Commentary: Poorer Fusion Outcomes in Diabetic Cervical Spondylotic Myelopathy Patients

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The authors have presented in admirable data-crunching detail a comparison of outcomes of diabetic and nondiabetic myelopathies treated with noninstrumented anterior discectomy and fusion. Not surprising is the difference in fusion rates from what we know about diabetic microvascular changes. Also not surprising to nihilists is the observation the poorer fusions had no effect on assiduously measured outcomes between their two groups. This is a neat rejoinder to the “radiograph revisers” of the world.

While, in general, the clinical outcomes of diabetics versus nondiabetics were identical, the results themselves are not all that stella. Admittedly, the literature supports the author’s figure of three out of four satisfied patients, I would guess that most surgeons would believe their own experience was better than this.

The essential critique, acknowledged by the authors, is that 29 matched patients is a very small study group regardless of their meticulous power analysis. It would not be surprising, fusion impact not withstanding, that the diabetic outcomes worsened in a larger study because of unrecognized confounders over time.

The take-home about the non-impact of fusion quality is valuable, but to accept that diabetes itself otherwise did not compromise clinical outcomes is a stretch. Epstein1 reported a distinct difference in outcome in spine surgery in the diabetic and similarly Fei et al2 in a total of 13,000 patients from 12 studies found that infection compromised spine surgery outcome in diabetics.

References