

DR. ANINDYA BASU

Senior Consultant - Spine Surgeon

Qualification

MBBS | MS (Orthopaedics) | MRCS | MCh (Orthopaedics) | DNB (Orthopaedics) | MNAMS | AO Global Spine Diploma

Overview

Dr. Anindya Basu is a Senior Consultant Spine Surgeon at Manipal Hospital Broadway at Salt Lake, specialising in the management of degenerative, traumatic, and disc-related spinal disorders, with a strong focus on Minimally Invasive Spine Surgery (MISS) and Ultra Minimally Invasive Endoscopic Spine Surgery. With extensive experience in spine care, he provides both operative and non-operative treatment options for patients with acute, chronic, and complex spinal conditions. His area of clinical expertise includes the management of slipped discs, spinal canal stenosis, sciatica and nerve compression syndromes, traumatic spine injuries, and age-related degenerative spine diseases, which are among the most common causes of back and neck pain in adults and elderly patients. As the field of spine surgery continues to evolve, Dr. Basu has played an important role in adopting techniques that prioritise precision, structural preservation, and faster recovery. He is particularly recognised for employing Minimally Invasive Spine Surgery (MISS), where surgery is performed through small skin incisions using tubular retractors, microscopes, and specialised instruments. Unlike conventional open surgery, MISS allows

the surgeon to gently separate muscle fibres instead of cutting them, significantly reducing collateral tissue trauma. This approach results in less postoperative pain, minimal blood loss, reduced scarring, and early mobilisation, enabling many patients to return home sooner and resume daily activities within a shorter timeframe. Taking this approach a step further, Dr. Basu is also experienced in Ultra Minimally Invasive Endoscopic Spine Surgery, a cutting-edge technique that uses a high-definition spinal endoscope introduced through 5–8 mm skin incisions. The endoscope provides a direct, magnified view of the spinal nerves and the diseased tissue on an external monitor, allowing for highly precise nerve decompression and disc removal. Compared to standard minimally invasive methods, endoscopic spine surgery causes minimal to near-zero muscle injury, as it works through natural anatomical corridors without the need for muscle cutting or extensive retraction. Many of these endoscopic procedures can be performed under regional or local anaesthesia with sedation, making them excellent options for elderly patients or those with multiple medical comorbidities who may not be ideal candidates for general anaesthesia. The benefits of MISS and endoscopic spine surgery are not merely cosmetic. These techniques are backed by global evidence demonstrating reduced postoperative morbidity, lower infection risk, and improved patient satisfaction. Patients undergoing such procedures typically experience minimal postoperative discomfort, very low blood loss, early standing and walking, and in many cases, day-care or overnight discharge. For working professionals and active individuals, the ability to return to function sooner without prolonged immobilisation offers a major advantage. In addition to his surgical expertise, Dr. Basu’s practice philosophy is anchored in evidence-based decision making, careful clinical correlation, and a patient-centred approach to spine health. Spine disorders are often multifactorial and can range from simple muscular strains to complex neurological compression or instability. For this reason, Dr. Basu conducts comprehensive evaluations that involve clinical examination,

imaging correlation, neurological assessment, and functional goals mapping. Where surgery is not immediately indicated, he employs conservative modalities such as medication-based management, interventional pain procedures, structured physiotherapy, and lifestyle modifications including ergonomics, posture correction, activity optimisation, and muscle strengthening. His treatment plans are highly individualised, taking into account each patient’s diagnosis, age, occupation, functional demands, medical profile, and recovery expectations. Surgery is considered only when there is persistent pain, functional limitation, neurological deficit, or structural pathology where operative intervention offers superior long-term outcomes. Through this measured and rational approach, patients and families are empowered to make well-informed decisions about spine surgery with clarity and confidence. A significant portion of Dr. Basu’s practice involves managing conditions such as lumbar disc prolapse, which may cause radiating pain or sciatica, as well as spinal stenosis, where narrowing of the spinal canal leads to leg pain, numbness, or walking difficulty. He also treats recurrent disc herniations, selected spinal infections, and cases of spinal instability where stabilisation is required to restore structural integrity and protect neurological function. These spine disorders are becoming increasingly common due to sedentary lifestyle patterns, ageing populations, occupational stress, and poor ergonomics, especially in urban India. Another important aspect of his practice is long-term spine health and rehabilitation. Spine surgery does not end at wound closure; recovery involves conditioning of muscles, correction of movement patterns, restoration of flexibility, and prevention of recurrence. Dr. Basu works closely with physiotherapists and rehabilitation specialists to ensure patients receive structured post-operative care that focuses on core strengthening, endurance training, posture-safe movements, and functional reintegration. He also educates patients on lifestyle adjustments including weight control, workstation ergonomics, daily posture hygiene, and safe exercise routines — elements that play a

crucial role in maintaining long-term spinal stability. While advancements in spine surgery have significantly improved outcomes, not every patient requires a surgical procedure. Many spine conditions respond well to conservative treatment, and Dr. Basu ensures that patients are not exposed to unnecessary interventions. For conditions that are suitable for surgical management, minimally invasive and endoscopic techniques offer durable long-term benefits when performed with appropriate indications and technique. Through this balanced and scientifically grounded approach, Dr. Basu aims to restore mobility, reduce pain, and improve quality of life for patients living with spine disorders. His practice reflects the continued evolution of spine surgery towards less invasive, more precise and patient-friendly methods that prioritise faster recovery and functional outcomes. His work at Manipal Hospital Broadway, Salt Lake supports the institution’s broader commitment to modern, protocol-based spine care powered by advanced technology, multidisciplinary collaboration, and strong clinical governance.

Fellowship & Membership

- Clinical Fellowship in Complex Spine Surgery, Royal Victoria Infirmary, Newcastle, UK
- Scottish National Spine Deformity Fellowship, Royal Hospital for Sick Children and Royal Infirmary, Edinburgh, UK
- Spine Endoscopy Fellowship, Good Moonwha Hospital Busan & Himplus Hospital, South Korea
- The Royal College of Physicians and Surgeons of Glasgow
- North American Spine Society (NASS)
- Association of Spine Surgeons of India
- Indian Orthopaedic Association
- West Bengal Orthopaedic Association
- Asia Pacific Spine Society
- Association of Minimally Invasive Spine Surgeons of Bharat

- International Society of Unilateral Biportal Endoscopy
- Scoliosis Research Society

Field of Expertise

- Complex spinal deformity – Scoliosis and kyphosis corrections
- Minimally invasive Spine Surgeries - tubular fusions and discectomies
- Endoscopic spine surgery (TELD, UBE)
- Intraoperative Spinal Neuromonitoring
- Computerised 3D Navigation-guided procedures

Languages Spoken

- English
- Bengali
- Hindi

Awards & Achievements

- Gold Medalist in Surgery, Medical College Kolkata (2009-10).
- Best Outgoing Student MS Orthopaedics Examination (2014) – RG Kar Medical College Kolkata.
- Former Unit Head and Senior Consultant Spine Surgeon and Faculty In-Charge of the FNB Spine Fellowship Programme at the Institute of Neurosciences Kolkata (INK).

Talks & Publications

- Choose your eyes in spine surgery- Chennai UBE Meet 2025.
- UB Endoscopic TLIF - Neurocon Nepal, SSWBCON , WIROC 2025.

- UB Endoscopic ULBD – ASSI Operative course Mumbai 2025.
- Pseudoarthrosis in MIS – Management strategy- ASSI Operative course Mumbai 2025.
- Convex Instrumentation technique for Adolescent Idiopathic Scoliosis – Should this be the Gold Standard –AO Spine Regional conference Bangkok 2025.
- Enhanced recovery pathway after AIS surgery – Scoliosis week – Deformity marathon 2025.
- UB Endoscopic TLIF is better than MIS or Open TLIF – Asian UBE Meet 2025.
- Basics of Unilateral Biportal Endoscopy – Indore Cadaveric Spine Surgery course.
- UBE Discectomy – Comprehensive Minimally Invasive spine surgery course AIIMS Rae Bareli 2025.
- UBE TLIF UBECON Nepal 2025 (Virtual talk).
- UBE TLIF – why do I prefer it more than MIS TLIF – Britspine Manchester 2025.
- Navigated MIS TLIF – Medtronic -MSR cadaveric course on Spinal Navigation 2024.
- Bleeding control in UBE- RASE India Cadaveric workshop Mumbai 2024.
- Jitendra Nath Pal, Anindya Basu, Sunit Hazra, et al. Bizarre Parosteal Osteochondral Proliferation of Metatarsal:Journal of Evidence Based Medicine and Healthcare, 2014.
- Pal JN, Kar M, Hazra S, Basu A. Differential diagnosis of BPOP: Journal of Orthopaedic Case Reports 2015.
- Selvin PV, Gerber C, Basu A, Basu G, Mhatre R. Epidural angiolipoma and Andersson lesion: Indian Spine J 2021.
- Prabhakar VS, Gerber C, Basu A, et al. Surgical management of aggressive vertebral hemangioma: Indian Spine J 2021.
- Selvin PV, Gerber C, Basu A, et al. Polyostotic Spinal Paget’s Disease:J Korean Soc Spine Surg. 2022.
- Selvin PV, Gerber C, Basu A, et al. Modified “Lift up”

Laminoplasty: J Korean Soc Spine Surg. 2022.
- Tosaddeque Hussain, Indranil Ghosh, Christopher Gerber, Anindya Basu, et al. Postpartum Paraplegia following Spinal Anaesthesia… Journal of Surgical Case Reports.
- Prabhakar, Selvin; Shahi, Pratyush; Hussain, Md. Tosaddeque; Tiwari, Mona; Gerber, Christopher; Basu, Anindya.
- Utility of Diffusion Tensor Imaging in Predicting Outcomes Following Surgical Treatment of Degenerative Cervical Myelopathy. Neurology India 73(2):p 292-297, Mar–Apr 2025. | DOI: 10.4103/neurol-india.Neurol-India-D-24-00271.
- Selvin V, Gerber C, Basu A, Tiwari M, Hussain TMD, Ganguly J. Hirayama disease and its management: Experience of a tertiary care center in Eastern India. Indian Spine J 2025;8:26-35.
- Debajyoti Datta, Debarshi Chatterjee, Mona Tiwari, Soutrik Das, Anindya Basu:Intramedullary Spinal Epidermoid Cyst—A Rare Cause of Spastic Paraparesis: Asian Journal of Neurosurgery: Article published online: 2024-06-04
- Vijayan, Selvin P.; Gerber, Christopher; Basu, Anindya; Mhatre, Radhika1. Isolated Spinal Intramedullary Neurocysticercosis: Case Report and Review of Literature. Indian Spine Journal 6(1):p 96-100, Jan–Jun 2023. | DOI: 10.4103/isj.isj_100_21.
- Christopher J Gerber, Anindya Basu, Selvin Prabhakar. Bioengineering of Spinal Implants. Springer Nature Singapore.