

## **Facet Joint Osteoarthritis**

The facet joints are the small joints at the back of the spine that facilitate movement of the spine at each level. Each vertebra articulates with another vertebra via these joints which are approximately the size of a knuckle joint. Like any other joint in the body, they are lined with cartilage and lubricated by synovial fluid. Also, like any other joint in the body they can be affected by arthritis – joint inflammation - which may or may not be painful. Usually, this is wear and tear osteoarthritis, but inflammatory more generalised arthritis can also affect the spine. eg. rheumatoid arthritis.

Wear and tear can occur de novo in the joint or as a result of disc degeneration anteriorly when the disc height collapses and the joint then becomes incongruent. In reality, a combination of the two usually exist. It is unusual to see someone with advanced disc degeneration and no facet joint abnormality. Conversely, the appearance of degenerative facet joints can occur in the presence of nearly normal discs.

Patients often complain of low back pain made worse by extension. Direct palpation over the affected facet(s) may be uncomfortable. The pain is activity related and often relieved to an extent by lying down.

Diagnosis is made clinically with the aid of MRI, CT or plain radiographs and the first line of treatment should always be non-operative. This includes weight loss, physiotherapy, manipulations and acupuncture. Injections of local anaesthetic and steroid are often used as an adjunct but have the added benefit of being diagnostic – ie. If the pain goes with a numbing injection then the pain emanates from that area. A word of caution is necessary here as often the injection is not into the joint itself, but around it, and then it is not known if the problem is the joint itself or from the surrounding tissues. Formal pain management programs may also help and in some cases where a positive response to a specific injection near the facet has been good then a rhizolysis can be attempted. This burns away the nerve supply to the joint and is performed with sedation as a day case.

Rarely surgery is suggested for low back pain secondary to facet pain in the absence of deformity or nerve pain. If nerve pain or deformity is present then the indications for surgery are much more extensive, but non-operative measures should still be pursued primarily. If surgery is suggested then options include fusion across the joint or off loading the joint with a stabilisation system or an interspinous spacer.