EDITORIAL

# Juxtafacet cysts in the Lumbar Spine: Surgical Management

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## EDITORIAL

The Kao coined the term "juxta facet cyst" (JFC) in 1968 to include both synovial cysts and ganglion cysts adjacent to a spinal facet joint or arising from the ligamentum flavum of the spinal facet joints. Ayberk G described the first spinal synovial cyst during a postmortem examination. Voss Schulte and Borger reported the first case of a spinal synovial cyst causing root compression in 1950. Discal, synovial, and ganglion cysts, Tarlov's perineural cyst, extradural arachnoid cyst, dermoid cyst, and neuroma with cystic changes are among the clinical and radiologic differential diagnoses of intraspinal extradural cystic mass lesions. Juxtafacet cysts of the lumbar spine are extradural degenerative lesions that cause symptoms of lower back pain and radiculopathy. They are sometimes mistaken for free fragments of herniated lumbar discs or other epidural masses. These lesions are most common in the lumbar spine (88e99 percent), with up to 8% occurring in the thoracic region and 1 to 4% occurring in the cervical region.

JFC has an unknown aetiology; possibilities include synovial fluid extrusion from the joint capsule, latent growth of a developing rest, myxoid degeneration, and cyst formation in the condyle. JFC's aetiology is unknown; potential causes include synovial fluid extrusion from the joint capsule, latent growth of a developing rest, myxoid degeneration, and cyst formation in the connective tissue. Increased motion appears to play a role in many cysts, and while the role of trauma is debatable, it is likely to play a role in a small number of cases.

Optimal treatment is a point of contention. If symptoms persist despite conservative treatment, some authors recommend cyst aspiration or facet injection with steroids, whereas most surgeons prefer surgical cyst excision. In this case series study, we describe the posterior decompression and cyst removal, as well as the complete resolution of their sciatic symptoms and neurogenic claudication

Between January 1999 and September 2012, seven patients with Juxtafacet cysts underwent surgery at the _Izmir Bozyaka Training and Research Hospital, Department of Neurosurgery. All patients had a thorough clinical examination and a careful history taken [1-5].

Before surgery, magnetic resonance imaging (MRI) is performed. The correlation of the MRI findings with the clinical findings led to the diagnosis of a Juxtafacet cyst. Juxta-facet cysts showed a typical pattern in T2-weighted images, with a hyper intense center and a hypo intense rim.

All of the procedures were performed under a surgical microscope using the micro neurosurgical technique. The patient was in the prone position while under general anesthesia. All patients had laminectomy (5 patients had decompressed laminectomies and two patients had hemi laminectomy), flavectomy, and cyst excision. The operation material samples were histologically evaluated. During the preoperative and postoperative periods, all signs and symptoms were evaluated. The patients were evaluated in the first and third months following the operation [6].

During the preoperative and postoperative periods, all signs and symptoms were evaluated. Following the operation, the patients were evaluated in the first and third months, as well as additional months during the four-year follow-up period. During the post-operative period, patients' outcomes were evaluated using a questionnaire scoring system. According to this system, a score of 5 indicates excellent (complete resolution of symptoms); a score of 2 indicates good; and a score of 3 indicates poor (minor, occasional pain). Patients were polled to gauge their level of satisfaction with the procedure.

The study included seven patients, five males (72%) and two females (28%), ranging in age from 58 to 68 years, with a mean age of 63 (9.1 STD). The average duration of the symptoms was ten (four STD) months (range 1e12 months) [7].

Regarding the location of facet cysts, five patients (72 percent) had the cyst at the L4-L5 level, and two patients (28 percent) had the cyst at the L5-S1. Table 1 lists the other radiological findings. There were no post-surgery complications. All of the patients had back pain, and five of them also had unilateral radicular leg pain and two had bilateral leg pain.

All patients benefited from the surgery, with five receiving excellent (72 percent) and two receiving good results (28 percent ). Patients who presented with motor and/or sensory deficits were evaluated [8].

Unexpected asymptomatic abnormalities that differ from expected diseases are known as incidental extra spinal findings (IESFs) on imaging. They are often discovered during radiological tests. The detection limits of incidental lesions have increased due to developments in digital evaluation of radiological images. The discovery of such data raises a number of practical and ethical concerns for clinical management. For example, signal saturation bands are used in standard imaging protocols to reduce the number and severity of artifacts in magnetic resonance imaging (MRI) of the lumbar spine; however, incidental findings can include a wide range of abdominal and pelvic organs, and the diseases encountered can be extremely varied [9-10].

Back pain is one of the most well-known medical disorders in industrialized countries, hence we decided to study lumbar imaging in this research. MRI is often favored because it allows for multilane, non-ionizing imaging of soft tissues, and it has become the most popular imaging modality since it can be utilized to assess extra spinal regions.

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## REFERENCES

1. Vivek V, Minesh PM. Clinical ramifications of "genomic staging" of low-grade gliomas. J Neurooncol 2016 Sep; 129(2):195-9.
2. Chris DM. Alkyl-Acylglycerols and the Important Clinical Ramifications of Raising Plasmalogens in Dementia and Alzheimer's disease. Integr Med (Encinitas) 2020 Jun; 19(3):12-16.
3. Derry CR, Victor ZS. Clinical ramifications of the MHC family Fc receptor FcRn. J Clin Immunol 2010 Nov; 30(6):790-7.
4. Matthew B, John LM, Natalie S, et al. Is acupuncture dose dependent? Ramifications of acupuncture treatment dose within clinical practice and trials. Integr Med Res 2020 Mar; 9(1):21-27

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5. Naveed S. Type 2 diabetes-related sex differences in cardiovascular risk: reasons, ramifications, and clinical realities. Eur Heart J 2020 Apr 1; 41(13):1354-1356.
6. Jennifer MB. Clinical Obstetrics & Gynecology: Polycystic Ovary Disease Ethnicity, Diversity, and Psychosocial Ramifications. Clin Obstet Gynecol 2021 Mar 1; 64(1):76-82.
7. Colin PW, Liselotte ND, Jeff TR, et al. Intervention to promote physician well-being, job satisfaction, and professionalism: a randomized clinical trial. JAMA Intern Med 2014 Apr; 174(4):527-33.
8. Richard SK, Lewis HG. Legal Ramifications of Ambiguous Clinical Guidelines-Reply. JAMA 2017 May 16; 317(19):2020-2021.
9. Charles GK, Lori HK. Legal Ramifications of Ambiguous Clinical Guidelines. JAMA 2017 May 16;317(19):2020
10. Joseph RL, Chengcheng Z, Dimitrios M, et al. Abdominal aortic aneurysm measurement at CT/MRI: potential clinical ramifications of non-standardized measurement technique and importance of multiplanar reformation. Quant Imaging Med Surg 2021 Feb; 11(2):823-830.