

ANTERIOR THORACIC AND LUMBAR SPINE ARTHRODESIS: A SERIES OF 16 CONSECUTIVE CASES AND REVIEW OF THE OPERATIVE TECHNIQUE

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Objetivos- Anterior surgery on the spine represents a less commonly utilized but important adjunct in the armamentarium of the spine surgeon. Spine reconstruction in cases of tumor, infection or trauma will continue, under certain circumstances, to be routine indications for anterior surgery of the thoracic and lumbar spine. On the other hand, the anterior approach to the thoracic and lumbar spine is a more complex procedure, and requires anatomic and technical knowledge by the spine surgeon. We report our provisional results in 16 patients undergoing anterior reconstruction for a variety of indications. Rational anatomic approaches to the spine in these areas are presented, and the authors explain the relevant thoracic and abdominal concerns to a spine surgery.

Material e Métodos- A prospectively series of 16 consecutive patients with surgical thoracic and/ or lumbar spine disease during a 15-month period was analyzed. The criteria for surgical intervention was: partial or progressive neurological deficit, kyphotic angulation more than 30 grades at one segment, progressive kyphosis, lesion with loss of more than 50% of height with angulation, residual canal diameter less than 50% of normal, severe burst fractures, and destructive infectious or neoplastic body vertebral lesions.

Resultados- The average operative time was 4 hours and the average time of hospitalization after surgery was 10 days. At the time of follow-up, except in one patient with osteoporotic fracture, no loss of reduction or fixation was noted in any patient and satisfactory results were found in all patients. No major or permanent neurologic complications were encountered. There were no cases of neurologic worsening, no plate or screw fractures, and no vascular complications. All patients, except the one who presented with paraplegia, had clinical improvement. There were surgical perioperative complications in 5 patients.

Conclusões- It must be noted that this report is case collection study involving very short follow-up and a variety of indications. It is not expected that this presentation will be all-inclusive, but the authors could testify some important aspects from literature concerned. Most complications do not alter the improvement in ultimate functional outcome when they are recognized and treated appropriately. The main factor influencing the occurrence of complications is surgical experience. Anterior spinal fusion surgery is a safe procedure and can be used with confidence when the nature of a patient's spinal disorder dictates its use. The anterior approaches provide excellent exposure of the relevant bony anatomy and can be used to secure anterior column support with bony fusion. It is possible direct visualization for anterior decompression and stabilization through a single-stage approach, and lessened the need for second-stage posterior stabilization.

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