



A retrospective study of 113 consecutive cases of surgically treated spondylodiscitis patients. A single center experience

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Introduction

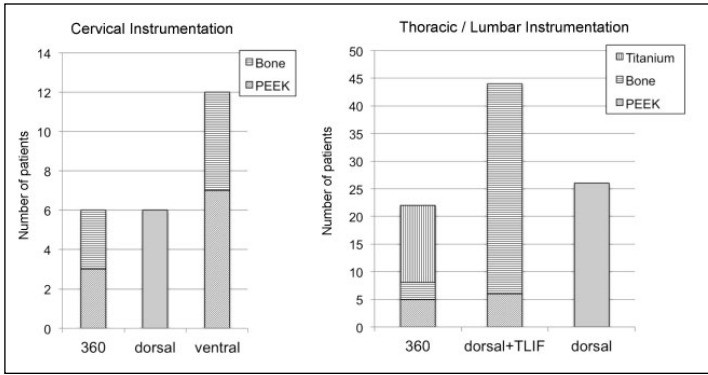
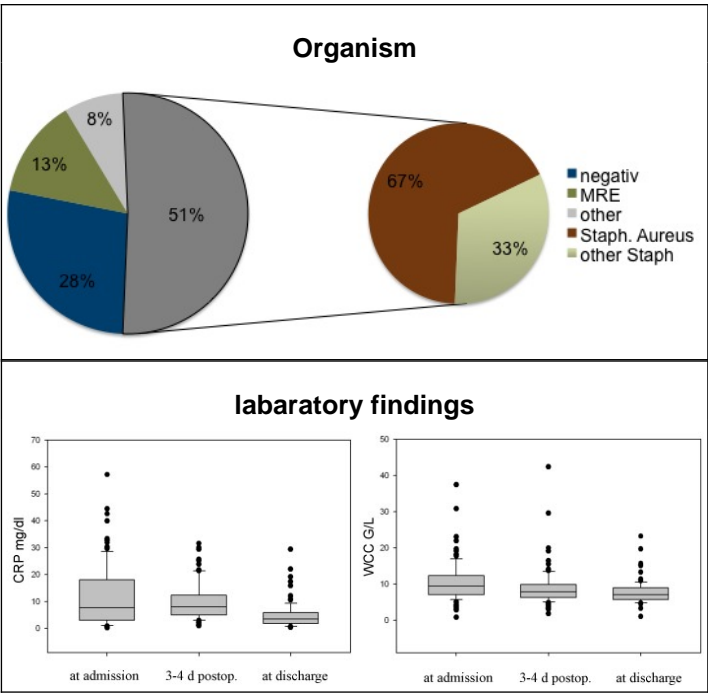
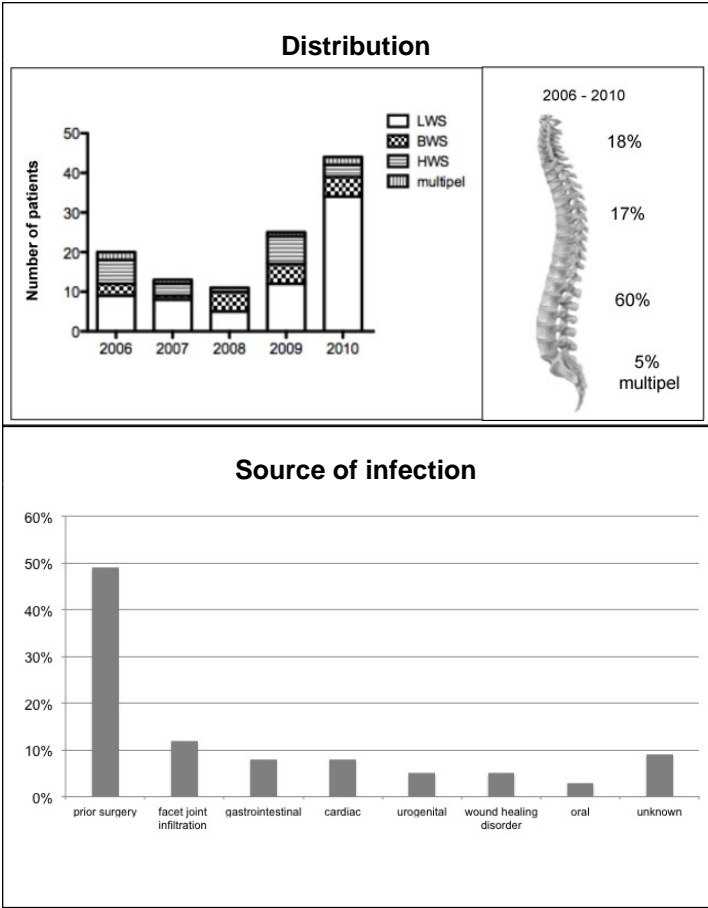
Aim of this study is to evaluate the different surgical approaches and the postoperative antibacterial treatment regime for spondylodiscitis.

Methods

We performed a retrospective review of surgically treated patients due to spondylodiscitis between 2006 and 2010.

Results

113 patients were identified. The mean age at presentation was 65 years, 78 patients were male (69%). 104 patients (92%) had pain. Neurological deficit was found in 51 patients (45%).



Conclusions

Staged surgical immobilization and instrumentation and optimal debridement at the interdiscal space is a reliable approach to achieve complete healing of spinal inflammation. Thereby, a short period of intravenous antibiotics of 1-2 weeks is followed by 3 months of oral antibiotics is appropriate in most cases. The choice of fusion material (autologous bone, Titanium, PEEK) seems less important.

The surgical approach

Cervical

- Inflammation anterior of Myelon -> ventral instrumentation
- Inflammation was mostly posterior located -> dorsal instrumentation
- Both areas or more than two segments affected -> combined approach

Thoracic & Lumbar

- Discitis without any destruction of the endplates and reduced disc height ->dorsal instrumentation
- Destruction of the endplates with normal or increased disc height -> dorsal instrumentation, debridement and interbody fusion.
- If an interbody fusion from posterior was not possible due to massive destruction of the bony structures, then interbody fusion was performed either through an extreme lateral or an anterior approach.

Postoperative intravenous antibiotics were administered for 14.4 ± 9.3 days followed by 3.2 ± 0.8 months of oral antibiotics.

Clinical Outcome

- Complete healing of the inflammation was achieved in 111 (98%) of cases.
- Only two patients had a relapse of the inflammation following dorsal instrumentation alone. This was followed by debridment and anterior interbody fusion upon relapse. Two patients died due to septic schock, both with fulminant endocarditis.
- From the 51 patients with neurological deficit, 23 (45%) had full recovery and 21 (41%) had improved incompletely after surgery.