



Lumbar Facet Joint Cysts: Investigating Demographics and Evaluating Management Within CVUHB – A Retrospective Case Series

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OBJECTIVE: To determine whether facet cysts were managed within CVUHB in agreement with the current literature, investigate patient outcomes and define facet cyst characteristics.

BACKGROUND: Lumbar facet joint cysts (Figure 1) are known to be a rare cause of back pain and radiculopathy which have found increasing appreciation for their significance in recent years. Complications can be as serious as cauda equina syndrome¹ and current literature suggests cyst incidence rates greater than previously thought². Studies outline that management should involve facet injections first with surgical decompression a 2nd line option³. Despite literature recommendations, the universal optimum management is still in contention and yet to be defined.

METHODS: An 87 patient retrospective case series was collated using a radiological database search that screened MRI Spine Lumbar and Sacrum Scan (MRI SLSS) Radiologist reports for the term 'Facet Joint Cyst'. Search parameters were set as scans in over 18 year olds undertaken between 1st January 2013 – 31st December 2017 within CVUHB. Each patients MRI was reviewed to document facet cyst characteristics and any visible coexistent spinal pathology. Professional correspondence formulated from inpatient and outpatient appointments was analysed to determine cyst symptomatology, treatments received and outcomes at follow up.

RESULTS: 22,292 MRI SLSS were performed within CVUHB in the 5-year period, of which lumbar facet cysts were identified on 87 (0.39% crude incidence). The 87 patients (female n=52) mean age was 61.2. 7 patients had >1 cyst. 59/94 cysts caused neural compression – left L5 nerve root most frequently impinged. L4-L5 was the most frequent cyst location (50%) with L3-L4 second (26.2%). Maximum mean cyst diameter and surface area were 7.38mm and 45.24mm² respectively. 46/87 patients had lumbar spondylolisthesis with 28 cysts at the levels affected. 61/87 patients were symptomatic and 26 incidental findings. 52/61 patient notes were accessible. 38/52 received a hospital intervention (facet injection +/- nerve root block or surgery), with mean duration from MRI to intervention of 9.68 months. 34/38 received an injection, of which 15 ultimately required surgery – 4 had surgery without prior injection. 45.1% of the injection group had a positive result. 14 patients received surgery and all described a decrease symptoms. 3/14 required further treatment during future follow up.

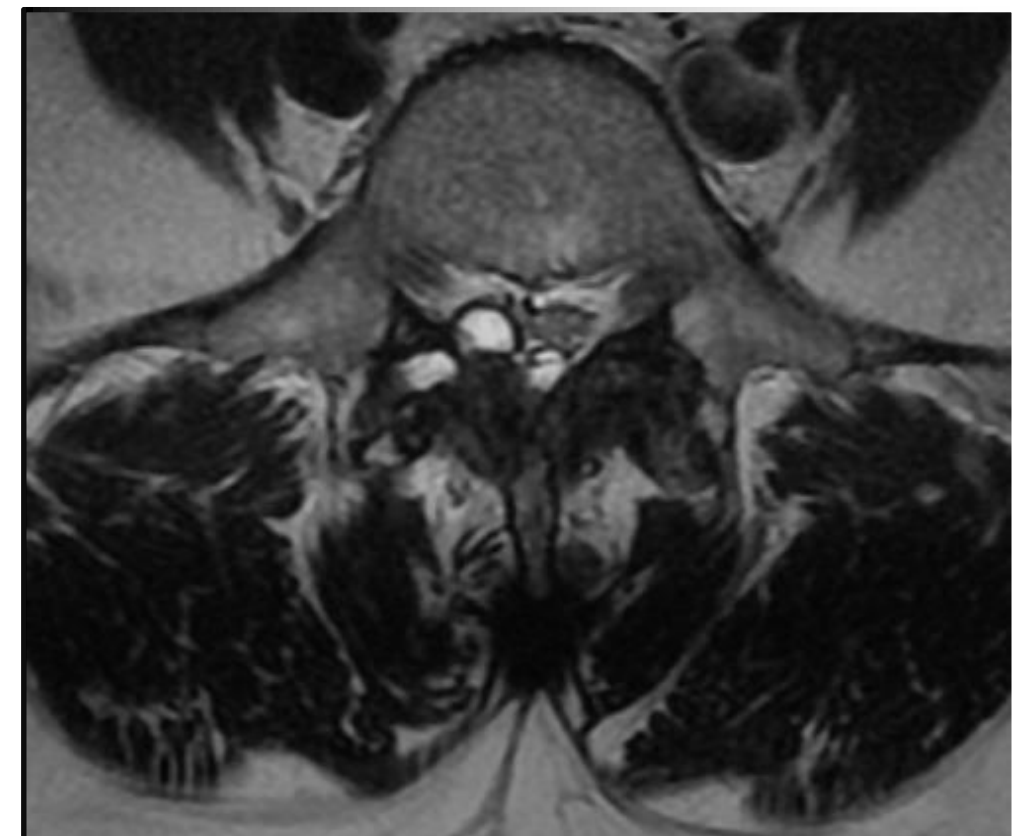


Fig 1. T2 weighted lumbar MRI with right sided cyst at L4-L5.

	NO BACK PAIN:	BACK PAIN:	TOTAL:
NO RADICULOPATHY:	26	8	34
RADICULOPATHY:	7	37	44
TOTAL:	33	45	

Table 1. Analysis of symptoms exhibited by patient cohort.

	NO INJECTION	INJECTION
NO SURGERY	49	19
SURGERY	4	15

Table 2. Summary of hospital interventions.

CONCLUSION: 89.5% of the cases followed the current literature consensus of injection before surgery. Injections produced short term symptomatic relief in roughly 50% of cases while surgical management demonstrated satisfactory outcomes in all patients. However, with significant risks involved with spinal surgery, injections should be offered prior to considering a surgical route.

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