Clinical: MIS fusion-stabilization
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Minimal Invasive Spinal Fixation in Septic Conditions
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Background and purpose: Management of pyogenic spondylodiscitis in adults is still controversial at the moment. The aim of this study is to evaluate the results of a minimal invasive method for deformity correction and stabilization of these lesions by a percutaneous osteosynthesis.

Methods: Ten patients were included in this study and treated by a two-step procedure. Firstly a posterior percutaneous osteosynthesis, completed by a complementary anterior access for intervertebral grafting. Postoperative evaluation was clinical and radiological with measurement of local sagittal deformity and restitution of vertebral body height.

Results: On the whole series, bacteriologic identification was possible and pain was controlled in every cases. On postoperative evaluation the good positioning of the implants was always verified. Mean local sagittal deformation was +2.1° preoperatively and -8.4° postoperatively. Mean increase of the vertebral body height was measured at 8mm postoperatively. At last follow-up a moderate loss of correction was noticed (with a mean of 2° and 3mm) and all patients but one showed a solid bony fusion.

Conclusion: The realization of a percutaneous osteosynthesis in septic conditions in association with an anterior graft provides satisfactory clinical and radiographic results. It provides an interesting alternative for deformity correction and spinal stabilization with a minimal invasive access in patients with comorbidities.