Short-Form-36 Physical Component Summary (SF-36-PCS). MC subgroup on pre-operative MRI was recorded by a single neuroradiologist. **Results:** 179 patients were included. The sample prevalence of MC on pre-operative MRI was 62%; MC2 was most common (35%). No differences in pre-operative scores were identified, regardless of present or absent MC. For the overall cohort, improvement in assessment scores were observed: SF-36 improved an average of 8.2 points (95% CI: [5.8, 10.7]), ODI by 11.3 points (95% CI: [8.7, 14.0]), and VAS by 2.8 points (95% CI: [2.1, 3.5]). In nearly all cases, MCID values were met. **Conclusions:** Clinically significant improvement in post-operative pain, disability, and HRQoL was observed for both procedures. Modic change on pre-operative MRI was not associated with worse clinical assessment scores.

P.231

A Quantitative Degenerative Lumbar Spondylolisthesis Instability Classification (DSIC) System to Reduce Variation in Surgical Treatment

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Background: The Degenerative lumbar Spondylolisthesis Instability Classification (DSIC) system categorizes spondylolisthesis (stable, potentially unstable, unstable) based on surgeon impression. It does not contain objective criteria. **Objective-1:** Develop a quantitative-DSIC system from predetermined radiographic/clinical variables. **Objective-2:** Compare qualitative (surgeon-assigned) and quantitative (objective) DSIC Types. **Objective-3**: Determine proportion of patients receiving more invasive surgery than warranted based on the objective system. **Methods:** Patients from 8 centers were enrolled prospectively (2015–2020). Radiographic/clinical variables were collected and included/excluded from the quantitative DSIC system based on prior systematic review. Scores were converted to DSIC Types: 0-2 points ("Stable"; Type 1), 3 points ("Potentially Unstable"; Type 2), 4-5 points ("Unstable"; Type 3). Surgical procedures performed were compared to those suggested by the objective system. **Results:** Quantitative DSIC scores were calculated (309 patients). The score includes five variables: facet effusion, disc height, translation, disc angle, and low back pain. Quantitatively, 57% were stable, 34% potentially unstable, and 9% unstable patients. Qualitatively, 30% were stable, 53% potentially unstable, and 17% unstable patients. Surgeons assigned more instability than the objective scoring system in 42% of cases. More invasive surgery was performed in 57% of cases. **Conclusions:** Surgeons are more likely to categorize greater degrees of spinal instability than what is objectively scored.

P.232

Motor Recovery after Early Surgical Decompression in Cervical ASIA A Spinal Cord Injury Patients

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Background: Despite growing evidence for early surgical decompression for traumatic cervical spinal cord injury(tCSCI) patients, controversy surrounds the efficacy of early surgical decompression on patients with a complete (ASIA A) cervical injury. **Methods:** Patients with ASIA A cervical tCSCI were isolated from 4 prospective, multi-center datasets. Patients who had a Glasgow coma scale of less than 13, were over the age of 70 or under 16 were excluded. Significant gain was defined to include those that recovered more than two muscle groups (greater than 3/5 power) below their level of injury. Analysis of variance (ANOVA) was then done to compare significant gain over the 1 year follow-up period for patients with and without early decompressive surgery (<24hrs). **Results:** We identified 420 cervical ASIA A tCSCI patients. The mean number of muscle groups gained was 2.69 (SD 2.3.12) for those who had early surgery compared to 2.37 (SD 3.38) for those with late surgery. Of those patients who had early surgery 39.67% had a significant improvement vs. 28.76% of those who did not have early surgery ($P = 0.030$). **Conclusions:** For the first time, we have shown a clear therapeutic benefit of early surgical decompression within 24 hrs in ASIA A tCSCI patients.

P.233

Implementation of an Enhanced Recovery After Surgery (ERAS) Protocol for Scheduled Spine Surgery

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Background: Enhanced Recovery After Surgery (ERAS) Protocols improve post-surgical outcomes through decreased length of hospital stay, reduced readmission rates, decreased post-operative pain, and greater patient satisfaction. ERAS also has significant benefits to the healthcare system through reduced cost of post-operative care. While ERAS protocols are well established in many surgical fields, a complete guideline for spine surgery is lacking. Early ERAS studies in spine surgery suggest up to a 50% reduction in length of stay (LOS) and decreased cost of care. **Methods:** Primary literature review followed by multidisciplinary critical appraisal for optimization and redesign of our current system of care for scheduled spine