

Resume of Jwalant S. Mehta.

MBBS, MS(Orth), D(Orth), MS(Orth), MCh(Orth), FRCS (Eng), FRCS (Tr & Orth)

PERSONAL AND CONTACT DETAILS:

Name: Jwalant S. Mehta
NHS base: Royal Orthopaedic Hospital, Birmingham B31 2AP
NHS hospital: Birmingham Childrens Hospital
Private affiliations: Spire Parkway Hospital, Solihull
The BMI Priory Hospital
Bromsgrove Private Clinic
The Portland Hospital, London
Royal National Orthopaedic Hospital, Stanmore
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Nationality: British; Indian

MEDICAL LICENSURE:

General Medical Council (UK): Specialist Register for Trauma & Orthopaedics

Registration no: 4479169

Missouri Board for Healing Arts: Visiting Professor Licence (Dec 2008)

Licence No: 200803379

QUALIFICATIONS:

India 1989 **MBBS** (Bombay University)
 1992 **MS Orth** (Bombay University)
 1992 **D Orth** (Bombay University)

UK 1998 **MCh Orth** (University of Liverpool)
 2001 **FRCS** (Tr & Orth)
 2002 **FRCS** (Royal College of Surgeons of England)

ADDITIONAL RESPONSIBILITIES

- Paediatric Safeguarding Lead for Royal Orthopaedic Hospital
- Expert member of the National Research Ethics Committee (Edgbaston sub-committee)
- Designated Appraiser for the Royal Orthopaedic Hospital
- Ethics Advisory Group: Birmingham Womens and Childrens' Hospital

RESEARCH & PUBLICATIONS

Thesis and Dissertations:

1. Study of avascular necrosis of femoral heads in operated trans-cervical fractures of the femur. M.S.(Orth), Bombay University, July '92.
2. Spondylo-discitis of the thoracic spine: A new classification based on selection of surgical approach. M.Ch. (Orth) Liverpool, December 1998.

Study Groups, Paediatric Spine Foundation and Scoliosis Research Society:

- Contributor site to the PSSG (Paediatric Spine Study Group)
- Paediatric Spine Foundation Research Interest Groups: Pulmonary outcomes; Growing Spine Graduate; Radiation and Growth
- European Spine Study Group (ESSG), Associate member.
- SRS steering committees, current: Fellowship
- Paediatric Spine Foundation: Outreach committee.
- SRS steering committees, previous: Grant review, Growing spine, Worldwide conferences, Education, CME, Website.
- Strategic research alliance with University of Toledo, OH, USA

Editorial Commitments:

- Clinical Journal of Orthopaedics
- European Spine Journal
- Spinal Deformity Journal
- Indian Journal of orthopaedics
- Bone Joint Journal
- Global Spine Journal

Book Chapters and invited publications:

1. **Mehta JS**, Gaines RW Jr. Anterior short segment fusion for Scheuermanns disease. ***Bridwell's textbook of Spine Surgery, 3rd edition, in Press.***
2. Romagnoli JR, **Mehta JS**, Gaines RW Jr. The L5 vertebrectomy approach for the treatment of Spondyloptosis with the reduction of L4 on S1. ***Bridwell's textbook of Spine Surgery, 3rd edition, in Press.***
3. **Mehta JS**, Gaines RW Jr Short Segment 'Bone-on-bone' fusion for adolescent idiopathic scoliosis. ***Mastering techniques in Orthopaedic Surgery: Spine.***
4. **Mehta JS**, Gaines RW Jr L5 vertebrectomy with reduction of L4 onto S1 for the surgical reconstruction of lumbosacral spondyloptosis. ***Mastering techniques in Orthopaedic Surgery: Spine.***
5. **Mehta JS**, Gaines RW Jr The anterior approach to treating Scheuermann's disease: Short segment fusion. ***Mastering techniques in Orthopaedic Surgery: Spine.***
6. **Mehta JS**, Gaines RW Jr. *Anterior surgery in spinal pathology. E chapter for the SRS website.*
7. **Mehta JS**, Hemmadi SS. Legg-Calve-Perthes disease: A monograph for primary care physicians. *BMJ Point of care, an e-publication in ePocrates.*
8. **Mehta JS**. Chronic spinal cord injuries. A monograph for primary care physicians. *BMJ Point of care, an e-publication in ePocrates.*
9. **Mehta JS, Jones M.** Proximal Junctional Kyphosis. ASSI Monograph on *Spinal Complications.*

10. **Mehta JS, Goel VK, Zaveri G.** Biomechanical aspects of spinal deformities in Ankylosing Spondylitis. ASSI Monograph on *Ankylosing Spondylitis*.
11. **Mehta JS, Nnadi C.** Complications of growing rod instrumentation for Early Onset Scoliosis. ASSI Monograph on *Early Onset Scoliosis*.
12. **Mehta JS.** Making Adult Spinal Surgery Safer: strategies and limitations. *Backbone 103, 18 – 24.*
13. **Mehta JS.** Safety protocols: How to get things right. ASSI Monograph on 'Safety in Spinal Surgery'
14. **Mehta JS, Keerthi I.** Clinical Bio-mechanics of the lumbar spine. *Chapter. Textbook of Orthopaedics and Trauma.*
15. **Mehta JS, Rege AJ.** Safety Protocols: How to get things right consistently. ASSI Monograph on Safety in Spine Surgery
16. **Mehta JS.** Growth rods in Early Onset Scoliosis: Current Scenario.

Published papers and abstracts in peer-reviewed journals:

1. Agarwala S., **Mehta JS** Micro-lumbar Discectomy - The first century at the Hinduja Hospital. *Bombay Hospital Journal, Vol. 36, No. 4, 1994.*
2. **Mehta JS, Bhojraj SY.** Tuberculosis of the thoracic spine: A classification based on the selection of surgical strategies. Agarwala S, **Mehta JS.** The Kashiwagi syndrome in calcaneal fractures - an under recognised clinical entity. *Orthopaedics Update (India) Vol. 5 : 1995.*
3. Mannion SJ, **Mehta JS, Spencer JD.** Oedeme blue. *Journal of the Royal Society of Medicine Sept 1998; 91: 491 – 492. Journal of Bone & Joint Surgery 83-B, No. 6, August 2001; 859-863. Mehta JS, Nicolaou N, Kiryluk S, Fordyce MJ.* Venous ulcers after hip replacements: A clinical evaluation at 5 – 12 years. *Journal of Bone and Joint Surgery 85-B, No 7, September 2003; 960-2.*
4. **Mehta JS, Kiryluk S, Fordyce MJ, Tuson KWR.** Pain and patient satisfaction: Outcome parameters for the successful hip replacement in the elderly. *Hip International 2005; 15: 112 - 118*

5. **Mehta JS**, Conybeare ME, Hinves B, Winter JBM. Protein C levels in patients with Legg-Calve-Perthes disease. Is it a true deficiency? *Journal of Paediatric Orthopaedics* 26 (2); Mar / Apr 2006: 200 – 203
6. **Mehta JS**, Gibson MJ. The treatment of neuromuscular scoliosis. Review article *Current Orthopaedics* (2003) 17, 313-321.
7. **Mehta JS**, Reed MR, McVie JL, Sanderson PL. Weight bearing radiographs in Thoraco-lumbar fractures. Do they influence management? *Spine* 29 (5); March 1 2004: 564 – 567.
8. Jones A, **Mehta JS**, Fagan D, Ahuja S, Grant A, Davies PR. Anterior odontoid screw for a paediatric odontoid non-union: a case report. *Spine* 30(1); Jan 1 2005: E 28 – 30.
9. Gill I, Eagle M, **Mehta JS**, Gibson MJ, Bushby K, Bullock R. Correction of neuromuscular scoliosis in patients with pre-existing respiratory failure. *Spine* 2006 Oct 1, 31(21): 2478-83.
10. Eagle M, Bourke J, Bullock, R, Gibson MJ, **Mehta JS**, Giddings D, Straub V, Bushby K. Managing Duchenne muscular dystrophy – The additive effect of spinal surgery and home nocturnal ventilation in improving survival. *Neuromuscular disorders* 17 (6), June 2007: 470 - 475.
11. Lakshmanan P, Jones A, **Mehta JS**, Howes J, Ahuja S, Davies PR. Recurrence of kyphosis and its functional implications after surgical stabilisation of dorso-lumbar fractures. Accepted for *The Spine Journal*.
Non-fusion short fixation of A3 burst fractures, loss of fixation attributable to polyaxial screw slippage? Lakshmanan P, Jones A, **Mehta JS** et al. *The Spine Journal* Letter to Editor, 10 (5), May 2010.
12. Kusakabe T, **Mehta JS**, Gaines RW Jr. Results after short-segment bone-onbone instrumentation for adolescent idiopathic scoliosis with a mean follow-up of 6 years. Accepted for publication in *Spine*.
13. **Mehta JS**, Kochhar S, Harding I. Retro-listhesis in the segment above the lytic slip: role of the facet degeneration. *European Spine Journal*
14. **Mehta JS**, Moldavsky, Kannan M, Khalil S. Pedicle screw pullout based on 4 screw preparation techniques. *Indian Journal of Orthopaedics*.
15. Is the routine use of magnetic resonance imaging indicated in patients with scoliosis? Dewan V, Gardner A, Forster S, Matthews J, Newton Ede M, **Mehta JS**, Spilsbury J, Marks D. *J Spine Surg*. 2018 Sep;4(3):575-582.

16. Prediction of Scoliosis Curve Correction Using Pedicle Screw Constructs in AIS: A Comparison of Fulcrum Bend Radiographs and Traction Radiographs Under General Anesthesia. Tokala DP, Nelson IW, **Mehta JS**, Powell R, Grannum S, Hutchinson MJ. *Global Spine J.* 2018 Oct;8(7):676-682. Epub 2018 Mar 26.
17. Magnetically Controlled Growing Rods: The Experience of Mechanical Failure from a Single Center Consecutive Series of 28 Children with a Minimum Follow-up of 2 Years. Beaven A, Gardner AC, Marks DS, **Mehta JS**, Newton-Ede M, Spilsbury JB. *Asian Spine J.* 2018 Oct;12(5):794-802. Epub 2018 Sep 10.
18. Does the law of diminishing returns apply to the lengthening of the MCGR rod in early onset scoliosis with reference to growth velocity? Gardner A, Beaven A, Marks D, Spilsbury J, **Mehta JS**, Newton Ede M. *J Spine Surg.* 2017 Dec;3(4):525-530.
19. Non-fusion options in cervical disc herniations. **Mehta JS**, Czyz M. *International J of Spine.* 2019 4 (2): 7 – 8.
20. Multi-centre assessment of neurologic changes in distraction-based surgery for Early Onset Scoliosis. Newton Ede M, Pawelek J, Skaggs D, Emans J, Shah S, Thompson G, **Mehta JS**, Marks DS. *Abstract Spinal deformity* 5 (2017): 440 – 465
21. A United Kingdom single centre review of the impact of extended waiting times in Early Onset Scoliosis: the effect of a delay to surgical treatment of over 12 months. *Abstract Spinal deformity* 5 (2017): 440 – 465 Jones MJ, Newton Ede M, **Mehta JS**, et al.
22. Long-term follow up of patients with infantile idiopathic scoliosis; is rib vertebra angle difference (RVAD) a reliable indicator of evolution? *Abstract SRS 2019.*
23. Radiation exposure in children and adults during the treatment for scoliosis. **Mehta JS**, Hodgson K, Yiping L, Kho J, Timmiaiah R, Topiwala U, Sawlani V, Botchu R. *Bone Joint Surgery* 103 – B (4); 739 – 745: 2021.
24. Efficacy of distal pedicle screw fixation as a caudal foundation in VEPTR growing rod constructs for early onset scoliosis. Dong H, Nandra R, Thurston D, Laugharne E, Newton Ede M, Gardner AC, **Mehta JS**. *Spinal Deformity* 2021 July; 9 (4): 1169 – 1174.

25. Biomechanical Analysis of the Tuning Fork Plate versus Dual Pelvic Screws in a Sacrectomy Model: A Finite Element Study *Joukar A, Mehta JS, Goel VK, Marks DS. Global Spine Journal Feb 1, 2021: 1 – 8.*
26. The impact of blood conservation techniques on the transfusion requirements for posterior scoliosis correction: Do we need routine cross-match for the operation? *Haleem S, Thimmaiah R, Nagrath N, Gowda D, Bhimarasetty C, Mehta JS. Brain and Spine Vol 1, Suppl 1. Abstract in Eurospine 2021*
27. Growth preserving instrumentation in early onset scoliosis patients with multi-level congenital anomalies. PSSG publication. *Spinal Deformity Journal (2021) 9: 1491*
28. The impact and surgeon perceptions of the suspension of the CE certification of MAGEC devices on clinical practice. *Hothi H, Shafafy M, Tucker S, Broomfield E, Mehta JS, Loughenbury P, Khan A, Gardner AC. Accepted by BJJ Open*
29. Lumbar-sacral destruction fixation biomechanics: A Finite element study. *Joukhar A, Mehta JS, Marks DS, Goel VK. The Spine Journal 17 (11), Suppl S335, Nov 2017. Abstract*
30. Does Magnesium sulfate infusion in the peri-operative period reduce the requirement for post-operative opioid analgesia in posterior surgical correction of AIS. *Minnis P, East J, Mehta JS, DaSilva EJ. The Spine Journal 17 (11), S334, Nov 2017*
31. Vertebral and intra-spinal anomalies in patients with congenital scoliosis. *Tahir M, Newton Ede M, Marks DS, Mehta JS, Gardner AC. The Spine Journal 17 (11), S321 – 322 Nov 2017*
32. The rate of disc degeneration on MRI in preoperative adolescent idiopathic scoliosis. *Jones M, Badreddine I, Mehta JS, et al. The Spine Journal 17 (11) S332, Nov 2017*
33. The impact of blood conservation techniques on transfusion requirements for posterior scoliosis correction: Do we need a routine cross match for the operation. *Haleem S, Thimmaiah R, Nagrath N, Gowda D, Bhimarasetty C, Mehta JS. Spinal Deformity Journal Jan 2022*
34. Comparing the outcomes of Traditional Growing Rods and Magnetically Controlled Growing Rods at Graduation. *Tahir M, Mehta D, Sandhu C, Jones*

- M, Gardner AC, Mehta JS. February 2022 Bone and Joint Journal 104-B(2):257-264 DOI: 10.1302/0301-620X.104B2.BJJ-2021-1198.R1*
35. Incidence of post spinal surgery Pulmonary Emboli over a 12 year period in a specialist tertiary referral centre. *Taylor P, Norman H, Mehta JS, DaSilva EJ. Submitted to BJJ*
 36. The role of Magnesium in reducing opiate requirements after scoliosis surgery. Submitted to Indian Journal of Orthopaedics
 37. A comparison of MRI and SPECT CT scanning in complex spine pathology: Does SPECT – CT provide additional diagnostic information over MRI? *Thurston D, Hurley P, Raheel F, Gadhvi R, Botchu R, Gardner AC, Mehta JS. Submitted to GSJ.*
 38. Does inter-vertebral disc degeneration in AIS correlate with patient reported pain scores? A review of 968 cases. *Boylan C, Thimmaiah R, McKay G, Gardner AC, Mehta JS, Spilsbury JB, Marks DS, Jones M. Submitted to Spinal Deformity.*
 39. A comparison of the post-fusion outcome of patients with early-onset scoliosis treated with traditional and magnetically controlled growing rods
 40. Systematic review and meta-analysis: Does anterior-posterior spinal fusion have a role in severe thoracic adolescent idiopathic scoliosis? *Dwarkanath L, Sewell MD, Leung E, Knight T, Jones M, McKay G, Newton-Ede MP, Marks DS, Spilsbury JB, Mehta JS, Gardner AC. IJO 2022. <https://doi.org/10.1007/s43465-022-00747-9>*
 41. Alteration in the cross-sectional area (CSA) ratio of the para-spinal muscle following vertebral insufficiency fractures. *Shah A, Iyengar KP, Azzopardi C, Haleem S, Mehta JS, Botchu R. IJRI 2022 DOI [https://doi.org/ 10.1055/s-0042-1758522](https://doi.org/10.1055/s-0042-1758522).*
 42. Prevalence of spondylolisthesis in Scheuermann's kyphosis: An MRI study. *JBJS B, Oct 1: 2014*
 43. Body Mass Index affects outcomes after vertebral body tethering surgery. *Spine Deformity 2022. Mishreky A, Parent S, Miyanji F, et al PSSG publication*
 44. Significant unexpected abnormalities detected on MRI scanning in Scheuermann's kyphosis: A consecutive series of 104 patients over 6 years. *JBJS B, 2014.*

45. Does the presence of programmable implanted devices in patients with early onset scoliosis alter typical operative and non-operative practices? A survey of spinal surgeons. McMahon R, Morgan SJ, et al PSSG publication.
46. Growth preserving instrumentation in early onset scoliosis with multi-level congenital anomalies. Carter Clement, Yaszay B, McClung A, et al PSSG publication.

CURRENT RESEARCH PROJECTS:

Protocol / Data collection:

1. Do Proximal hooks protect against PJK in long constructs
2. Positional effects on loading of the neural arch: FEA study
3. Lung function study after anterior scoliosis surgery
4. HISTory study: 20+ year outcomes of AIS surgery
5. Outcomes of Hemivertebra excision: PSSG study
6. Radiation exposure in paediatric deformity surgery: PSSG study
7. Comparing TGR and MCGR at graduation: PSSG study
8. Review of CT scan radiation doses with improvement in technology

Draft / Submission:

1. Facet pathoanatomy in Adult Spinal deformity
2. The role of SPECT scans in the assessment of complex spinal problems
3. Functional outcomes of sacral agenesis
4. The utilization of HDU+ in post-operative management of neuromuscular and syndromic scoliosis
5. Systematic review of posterior lumbar inter-body cage migration.

MEMBERSHIPS:

1. British Orthopaedic Association
2. Indian Orthopaedic Association
3. Bombay Orthopaedic Society
4. AO Spine
5. British Scoliosis Society
6. British Association for Spinal Surgeons

7. Association of Spinal Surgeons of India
8. Scoliosis Research Society

EDITORIAL COMMITMENTS:

1. European Spine Journal
2. Spine Deformity Journal
3. Bone Joint Journal (formely JBJS Br)
4. Global Spine Journal
5. Indian Journal of Orthopaedics
6. Journal of Clinical Orthopaedics

CLINICAL (NHS & PRIVATE) PRACTICE:

- Deformity corrections in paediatric, adolescent, adult and elderly populations.
- Degenerative conditions of the cervical and the lumbar spine.
- Sports injuries in professional and semi-professional football, cricket and rugby players.
- Medico-legal report writing for injury claims and clinical negligence.

