Treatment Under CT-Guide of Lumbar Synovial Cyst with Severe Lumbosciatalgia

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Clinical Image

Lumbar zygapophyseal joint synovial cysts are commonly present in facet joint degenerative arthropathy and may be symptomatic when compressing nerve roots or narrowing the spinal canal. Treatment varies from conservative management to open surgery. Minimally invasive treatment is a valid alternative to open surgery and includes percutaneous aspiration/rupture, which can be performed under computed tomography guidance. We present the case of a man, 52 years old, with a L5-S1 synovial cyst which caused a severe left lumbosciatalgia refractory to physiotherapy and analgesic drugs, admitted in emergency department. With patient in prone position, we proceeded to position a fine needle of 20 G into the cyst via a CT-guided translaminar approach. We subsequently injected saline, which caused the rupture of the cyst, and corticosteroid nerve root injection. Patient reported, in the next 3 month follow-up, a significant pain reduction (NRS went from 9 to 3) and MRI control documented a volume reduction of the cyst, with a fissuration on its cranial side. This procedure could be the first line treatment in patient with severe pain prior surgery choice.

Figure 1: A-B: MRI T2W axial and sagittal plane shows a large sinovial cyst on left zygapophyseal joint. C: position of the 20 G needle into the cyst via a CT-guided translaminar approach D-E: control MRI images demonstrate volume reduction and fissuration on cranial side, with significant reduction of painful symptoms.