Abstract

Lumbar spinal fusion is a well-established surgical procedure for many spinal conditions. Posterior instrumentation may be added to provide immediate stabilization and improve fusion rates. Spinous process fixation, a type of posterior fixation, offers a less-invasive option to pedicle or facet screws with quantitative evidence of similar biomechanical stabilization; however, little has been published on the use of these devices. Further, there has been confusion about the use of spinous process fixation devices versus spinous process spacers. Spinous process fixation devices provide spine surgeons with another option for instrumented fusion, offering potential advantages for select patients. Biomechanical data suggest that relative to pedicle screws, modern spinous process fixation devices provide equivalent stability with reduced clinical risk and a less-invasive surgical procedure. These devices need to be distinguished from spacers, which are non-fixation devices.