

Spondylodiscitis surgery indications

Surgery is necessary when non-surgical [spondylodiscitis treatment](#) is unsuccessful.

1. situations, where the [diagnosis](#), is uncertain, especially when [neoplasm](#) is a strong consideration (CT-guided needle biopsy usually helps here) Considering the fact that the majority of patients can be treated successfully by conservative means, surgical intervention mainly aims to acquire bacteriological or histological verification when [CT-guided biopsy](#) is inconclusive ¹⁾.
2. [decompression](#) of neural structures, especially with associated [spinal epidural abscess](#) or compression by reactive granulation tissue. Ascending numbness, weakness, or onset of neurogenic bladder herald [cauda equina syndrome](#)
3. drainage of an associated abscess, especially septated abscesses that might be recalcitrant to CT-guided percutaneous needling ²⁾ Surgical drainage, bone debridement and reconstruction are indicated when an anterior abscess is larger than 2.5 cm on radiographs ³⁾.
4. rarely, fuse an unstable spine. Most cases go on to spontaneous fusion.

Surgical treatment is absolutely indicated in patients with [spinal cord](#) or cauda equina compression with progressive neurological deficits. Relative surgical indications include spinal instability due to extensive bone destruction, significant deformity, or conservative treatment failure ^{4) 5)}

The anterior approach allows for anterior disc and bone debridement. The posterior approach is indicated when posterior elements are involved or in the presence of an epidural abscess. Although good results have been claimed, the use of instrumentation in the presence of an infected focus is controversial, as the use of cages or BMPs is ⁶⁾.

Unsuccessful medical treatment including a negative [biopsy](#) or stubborn pain may also be an indication of surgery ⁷⁾

The surgical treatment should be considered for patients who, after 4 weeks of conservative therapy, do not show a reduction in the [Erythrocyte Sedimentation Rate](#) (ESR) < 50 mm/h and of the [C-reactive protein](#) < 2.7 g/dl ⁸⁾.

¹⁾

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