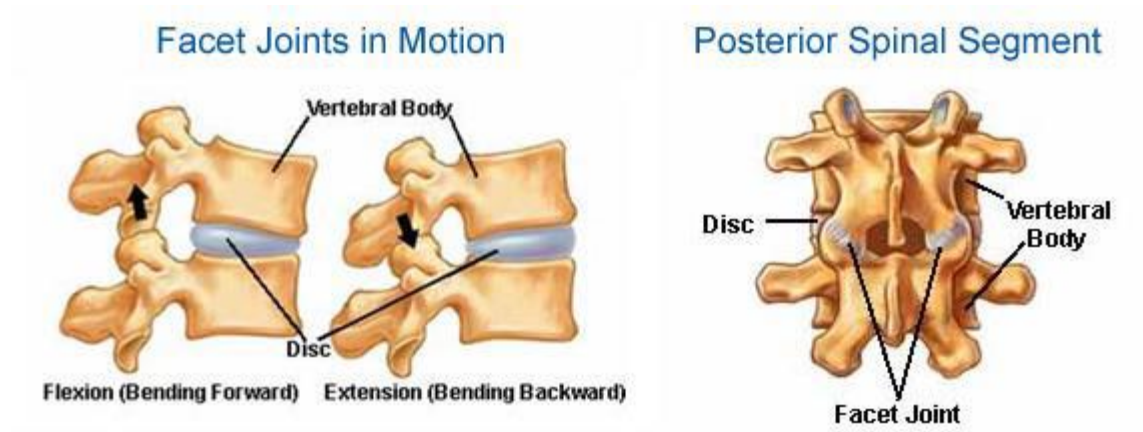
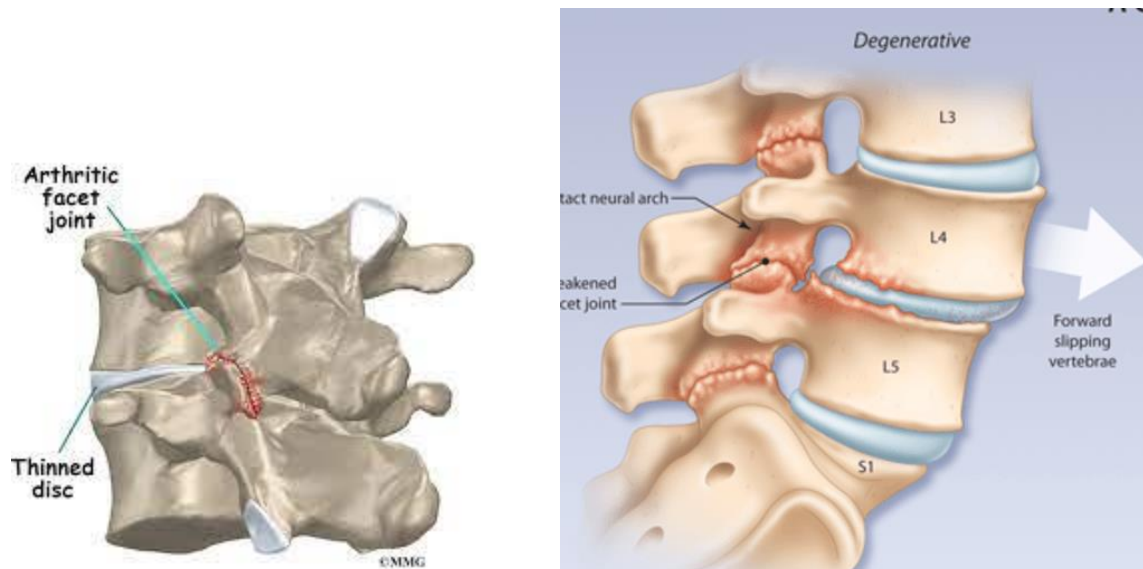


## Lumbar facet joints and lumbar facet pain:

The lumbar spine contains five pairs of lumbar facet joints (or zygapophyseal joints) or 10 joints in total. Located at the posterior aspect of the spine, these joints are what allow for most of the normal movement in the lumbar spine (forwards and backwards bending, side bending and rotation).



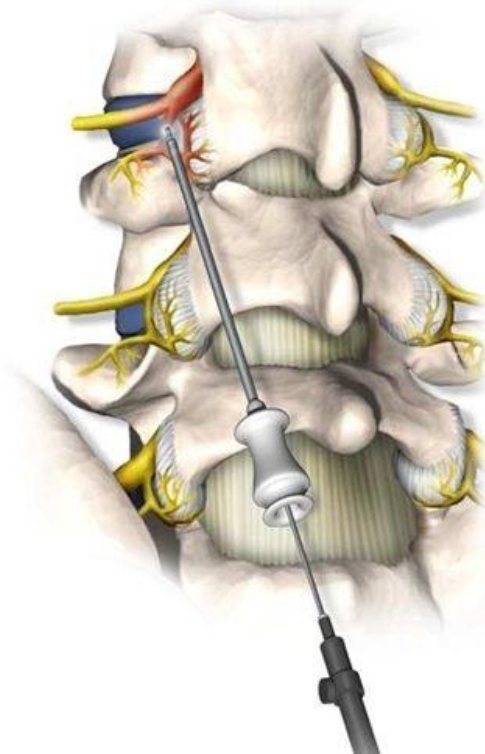
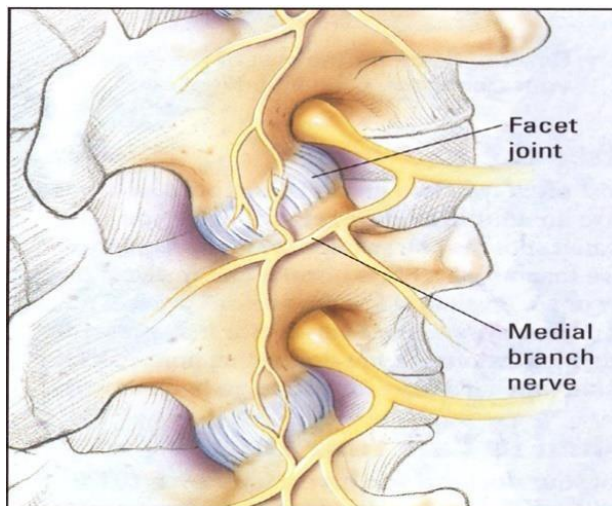
In younger individuals (teens to 50's) these joints only take on about 20% of the normal loadbearing demands of the lumbar spine. Later in life (50's and beyond) these joints will begin to take on more loadbearing as the lumbar discs go through age-related changes or other pathological changes themselves (see separate section on lumbar discs). This aging process is known as the degenerative cascade of the lumbar spine. By late adulthood, the facet joints may take on up to 80% of the gravitational load of the body leading to inflammation, arthritis, bony spurring, cyst formation and abnormal shifting of the vertebral bodies (spondylolisthesis).



It is well known that the lumbar facet joints can be a source of low back pain. Each facet joint receives a nerve supply from two of the "medial branches" of the lumbar nerve roots. Lumbar facet joint pain accounts for only 10-15% of chronic low back pain in younger patients, but as the years go by the incidence increases, and can account for 30%-50% of chronic low back pain in older adults.

Typical symptoms that may suggest lumbar facet joint pain are pain in the lumbar spine, top of the buttocks or in the sides of the hips-pelvis. Pain is typically unilateral (on one side of the body) but can be bilateral (on both sides). Pain may be sharp, dull, aching, throbbing and is typically worse with standing, twisting side-to-side or bending (forwards or backwards). It may be very difficult to differentiate lumbar facet joint pain from other common sources of low back pain (i.e., the lumbar discs or sacroiliac joints).

Treatment for lumbar facet joint pain typically includes rest, ice, NSAIDs (Ibuprofen), analgesics (Tylenol), chiropractic, physical therapy and home exercise. When these measures fail spinal injections may be offered. Diagnostic lumbar medial branch blocks vs. therapeutic lumbar facet joint injections may be utilized to diagnose and treat lumbar facet joint pain respectively. When the former technique is used the goal is to confirm that the facet joints are indeed the true source of pain. When diagnostic medial branch blocks are successful patients are then referred for radiofrequency neurotomy/ablation (RFA) of the medial branches. This can result in long-lasting pain relief anywhere from 6 months to 2+ years.



The lumbar medial branches of painful lumbar facet joint can be anesthetized to see if the pain temporarily resolves. This is called, “diagnostic medial branch blocks.” If the block is successful, these medial branches can be targeted with a special probe that uses heat to coagulate or damage the nerve so that it can’t deliver pain messages up to the brain. This technique is called radiofrequency neurotomy or radiofrequency ablation (RFA)