

Different Concepts in Short Segment Reconstruction of Moderate to Severe Mismatch Deformity with Extended ALIF, Mini-PSO, and Deformity TLIF – A Video Case Series

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Spinal imbalance results in large construct deformity corrections for both revision and virgin cases. Each case provides unique challenges which require surgeons to adapt through technique. A significant amount of deformity correction involves constructs from T10 to the pelvis. This video case series presents 3 patients with spinal imbalance, whom underwent short construct corrections below L1 using varying strategies. Each patient differs in age, gender, and comorbidities. Case 1 details techniques on an extended anterior lumbar interbody fusion (ALIF). Case 2 describes a pedicle subtraction osteotomy (PSO). Lastly, case 3 details deformity correction with a multilevel transforaminal interbody fusion (TLIF) approach. While no technique is superior to the other, this study demonstrates the technique and feasibility of each method. In all 3 cases, substantial corrections in imbalance were achieved.