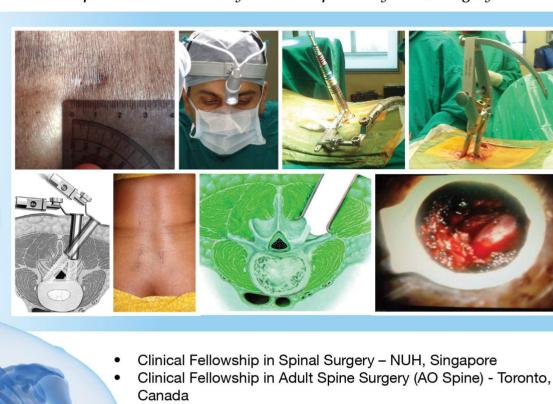


## MUMBAI SPINE, SCOLIOSIS and **DISC REPLACEMENT CENTRE:** Centre for Advanced Spinal Surgery Dr Arvind G Kulkarni

MS (Orth) (Bom), D'Orth, FCPS, Diploma (SICOT) 'Specialist in Minimally Invasive Spine (Key-Hole) Surgery'



- Clinical Fellowship in Paediatric Spine HSC, Toronto, Canada
- Clinical Fellowship in Adult & Paediatric Spine St. George & West mead - Sydney, Australia
- Clinical Fellowship in Disc Replacement Surgery NUH, Singapore

Special Interests: Artificial Disc Replacement, Minimally Invasive Spinal Surgery, Chronic Low Back & Neck Pain, Spinal Deformity, Revision Spine Surgery, Spinal trauma & tumours

AFFILIATIONS [Life - Member]

ASSI, IOA, BOS, POSI, KOA, OASIS, IMA, WSS

Reviewer: for the following journals: Spine, Journal of Neurosurgery - Spine, Biomed Central Imaging, Journal of Post Graduate Medicine, Neurology India, Indian Journal of Orthopedics.



'Micro-Endoscopic spinal surgery ' is a specialized revolutionary technique in which the routine spinal surgeries are performed using a key-hole. The most common spinal afflictions are disc herniations (slipped disc), lumbar canal stenosis and spinal instability. Generally, an open surgery is done to tackle most of these conditions. However, with the micro-endoscopic techniques, the objectives of the surgical procedure are achieved without any significant collateral damage to the soft tissue (muscles and ligaments) or the bony skeleton. Tubular retractors with diameters of 16 mm, 18 mm and 22 mm are passed through the key-holes to perform the procedures based on the indication of surgery. Apart from the elegance and cosmetic appeal, this technique has several advantages. The scar is miniscule (1.5-2cm long) and appears like an

ordinary scratch. Since there is no muscle or bony trauma, the contours of the back are well

preserved. The dependence of the patient on

pain-killers for the wound site pain is absolutely minimal compared to an open surgery. In fact, patients do not express any experience of wound site pain after a few hours of surgery. Since the tissue trauma is so minimal, there is no stress on the patient's metabolic functions unlike after a big open surgery that is associated with significant tissue trauma. Most of these patients are elderly with accompanying baggage of associated conditions such as diabetes, hypertension, heart issues, etc and a swift and painless procedure such as this makes a big difference with regards to their recovery. In obese patients, the surgery makes a monumental difference. Obese patients are associated with wound healing problems. In these patients, a long incision is otherwise needed to reach depths of 7-8 cm (to reach the spine). The entire procedure can be done using a keyhole in these patients (lots of patients with this condition are obese because they do not walk as a result of pain and hence accumulate weight). The blood loss with this procedure is minimal. The patients are made to walk within a few hours after surgery and can go home the very next day. A water-proof dressing is applied such that the patient can take bath as early as he/she wishes to.

## **Consultant Spine Surgeon**