LATERAL RETROPERITONEAL TRANSPSOAS APPROACH – A PRACTICAL MINIMAL INVASIVE SURGERY (MIS) OPTION IN TREATING PYOGENIC SPONDYLITIS OF THE LUMBAR VERTEBRA

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Background:
Pyogenic spondylitis requires surgical debridement and reconstruction in about 10% to 20% of cases. Lateral approach has the potential in treating pyogenic spondylitis with its ease of approach and low risk of complications.

Objective:
To evaluate the outcomes of lateral approach surgery in the surgical management of pyogenic spondylitis of the lumbar spine

Methods:
Single center, retrospective chart analysis was done on patients who presented with pyogenic spondylitis (lumbar discitis/vertebral osteomyelitis) and undergone lateral approach lumbar vertebral debridement and posterior instrumentation between 2014 and 2016. Data on blood loss, surgical operating time, complications, clinical outcomes and fusion rates were recorded.

Results:
Six patients (3 male and 3 female) underwent this procedure during the defined period. One patient presented with infected implant (PLIF) and vertebral osteomyelitis while 5 presented with single level spondylodiscitis. All patients underwent lumbar debridement, iliac strut grafting and posterior instrumentation. Mean operating time was 308.3 mins. Mean blood loss was reported at 341cc. Back pain symptoms resolved in all cases while 2 cases that had lower limb weakness had improvement of neurological deficits. One patient had a dislodged strut graft while posterior instrumentation and needed graft revision intraoperatively. Infective markers normalized for all patients and had radiological evidence of fusion on 6 months follow up.

Conclusion:
Lateral retroperitoneal approach is a viable option in pyogenic spondylitis as it allows thorough debridement and reconstruction with lower complications. It demonstrates short surgical time, moderate blood loss and low risk of vascular injuries. Clinical outcomes and fusion rates supports its use as practical MIS option for such cases.