the mean ODI at the final follow-up was 45.82 ± 2.05, and this change was statistically significant (p = 0.04). The difference in Cobb angle between pre-op, immediate post-op, and final follow-up was also statistically significant (p < 0.001). The mean VAS score improved from 8.18 ± 0.15 to 2.73 ± 0.24 at the final follow-up. However, this improvement was not statistically significant (p = 0.64). **Conclusion:** CTJTB with progressive neurological involvement or with kyphosis, when treated surgically, gives a better clinicoradiological outcome in terms of statistically significant improvement in ODI and the degree of kyphosis.

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P349: Spondylodiscitis and endocarditis

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Introduction: Spondylodiscitis and infective endocarditis rarely occur together, resulting in complex clinical presentations. This retrospective study investigates the relationship between these conditions by analyzing data from a monocentric patient population. **Materials and Methods:** Electronic hospital charts from the Department of Neurosurgery, Klinikum Diakonie, Jung-Stilling, Siegen, Germany, covering a ten-year period (2001-2020), were retrospectively analyzed. The study included 97 patients diagnosed with spondylodiscitis, among whom 8 were also diagnosed with endocarditis. The charts were anonymized and password-protected. **Results:** Patients with endocarditis underwent thoracic surgeries more frequently compared to those without endocarditis (43% vs. 15%, respectively). Cervical spondylodiscitis were not associated with endocarditis. Thoracic spondylodiscitis was present in 14 patients without endocarditis (16%) and 3 patients with endocarditis (43%). Patients with endocarditis exhibited a higher prevalence of neurologic abnormalities (6/8) and leukocytosis (43%) compared to those without endocarditis (48/88 with leukocytosis, 28%). Elevated C-reactive protein (CRP) levels were observed in patients with endocarditis (median CRP = 19.15) compared to those with isolated spondylodiscitis (median CRP = 8.7), and this difference persisted even after surgical treatment. Preoperative creatinine levels were also higher in the endocarditis group but decreased after surgical treatment. Anemia was more prevalent in cases of mono-level spondylodiscitis combined with endocarditis (8.95 g/dL). Positive blood cultures were found in 4 out of 8 patients with endocarditis (57%) and in 39 out of 88 patients without endocarditis (44%). Thoracic spondylodiscitis was more frequently observed in patients with endocarditis (3/8) compared to those without endocarditis (14/89). Hematogenous infection was the predominant route of infection in endocarditis cases. Spondylodiscitis developing through contiguous spread did not exhibit concurrent endocarditis, even in multimorbid cases with a history of cardiac disease. Endocarditis was more frequent in cases with involvement of multiple spinal segments (10%) compared to single segment cases (7.27%). Endocarditis occurred in 75% of cases with a preexisting heart condition, compared to 23.53% in patients without a history of cardiac disease, and this difference was statistically significant (p = 0.00545). Hematogenous infection was the sole route of spontaneous infection. Psoas abscesses were more frequently detected in cases of spondylodiscitis through contiguous spread (46.15% vs. 26.51%). However, there was no clear tendency regarding epidural abscess development based on the infection pathway, although it was more frequently observed in spondylodiscitis patients with endocarditis. **Conclusion:** Non-normalization of CRP dynamics and initial renal insufficiency may indicate concurrent endocarditis. Patients with spondylodiscitis developing through contiguous spread did not exhibit associated endocarditis, even in multimorbid cases with a history of cardiac disease. Surgical intervention limited to the cervical region was not associated with an increased risk of endocarditis. Endocarditis occurred more frequently in cases with a preexisting heart condition.

Keywords: spondylodiscitis; endocarditis; infection; retrospective analysis; clinical presentation

We have ethics committee approval (2021-702-f-S).

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P350: Practice preference and evidence analysis on topical use of tobramycin powder in lumbar spine surgery. A multi-national AO Spine Survey with systematic review of literature

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Introduction: There is an increasing interest in the topical use of antibiotics to prevent infection following spine surgery. To extend the antibiotic coverage to the gram-negative spectrum, the usage of tobramycin powder is being considered. We surveyed to analyze the current practice preference on the use of topical tobramycin in lumbar spine surgery and also aimed to analyze the literature for current evidence on the same. **Methods:** A multinational cross-sectional survey was conducted among AO Spine members worldwide to understand the use of topical tobramycin in 1 or 2-level open lumbar fusion surgeries. Also, an independent systematic review of four scientific databases (PubMed, Scopus, clinicaltrials.gov, Web of Science) was performed by two authors to identify relevant articles in adherence to the preferred reporting in systematic reviews and meta-analysis (PRISMA) guidelines. Studies reporting the usage of tobramycin in lumbar spine surgeries were included for analysis. **Results:** Among the 231 participating surgeons, only 1.7% (n = 4) reported utilizing tobramycin in 1 or 2-level open lumbar fusion surgery. Upon systematic review of the literature, two studies with 484 patients were included for analysis. With the usage of tobramycin as a topical antibiotic powder, both studies noted a reduction in the incidence of infection with change in the spectrum of infective organisms. **Conclusion:** Topical Tobramycin is not the common choice of topical antibiotic among surgeons worldwide. There is a lack of sufficient evidence in the literature to support the routine use of topical tobramycin in lumbar spine surgery.

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P351: Outcome after vertebral body replacement with anterior stand-alone spinal cages in spinal tuberculosis patients

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Study design: Retrospective and prospective case series. **Purpose:** The aim of this study was to assess the results of reconstruction of anterior column, fusion with stand alone cages in TB spine patients and complications related to cages. **Overview of Literature:** studies have shown that tb spine can be effectively managed with anterior corpectomy because pathology is anterior without compromising the posterior column of spine. Anterior cage alone can provide same level of stability after anterior corpectomy as that of posterior instrumentation. In this study we assess the effectiveness and stability of anterior corpectomy and anterior column fusion with stand-alone cages without posterior instrumentation in spinal tuberculosis. **Methods:** Study was carried out in patients with spinal tuberculosis/Pott's disease. We assessed 1200 patients who were treated with cages with/without any other instrumentation. Radiographs were obtained before and after the surgery. Total number of patients followed on OPD basis. A preoperative magnetic resonance imaging was obtained in every patient. **Results:** 1200 patients with tuberculosis spine were followed in Ghurki teaching trust hospital. Kyphotic angle correction was,16.6% patients with 0-10 degree improvement, 60% patients with 11-20 degree improvement and 23.4% patients with 21-30 degree improvement. However after 3 years change in post surgical change in kyphotic angle is insignificant. Regarding the Frankel Scale in patients with neurological involvement,47.49% patients show Frankel scale "E", 22.61% patients showed Frankel scale "D", 16.83% showed "C", 6.03% showed "B" while 7.04% patients showed no improvement after 3 years follow up. **Conclusions:** The study shows that the vertebral body replacement after anterior corpectomy by reconstructive cages and bone graft provides a reconstruction of the anterior column, good correction of the mean kyphotic angle, effective biopsy of pathology, drainage of pus and a correction maintained with cage without any cage related complication at long term follow up. The fusion can be achieved with reconstructive cage plus bone graft without posterior instrumentation.

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P352: Craniovertebral junction tuberculosis: how to manage

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Introduction: Tuberculosis (TB) of craniovertebral junction (CVJ) occurs in 1-5 % of cases of TB spondylitis. This can be a life-threatening condition due to mass effect of infective process or resultant instability. Literature is quite divided on management of patients with tuberculosis involvement of the craniovertebral junction. **Material and Method**: All patients with CV junction spine tuberculosis admitted in hospital were evaluated and managed accordingly. Total 4 cases were selected as a prototype. This was prospective observational study. **Results**: 25 % of all cases were managed conservatively whereas in 75 % surgery was done. **Conclusion**: Treatment of CVJ tuberculosis cannot be standardized, it has to be tailored to each patient broadly, abscess formation, atlanto-axial subluxation with cervico-medullary compression, severe or progressive neurological deficit should undergo surgical intervention at the earliest. Surgery provides for immediate neurological recovery, stability, and allows for early mobilization and also reduces the cost of staged surgery.

Keywords: tuberculosis (TB); craniovertebral junction (CVJ)