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A Revolution in Spine Care and the 25th Anniversary of the Founding of the International Society for the Advancement of Spine Surgery

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Prior to the year 2000, lumbar fusion was the only surgical option for a patient with functionally disabling back pain who had failed months of conservative care management. Disc replacement had been tried in Europe, but there were no strong scientific analyses of its efficacy, and spine surgeons generally viewed disc arthroplasty negatively based on a small series of reports and hearsay.

The revolution began with the beginning of the multicenter prospective US Food and Drug Administration Investigational Device Exemption (FDA IDE) study of the Charité artificial disc implant randomized to fusion in 2000. This was followed in 2001 with initiation of the ProDisc-L vs fusion multicenter study and followed soon by similar FDA IDE studies of the Maverick, Flexicore, and Freedom discs in the United States.

Data shared from these studies generated significant interest from spine surgeons in the United States and abroad. At the Texas Back Institute, we were fortunate to have a robust research infrastructure and were already known for work in the diagnosis and anterior surgical treatment of lumbar degenerative disc disease. The Texas Back Institute was ultimately the highest enrolling site in both Charité and ProDisc single-level studies, validating the unprecedented use of a single clinical research site concurrently for two such competitive and high-profile implants.

Global interest in motion preservation exploded, and the Spine Arthroplasty Society was formed. Its initial annual meetings were packed with surgeons and researchers from all over the world, allowing both basic science as well as evolving clinical data to be discussed in large public forums where questions and criticisms were aired. New products and techniques were shared and discussed by thought leaders at very early stages of development. These early meetings were electric! There were arguments as well as a sense of cumulative accomplishment.

The Spine Arthroplasty Society matured into the International Society for the Advancement of Spine Surgery (ISASS), which for 25 years has provided a stage for the dissemination of knowledge gleaned from translational basic science and clinical outcomes studies. Many hundreds of peer-reviewed scientific articles have been published, many generated by mining the huge mountains of data generated by the FDA IDE studies in the United States and similar studies from outside the United States. The society's journal, the *International Journal of Spine Surgery,* provided an initial pathway for the introduction of motion preservation research to the interested scientific and medical communities and still serves as the literary backbone of our society.

ISASS has functioned as an organization dedicated to knowledge transfer and professional networking, as well as for ensuring ongoing political activity to help promote access to scientifically validated (and FDA-approved) motion technologies to appropriate patients who would benefit from them. It has also allowed for the development of incredible friendships among scientists and surgeons worldwide, resulting in collaborations that would not otherwise be possible.

Lumbar and cervical arthroplasty devices are the most intensively studied implants in the human body, testifying to their safety and effectiveness. Several of the founding members of ISASS were inventors of these technologies and have seen the realization of their hopes proven by excellent scientific methods and by so many grateful patients.

As original clinical investigators and two past-presidents of ISASS, we can state with pride that

our involvement in spine arthroplasty has been the highlight of our professional medical careers, and we have witnessed how spine arthroplasty has improved the lives of so many of our patients and their families. Happy 25th anniversary to ISASS and its members!

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