Rapid development of minimally invasive spinal surgery: exciting advancements and challenges

This special section of *Annals of Translational Medicine* focuses on the important and interesting topic of minimally invasive spinal surgery (MISS). Techniques of MISS have developed rapidly in the past few decades. The spectrum of MISS now includes spinal degenerative diseases, spinal trauma, spinal deformity and spinal tumors.

In this special issue, hot topics such as percutaneous endoscopic cervical discectomy, endoscopic lumbar discectomy, and minimally invasive transforaminal lumbar interbody fusion in the treatment of spinal degenerative diseases are discussed. The use of MISS techniques in the treatment of spinal trauma is also reviewed. Readers will find recommendations on dealing with secondary osteoporotic vertebral compression fractures. Finally, readers will be introduced to the safe and effective use of MISS techniques in the treatment of spinal deformity and spinal metastases, which pose challenges for spine surgeons.

This special issue not only focuses on exciting aspects of MISS, but also highlights limitations and complications associated with MISS. Readers and future patients alike will benefit from this critical review of complications.

In summary, this special issue reports the newest MISS techniques in the treatment of a wide spectrum of spinal disorders. This timely issue will be extremely useful to spine surgeons, orthopedic surgeons, neurological surgeons, and young scientists who are interested in MISS. As MISS is still in its evolution, we also hope that this issue can bring some inspiration to readers to contribute to its progress.

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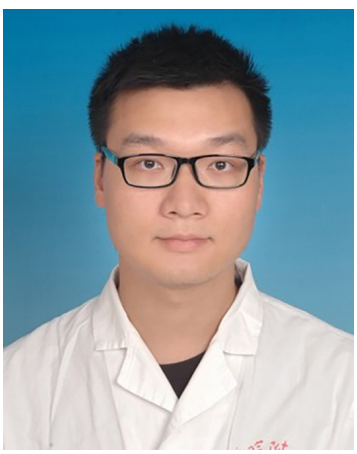

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