## **Masterclasses**

M5.3

**Minimally Invasive Spine Surgery** 

14:30 Room 221

**Minimally Invasive Spine Surgery: Limitation** 

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Minimally invasive spine surgery (MISS) has been shown to decrease the soft tissue traumatization and hence facilitate the subsequent rehabilitation. It has been gaining increasing popularity in recent years and applied in various aspects in spinal surgery including, degeneration, trauma, infection and metastasis. However, one should also, at the same time, need to understand the present limitations before fully embracing the technology. Anatomical consideration of the spinal column and the targeted pathology are definitely one of the concerns. Moreover, complex spinal deformity correction, revision surgery and vertebral tumour resection may pose another limitation to the application MISS. Radiation exposure and concomitant usage of other supportive equipment during MISS are also the other major issues to be addressed. Last but not least, the steep learning curve is one of the major hurdles to overcome before fully embarking on the technique. Literature has demonstrated that longer operative time and relatively higher surgical complication rate at the initial phase of skill acquisition are the serious consideration. Moreover, there are certain generic surgical complications associated with MISS. Hence, not only the availability of the adequate equipment but also the presence of the experienced personnel is the key to success in practicing MISS. Moreover, the surgical team should, at the same time, equipped themselves with the technique of the traditional open surgery just in case when the minimally invasive approach is not practicable. In summary, MISS has the advantage of less tissue traumatization but comprehensive training with respect to the knowledge and surgical skill is imperative.