Editorial

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When does “something” become a classic? Twenty-five years is the general response. However, this relates to music, art, technology or work of literature, where for quarter of a century that “something” should have maintained popularity consistently. The use of the adjective “classic” for a surgical operation has different connotations. It is about acceptance, widespread use and ability for that procedure to provide predictable and good to excellent outcomes by a community of surgeons, consistently. This has been a challenge we have encountered in the field of spinal surgery, where laminectomies and discectomies have made a place for themselves, spinal fusions for lytic and degenerative listhesis work well and decompression for compressive symptomatic myelopathies is the preferred option. What about disc herniations in the cervical spine where anterior cervical discectomy and fusion may be considered to be a “classic”?

An alternative term to classic is the “gold standard”. For many years, if not decades, the gold standard for treatment for herniated cervical discs was an anterior cervical discectomy and fusion (ACDF). This has been challenged of late by the plethora of data on cervical arthroplasty (cTDR). We have debated at many academic venues with quality arguments being made for arthroplasty supplanting ACDF as the “gold standard”.

The Editorial Board of the European Spine Journal felt it appropriate to review cTDRs, 18 years following the first patient being enrolled (in October 2002) [1] to a 7-year follow-up randomized clinical trial, that compared anterior cervical decompression–fusion in the neck to total disc replacement [2].

This edition provides numerous articles to celebrate that landmark. Just like hip and knee replacements, there are numerous designs of disc replacements to choose from currently and so will be in the future. We rely on long-term clinical results to help us make the best choice for our patients; this issue provides 10-year follow-up on Pro-Disc C from a single centre (Zhao et al.). However, such data are not available for all prostheses. To help improve our ability to choose a better-quality prosthesis for our patients, there are other tools. Havey et al. established a methodology to understand the kinematics of various cTDR designs in general using in vitro models, and Choi et al. did something similar to a finite element analysis in silico model. The other requirement for a good prosthesis is the bearing surface; here, Lee et al. provided tribological insights using metal-on-metal prosthesis to understand wear, which is inevitable with any joint surface(s). Their work helps us understand how to evaluate and study wear in relation to cTDRs to help estimate their longevity.

Guyer et al.’s study, systematically, demonstrates how surgeons make decisions to perform cTDR. While Goedmakers et al. studied radiculopathy as an indication, Finkensaedt et al. discussed the role of neck pain in influencing cTDR outcomes. In the longer term, the impact of spinal alignment’s association with adjacent segment degeneration (Yang et al.), new bone formation (Mobbs et al.) and its impact on clinical outcome (Yang et al.) are presented in this issue. Zigler et al. have analysed reoperations carefully after performing 535 consecutive cTDRs.

We believe that a combination of excellent design, better bone-prosthesis surfaces, better established bearing surfaces and early 2-year results will provide the foundation for long-term well-being of the prosthesis. Hips and Knees artificial joints, with much larger ranges of movements and more point loads, are being designed for 20–25 years, 80% survivorship now; there is no reason that a cervical disc prosthesis cannot be designed for the sake of lasting the remainder of patients’ life.

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Compliance with ethical standards

Conflict of interest The authors declare that they have no competing interests.

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