ACADEMIC CV



Name:Prof.(Dr) Sachin Anil Borkar

Professor

Department of Neurosurgery& Gamma Knife, All India Institute of Medical Sciences& associated Jai Prakash Narayan Apex Trauma Center, Ansarinagar, New Delhi, India.-110029

Educational Qualification :

M.B.B.S., M.Ch. (Neurosurgery) , D.N.B.(Neurosurgery), F.A.C.S.(Neurosurgery), M.N.A.M.S.(Gold Medallist)

- o Faculty AO Foundation, South Asia
- Faculty AO Spine
- Faculty ATLS
- Executive Committee Member, Neurotrauma Society of India(2021-2024)
- Executive Committee Member, Neuro-Spinal Surgeons' Association of India(2022-25)
- Executive Committee Member, Indian Society of Pediatric Neurosurgery(2022-25)
- Executive Committee Member, Delhi Spine Society(2022-25)
- Core Committee Member Neurological Society of India-Young Neuroscientist Forum(NSI-YNF)
- Member, Association of Spine Surgeons of India(ASSI) Publications Committee, ASSI Website Committee

- Editor, Journal of Spinal Sugery(JOSS)(<u>https://www.jossworld.org</u>)
- Section Editor, Journal of Clinical Orthopedics & Trauma(JCOT)
- Editorial Board Member, Neurology India
- Ex-Treasurer, Indian Society of Peripheral Nerve Surgery(2018-2022)
- Ex-delegate, AO Spine Indian Subcontinent Council(2018-20)

Youtube channel : Operative Neurosurgery

https://www.youtube.com/channel/UCqjyJjvqxJwHmdCe0hRcT3Q **Research Profile :** https://scholar.google.com/citations?hl=en&user=hbaQbswAAAAJ https://www.researchgate.net/profile/Sachin_Borkar

General achievements:

Dr.Sachin Borkar is working as a faculty of Neurosurgery, AIIMS New delhi and associated JPN Apex Trauma center since 2012. Currently he is Professor of Neurosurgery. During his glorious academic career, he has received various awards including **Gold medals in MBBS**, **DNB(Neurosurgery) as well as Best M.Ch.resident award.** He is also a recipient of Neurosurgery NEXTGEN award in 2016, H.Alan Crockard International Award by AANS/CNS spine section as well awards for papers presented in various national and international conferences. He has around 170 publications in various national and international journals including 26 chapters in books. He also has served as editor for two books focussed on niche neurosurgery topics. He also has presented his work in various national and international fora as invited faculty(150 presentations till now). He has been a delegate of the AO Spine Indian Subcontinent Council (AOSIN) from 2018-2020 as well as a trained AO Spine faculty. In addition to his academic commitments, he is currently serving as EC member of Neurotrauma Society of India(NTSI), Neuro-Spinal Surgeons' Association of India(NSSA), Indian Society of Pediatric Neurosurgery(INDSPN), Delhi Spine Society, among others. He is also aCore Committee Member of Neurological Society of India- Young Neuroscientist Forum(NSI-YNF), Editor of Journal of Spinal **Surgery**(JOSS)-the official journal of Neuro-Spinal Surgeons' Association(NSSA), Spine

section editor for Journal of Clinical Orthopedics & Trauma(JCOT) as well as editorial board member of Neurology India, World Journal of Clinical Cases(WJCC), International Journal of Neurology & Neurosurgery, EC Pediatrics, Medical Case Reports and Images, etc and reviewer for many neuroscience journals like World Neurosurgery, JOCN, AJNS, etc.

Contribution to patient care :

Dr Sachin Borkar is well versed in all aspects of Neurosurgery.His area of interest include complex spine surgery(including CVJ)and skull base surgery. He is also trained in complex spinal deformity surgery.In addition, he has special expertise in minimally invasive brain and spine surgery, eloquent region gliomas and complex spinal dysraphism(lipomeningocele). His research interest include vestibular schwannoma, cervical laminoplasty, machine learning and its application in Neurosciences,etc

Contribution to Neurosciences :

As a faculty at one of the premier institutes of the country, Dr.Sachin Borkar has been actively involved in neurosurgical care as well as teaching and training. He has also contributed to neurotrauma capacity building in far-flung areas of Ladakh, where neurotrauma care is rudimentary. He is actively involved in various educational activities conducted by National Board of Examination(NBE), Neurological Society of India(NSI), Association of Spine Surgeons of India(ASSI),Neuro- Spinal Surgeons Association of India (NSSA), Minimally Invasive Spine Surgery Association of Bharat(MISSAB) , AO spine , etc.

Detailed CV

Name: Dr Sachin Anil Borkar

Postal Address : Dr Sachin A Borkar, Professor Department of Neurosurgery, Room no.720, CN Center, All India Institute of Medical Sciences, Ansarinagar, New Delhi, India.

Pin.-110029.

E-mail: sachin.aiims@gmail.com

Educational Qualification :

M.B.B.S., M.Ch. (Neurosurgery), D.N.B.(Neurosurgery), M.N.A.M.S., F.A.C.S.

Name of the	University/Institute/	Month & Year of	No.of	Percentage	Class/Divisio
examination	College	passing	attempts	of marks	n/Grade
S.S.C.	Maharashtra State Board of	June, 1997	First	88.26%	Distinction,
	Secondary & Higher				15 th in order
	Secondary Education, Pune.				of merit
	(Nagpur Divisional Board)				
H.S.C.(10+2)	Maharashtra State Board of	June,1999	First	95.5%	Distinction,
	Secondary & Higher				1 st in order of
	Secondary Education, Pune.				merit in
	(Nagpur Divisional Board)				Science
					stream
M.B.B.S.	Government Medical	December, 2003	First	74.88%	Gold Medal
	College, Nagpur,				
	Maharashtra.				
	(Maharashtra University of				
	Health Sciences, Nashik)				
M.Ch.	All India Institute of	December, 2010	First	-	Best Outgoing
Neurosurgery	Medical Sciences(AIIMS),				M.Ch.Residen
(6 years	New delhi, India.				t
course)					
Diplomate of	National Board of	May,2014	First		Gold Medal
National	examinations(NBE), New				
Board(D.N.B.	delhi, India				
)					
Neurosurgery					

Major Academic Achievements-

S.S.C.(1997)

15th in order of Merit in Nagpur Divisional Board, Nagpur, Maharashtra, India.

H.S.C.(1999)

1st in order of Merit in Science stream in in Nagpur Divisional Board, Nagpur, Maharashtra, India.

M.B.B.S.(1999-2003)

From Government Medical College, Nagpur, Maharashtra India; under Maharashtra University of Health Sciences (M.U.H.S), Nashik.

Awarded <u>GOLD MEDAL</u> for outstanding performance in Final M.B.B.S. by M.U.H.S., Nashik, Maharashtra, India.

Internship (2004)

From Government Medical College, Nagpur, Maharashtra India; under Maharashtra University of Health Sciences (M.U.H.S), Nashik.

M.Ch.(Neurosurgery, Integrated 6-years course 2006 -2011)

From All India Institute of Medical Sciences, New Delhi, India; the premier Medical Institute of India.

Positions held :

- Assistant Professor, Department of Neurosurgery & Gamma Knife, All India Institute of Medical Sciences, New Delhi, India- since 7th March, 2012 to 30th June,2015.
- Associate Professor, Department of Neurosurgery & Gamma Knife, All India Institute of Medical Sciences, New Delhi, India- since 1st July,2015 till 30th June,2018
- Additional Professor, Department of Neurosurgery & Gamma Knife, All India Institute of Medical Sciences, New Delhi, India- since 1st July,2018 till 30th June,2022.
- Professor, Department of Neurosurgery & Gamma Knife, All India Institute of Medical Sciences, New Delhi, India- since 1st July,2022 till date.

Fellowships /Advanced training :

• AANS/CNS Spine section H. Alan Crockard International Spine fellowship in Minimally Invasive & Complex Spine Surgery, University of California San Francisco(UCSF) Medical Center, San Francisco, CA, USA; June-July 2016

- International Group for Advancement of Spinal Sciences(IGASS) Spine
 Fellowship- under Prof. Khai S. Lam, Spine Surgeon at Guy's & St. Thomas' Hospital, NHS Foundation Trust, 2015
- AO Spine Asia Pacific Spine fellowship –under Prof. Shankar Acharya at Sir Gangaram Hospital, New Delhi, India;2016
- Clinical observership/ Short-term fellowship Neuro-oncology under Prof. Mitchel S Berger, Professor & Head, Department of Neurological surgery, University of California San Francisco(UCSF) Medical Center, San Francisco, CA, USA; September 2009.

Publications & Presentations -

Publications – Total 170(as on Sept,2022)Chapters in book-26) -details attached below
Presentations – have done poster and platform presentations at various National &
International conferences.

<u>Awards –</u>

- Best paper award, World Federation of Neurosurgical Societies(WFNS) Symposium, Kualalumpur, Malaysia,2018.
- 2) Awarded Fellowship of American College of Surgeons(FACS) in 2017
- Neurosurgery NEXT GEN award (1st prize) during International Neurosurgery Update,4-5th June, 2016; Mumbai, India
- 4) Awarded AO Spine India National Fellowship in Spine for the year 2016.
- 5) AANS/CNS Spine section's Crockard International Fellowship (Spine & Peripheral nerve) for the year 2015.
- 6) Gold medal in DNB Neurosurgery, 2013 batch
- 7) Awarded Memberhip of National Academy of Medical Sciences(MNAMS),2014
- Best Neurosurgery Resident Award, 14th AIIMS Annual Microneurosurgery Workshop, Feb.2012, AIIMS, New delhi
- Selected as a distinguished achiever in the field of Medical Sciences and included in 2010 edition of Marquis Who's Who in the World
- Neurosurgery Best Paper Award , Delhi Neurological Association Annual Meeting ,23-24 January, 2016; New delhi, India.

- Resident Paper Award at Neuropedicon-2008, 19th Annual Meeting of Indian Society of Pediatric Neurosurgery, Coimbatore, India.
- 12) Herbert Krause Neuro-oncology Best Paper Award ; Neurocon-2007, 56th Annual Meeting of Neurological Society of India, Agra, India(Co-author).
- 13) Best Paper Award(1st Prize) UK-UP Neurocon 2016, 22nd Annual Conference of Neuroscience Society, 19-20th March,2016, Nainital,UK(Co-author)
- 14) Best Paper Award(2nd Prize) UK-UP Neurocon 2016, 22nd Annual Conference of Neuroscience Society, 19-20th March,2016, Nainital,UK(Co-author)
- 15) Indian Society of Pediatric Neurosurgery (INDSPN) Traveling Fellowship for the year 2008.
- 16) Codman Depuy Travelling Fellowship to attend XIV WFNS World Congress held in Boston, MA, USA in 2009.

<u>Membership:</u>

- o AO Spine Member Plus
- National Academy of Medical Sciences(NAMS)
- Neurological Society of India(NSI)
- o Skull Base Surgery Society of India
- Indian society of Cerebrovascular Surgery
- Neurotrauma Society of India(NTSI)
- Association of Spine Surgeons of India(ASSI)
- Neuro Spinal Surgeons Association
- Indian Society of Peripheral Nerve Surgery (ISPNS)
- Indian Society of Trauma & Acute Care(ISTAC)
- Delhi Neurological Association(DNA)
- o Delhi Spine Society
- North American Spine Society(NASS)
- American Association of Neurological Surgeons(AANS)
- Indo-American Spine Alliance(IASA)

Professional Association:

- o Faculty AO Spine
- o Faculty AO Foundation, South Asia

- Faculty Advanced Trauma Life Support(ATLS)
- o EC Member, Neurotrauma Society of India(NTSI)(2021-24)
- o EC Member, Delhi Spine Society(DSS)(2022-24)
- o Member, Website Committee of Association of Spine Surgeons of India(ASSI)
- o Member, Publications Committee of Association of Spine Surgeons of India(ASSI)
- Ex-Delegate member of AO Spine Indian Subcontinent Council(2018-21)
- o Ex-Treasurer of Indian Society of Peripheral Nerve Surgery(ISPNS)(2018-22)

Editorial Board activities:

- Editor, Journal of Spine Surgery(JOSS), the official journal of Neuro-Spinal Surgeons'Association of India(NSSA)
- o Section Editor, Journal of Clinical Orthopedics & Trauma
- o Editorial Board member of Neurology India
- Editorial Board member of International Journal of Neurology & Neurosurgery(IJNNS)
- o Editorial Board member of Medical Case Reports and Images
- o Editorial Board member of EC Pediatrics
- Ex Editorial Board member of World Journal of Clinical Cases(WJCC)

Reviewer :

- World Neurosurgery
- o Neurospine
- Asian J Neurosurgery
- Neurology India
- o J Clinical Neurosciences(JOCN)
- o BMJ Case Reports
- o Indian Journal of Medical Microbiology
- o Indian Journal of Neurosurgery
- Indian Spine Journal
- Indian Journal of Orthopedics
- o J Clinical Orthopedics & Trauma
- BMJ Pediatrics

- o Brain & Spine
- Journal of Spine Surgery
- o Journal of Clinical Orthopedics & Trauma

Research Projects:

Completed:

- Diffusion Tensor Imaging(DTI) tractography for prediction of facial nerve position in vestibular schwannoma and its intra-operative correlation. (Intramural, AIIMS funded)
- Cervical rotation before and after hinge-door cervical laminoplasty for cervical spondylotic myelopathy and its relation to post-operative axial neck symptoms(Extramural, AO Spine funded)

Ongoing :

- 1) Global sagittal balance in Degenerative Spine diseases
- 2) To study the effect of a locally administered

multifunctional cocktail on postoperative pain and blood loss in elective lumbar spinal surgeries: A prospective double blinded randomized control trial.

3) Development of a Machine Learning algorithm

for prediction of severity and need for surgery in Cervical Spondylotic Myelopathy.AIIMS-

IIT Delhi research Collaboration

 Histopathological and Immunohistochemistry Analysis Of Posterior Atlanto Occipital Membrane In Patients With Congenital/Developmental Craniovertebral Anomalies.ASSI research grant

PUBLICATIONS

Publications (2012-2022)

Overall-

- Books as Editor : 3
- Chapters in Books : 26
- Spine related publications: 61
- Brain related publications : 80
- Published abstracts: 3

Citations	1258
h-index	20
i10-index	38

SPINE

- Borkar SA, Sastri SB, Mohanty C, Bansal T. Therapeutic Spinal Injections and Percutaneous Procedures – An Overview .Current Practices In Neurosciences,March 2022.
- Kamra D, Bansal T, Anand P, Borkar SA. "Garland" of neurofibromas in neurofibromatosis type 1. J Spinal Surg 2022;9:65-6.
- Jeon H, Kim HC, Kim TW, An SB, Shin DA, Yi S, Kim KN, Yoon DH, Borkar SA, Son DW, Ha Y. Prediction of angular kyphosis after cervical laminoplasty using radiologic measurements. J Clin Neurosci. 2021 Mar;85:13-19.
- CK Thounaojam, SA Borkar, R Sharma, M Phalak, R Sharma, SS Kale.A prospective comparative study between day care spine surgery and conventional spine surgery.Indian Spine Journal 4 (1), 99
- R Sreenivasan, A Mohite, K Garg, SA Borkar, SS Kale.Delayed Epidural Hematoma Following Cervical LaminoplastyJournal of Spinal Surgery 2021;8 (4): 35

- 6) R Sharma, S Borkar, A Kumar, P Narwal, D Gupta, D Agrawal, S Kale.Post-Traumatic Cervicothoracic Junction Fracture-Dislocations: Technical Considerations and Outcome Analysis.Journal of Spinal Surgery 8 (4), 15-18.
- 7) S Kandregula, B Guthikonda, PS Chandra, S Yousefi, A Borhani-Haghighi, ...SA
 Borkar..... Microsurgery of Spinal Dural Arteriovenous fistula.Neurology India 70

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- Murlidharan Bhavaninilayam S, Borkar SA, Garg K, Phalak M, Kale SS. Letter to the Editor. Randomized trial for degenerative cervical myelopathy. J Neurosurg Spine. 2021 Mar 19:1-2
- Borkar SA, Sharma R. Biomechanical Factors Influencing Fixation Angle in Occipitocervical Fusion.Neurol India. 2021 May-Jun;69(3):780-781.
- 10) Verma S, Singh PK, Agrawal M, Sawarkar D, Borkar SA, Kumar A, Garg K, Agrawal D, Gupta D, Satyarthee G, Chandra SP, Kale SS. Use of Intraoperative Imaging to Preserve C1-C2 Mobility in Complex Atlas-Hangman Fractures.Neurol India. 2022 Jan-Feb;70(1):209-214.
- 11) Sharma R, Borkar S, Katiyar V, Goda R, Phalak M, Joseph L, Suri A, Chandra PS, Kale SS.Interplay of Dynamic Extension Reserve and T1 Slope in Determining the Loss of Cervical Lordosis Following Laminoplasty: A Novel Classification System.World Neurosurg. 2020;136:e33-e40.
- 12) Jeon H, Kim HC, Kim TW, An SB, Shin DA, Yi S, Kim KN, Yoon DH, Borkar SA, Son DW, Ha Y.Prediction of angular kyphosis after cervical laminoplasty using radiologic measurements.J Clin Neurosci. 2021 ;85:13-19.
- 13) Murlidharan Bhavaninilayam S, Borkar SA, Garg K, Phalak M, Kale SS.Letter to the Editor. Randomized trial for degenerative cervical myelopathy.J Neurosurg Spine. 2021;19:1-2.
- 14) Agrawal M, Borkar SA.Multiple Bilateral Spinal Neurofibromas in an Adult with Nonfamilial NF-1.Neurol India. 2020;68:236-237.
- 15) Sreenivasan R, Sharma R, Borkar SA, Arumulla S, Garg K, Chandra SP, Kale SS, Mahapatra AK.Cervical Split Cord Malformations: A Systematic Review. Neurol India. 2020 ;68:994-1002.
- 16) Alam I, Sharma R, Borkar SA, Goda R, Katiyar V, Kale SS. Factors predicting loss of cervical lordosis following cervical laminoplasty: A critical review. J Craniovertebr Junction Spine. 2020;11:163-168.

- Agrawal M, Gour SSK, Borkar SA. Unusual Calcification in Intramedullary Epidermoid Cyst. World Neurosurg. 2019;126:99-100.
- Agrawal M, Borkar SA, Mahapatra AK. Somsak's procedure: A review. J Peripheral Nerve Surgery 2020;01:1-5
- 19) Kale SS, Borkar SA. APCSS-CVJ Special Topic Series. Neurospine. 2019;16:184-185.
- 20) Agarwal N, Chandrappa H, Varshney G, Borkar SA. TO THE EDITOR.Comment on Functional Outcome of Elderly Patients Treated for Odontoid Fracture: A Multicenter Study. Spine (Phila Pa 1976). 2019;44:E927.
- Agrawal M, Borkar SA. Multiple Bilateral Spinal Neurofibromas in an Adult with Nonfamilial NF-1. Neurol India. 2020;68:236-237.
- 22) **Borkar SA**, Sharma R, Mansoori N, Sinha S, Kale SS. Spinopelvic parameters in patients with lumbar degenerative disc disease, spondylolisthesis, and failed back syndrome: Comparison vis-à-vis normal asymptomatic population and treatment implications. J Craniovertebr Junction Spine. 2019;10:167-171.
- 23) Zileli M, Borkar SA, Sinha S, Reinas R, Alves ÓL, Kim SH, Pawar S, Murali B, Parthiban J. Cervical Spondylotic Myelopathy: Natural Course and the Value of Diagnostic Techniques -WFNS Spine Committee Recommendations. Neurospine. 2019;16:386-402.
- Sharma R, Borkar SA, Phalak M, Joseph SL, Kale SS. Cervical alignment following laminoplasty for cervical spondylotic myelopathy. Surg Neurol Int. 2019;10:156.
- 25) Sharma R, Borkar SA, Goda R, Kale SS. Which factors predict the loss of cervical lordosis following cervical laminoplasty? A review of various indices and their clinical implications. Surg Neurol Int. 2019;10:147.

26) **Borkar SA**, Sreenivasan R, Sharma R, Sinha S, Joseph SL, Garg A, Kale SS. Cervical rotation before and after hinge-door cervical laminoplasty for cervical spondylotic myelopathy. J Craniovertebr Junction Spine. 2019;10:114-118.

- 27) Gour SSK, Agrawal M, **Borkar SA**. Letter to the Editor. Laminotomy outcomes in pediatric patients.J Neurosurg Pediatr. 2018; 17:1-3.
- 28) Agarwal A, Raheja A, Borkar SA, Mahapatra AK. An Unusual Case of Split Cord Malformation with Simultaneous Ventral and Dorsal Bony Spur at a Single Site: A Technical Challenge.J Pediatr Neurosci. 2018;13:214-217.

- 29) Sreenivasan SA, Phalak M, Borkar SA, Kale SS. Letter to the Editor. Percutaneous transforaminal endoscopic discectomy versus microendoscopic discectomy.J Neurosurg Spine. 2018;29:481-482.
- 30) Bansal S, **Borkar SA**, Mahapatra AK.

A common case with an unusual association: Chiari I malformation with holocord syrinx. Asian J Neurosurg. 2017 Apr-Jun;12(2):241-243.

- 31) Bansal S, Borkar SA, Mahapatra AK. Hydrocephalus associated with spinal intramedullary pilocytic astrocytoma. Asian J Neurosurg. 2017 Apr-Jun;12(2):217-219.
- 32) Agrawal M, Borkar SA, Mahapatra AK. Letter to the Editor Regarding "Efficacy of Early Surgery for Neurological Improvement in Spinal Cord Injury without Radiographic Evidence of Trauma in the Elderly.World Neurosurg. 2017 ;108:962.
- 33) Agrawal M, Borkar SA, Phalak M, Singla R, Mahapatra AK. <u>Does Spinal Cord Line</u> <u>Influence Choice of Surgical Approach in Multilevel Cervical Spondylotic</u> <u>Myelopathy?</u>World Neurosurg. 2017 Sep;105:1007.
- 34) Satyarthee GD, Garg K, Borkar SA. <u>Paraganglioma of the Filum Terminale: An</u> <u>Extremely Uncommon Neuroendocrine Neoplasm Located in Spine.</u> J Neurosci Rural Pract. 2017 Jul-Sep;8(3):490-493.
- 35) Garg K, Borkar SA, Kale SS, Sharma BS. Spinal arachnoid cysts Our experience and review of literature. Br J Neurosurg. 2017;31(2):172-178.
- 36) Singh SK, Mankotia DS, **Borkar SA**, Gupta UD. <u>Multiple mirror image cervical</u> neurofibromas in neurofibromatosis type 1.Neurol India. 2017;65(2):428-429
- 37) Mankotia DS, Singh SK, Borkar SA .Spontaneous regression of large herniated lumbar disc with remission of symptoms - case report and literature review. Indian J of Neurol Neurosurg 2016;8:53-56.
- 38) Nandish HS, Borkar SA, Kale SS, Sharma BS, Mahapatra AK. <u>Pediatric posterior</u> <u>cerebral artery stroke as a presentation of atlantoaxial dislocation.</u>J Pediatr Neurosci. 2015;10:149-52.
- 39) Raheja A, Borkar SA, Kumar R, Suri V, Sharma BS. <u>Metachronous spinal</u> <u>metastases from supratentorial anaplastic astrocytoma</u>. Asian J Neurosurg. 2015;10:60.
- 40) Raheja A, Borkar SA, Nalwa A, Suri V. <u>Primary spinal extraosseous cervical</u> <u>chondroma in an adult.</u>Neurol India. 2015;63:114-6.

- 41) **Borkar SA**, Mahapatra AK.Split cord malformations : A two years experience at AIIMS.**Asian J Neurosurg.** 2012;7(2):56-60.
- 42) **Borkar SA**, Sarkari A, Mahapatra AK. Craniosynostosis associated with neural tube defect : Is there a causal association?.**Pediatr Neurosurg.** 2011;47:337-41.
- 43) Sharma MS, Borkar SA, Kumar A, Sharma MC, Sharma BS, Mahapatra AK. Thoracic extraosseous, epidural, cavernous hemangioma: Case report and review of literature.J Neurosci Rural Pract. 2013 ;4:309-12.
- Prasad GL, Borkar SA, Satyarthee GD, Mahapatra AK.Split cord malformation with dorsally located bony spur: A clinical series of four patients with review of literature.J Pediatr Neurosci. 2012;7:167-70.
- 45) Borkar SA, Prasad GL, Satyarthee GD, Mahapatra AK. Spontaneous spinal extradural hematoma in a patient with Hemophilia B.J Pediatr Neurosci. 2011 ;6:131-3.
- 46) Bansal S, Suri A, Borkar SA, Kale SS, Singh M, Mahapatra AK. <u>Management of intramedullary tumors in children: analysis of 82 operated cases.</u>Childs Nerv Syst. 2012;28:2063-9.
- 47) Prasad GL, Borkar SA, Subbarao KC, Sharma MC, Mahapatra AK. <u>Neurenteric cyst</u> of the ventral cervicomedullary region. J Pediatr Neurosci. 2012 ;7:188-90.
- 48) Prasad GL, **Borkar SA**, Subbarao KC, Suri V, Mahapatra AK. <u>Primary spinal cord</u> <u>glioblastoma multiforme: a report of two cases.</u>Neurol India. 2012;60:333-5.
- 49) Borkar S, Bansal A, Mahapatra A. <u>Congenital dermoid inclusion cyst of anterior</u> <u>fontanelle associated with spinal dysraphism: a case report.</u>Childs Nerv Syst. 2011;27:2017-9.
- 50) Borkar SA, Satyarthee GD, Sharma BS. Conus ependymoma with holocord syringomyelia. Neurol India 2009;57:353-4.
- 51) Borkar SA, Kasliwal MK, Suri A, Sharma BS. Cervical Hemangioblastoma with holocord syrinx.Surg Neurol. 2009;72:437-8.
- 52) Bansal S, Borkar SA, Mahapatra AK. A common disease with uncommon presentation. Chiari I malformation with holocord syrinx. Asian J Neurosurg. 2017;12:241-243
- 53) Bansal S, **Borkar SA**, Mahapatra AK. Hydrocephalus associated with spinal intramedullary pilocytic astrocytomaAsian J Neurosurg. 2017 Apr-Jun;12(2):217-219.

- 54) Bora S, Borkar SA .Mediastinal hematoma following Internal Jugular Venous cannulation : A rare complication. Indian J of Neurol Neurosurg 2016;8:57-60.
- 55) Sharma R, Katiyar V, Borkar SA.Interplay of Radiological Parameters and Functional Outcomes following Cervical Laminoplasty.Neurospine(Under review)
- 56) Bansal T, Borkar SA.Primary Intradural Extramedullary Spinal Burkitt's lymphoma mimicking a nerve sheath tumor: A Case Report.Spinal Cord Series & Cases(Under review)
- 57) Bansal T, Borkar SA .Spinal hemangioblastoma causing a holocord syrinx: A report of 2 cases and review of literature.Indian Spine Journal(Under review)
- 58) Gurjar H, Gaonkar V, Bansal T, Borkar SA. Multiple sporadic spinal hemangioblastoma at the filum terminale and cervicodorsal junction: A case report and review of literature .Indian Spine Journal(Under review)

<u>BRAIN</u>

- 59) Goda R, Sharma R, Borkar SA, Katiyar V, Narwal P, Ganeshkumar A, Mohapatra S, Suri A, Kapil A, Chandra PS, Kale SS. Frailty and Neutrophil Lymphocyte Ratio as Predictors of Mortality in Patients with Catheter-Associated Urinary Tract Infections or Central Line-Associated Bloodstream Infections in the Neurosurgical Intensive Care Unit: Insights from a Retrospective Study in a Developing Country.World Neurosurg. 2022 Mar 3:S1878-8750(22)00262-5.
- 60) Mishra N, Rath GP, Bithal PK, Chaturvedi A, Chandra PS, Borkar SA. Effect of Goal-Directed Intraoperative Fluid Therapy on Duration of Hospital Stay and Postoperative Complications in Patients Undergoing Excision of Large Supratentorial Tumors.Neurol India. 2022 Jan-Feb;70(1):108-114.
- 61) Tandon V,Raheja A, Mishra S, Garg K, Dash C, Borkar SA, Wellington J, Chaurasia B, Fontanella MM, Suri A, Chandra PS, Kale SS.Trends in Neurosurgical Teleconsultation Services Across the Globe During COVID-19 Pandemic.World Neurosurg. 2021;20:S1878-8750(21)00440-X.
- 62) Raheja A, Agarwal N, Mohapatra S, Tandon V, **Borkar SA**, Chandra PS, Kale SS, Suri A.Preparedness and guidelines for neurosurgery in the COVID-19 era: Indian perspective from a tertiary care referral hospital.Neurosurg Focus. 2020 ;49:E3.

- 63) Deora H, Mishra S, Tripathi M, Garg K, Tandon V, Borkar S, Varshney N, Raut R, Chaurasia B, Chandra PS, Kale SS.Adapting Neurosurgery Practice During the COVID-19 Pandemic in the Indian Subcontinent.World Neurosurg. 2020 ;142:e396e406
- 64) Rajesh Y, Biswas A, Banik P, Pal I, Das S, Borkar SA, Sardana H, Saha A, Das SK, Emdad L, Fisher PB, Mandal M.Transcriptional regulation of HSPB1 by Friend leukemia integration-1 factor modulates radiation and temozolomide resistance in glioblastoma.Oncotarget. 2020;11:1097-1108.
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PUBLISHED ABSTRACTS

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PRESENTATIONS

- Dural tear during OPLL surgery. Complications management.Video session. Mid-West Chapter of Neurological Surgeons(MCNS-2022), Wardha,7-9th April,2022.
- Revision ACDF.Complications management.Video session. Mid-West Chapter of Neurological Surgeons(MCNS-2022), Wardha,7-9th April,2022.
- CVJ anomalies. From simple to complex to intricate.Mid-West Chapter of Neurological Surgeons(MCNS-2022), Wardha,7-9th April,2022.
- Is Transoral odontoidectomy a historic operation. Evolution & current status of CVJ management. ASSICON-2022 Annual conference of Association of Spine Surgeons of India, Patna. 30th April, 2022.

- 5) Anterior odontoid screw: Indications & Surgical technique.ASSICON-2022 Annual conference of Association of Spine Surgeons of India, Patna.30th April,2022.
- Think before you screw (the patient)! : Talk on complications . Bimonthly meeting of Delhi Spine Society, 14th May,2022, Delhi.
- Correlation between Radiological Outcome and Functional Outcome Following Cervical Laminoplasty for Cervical Spondylotic Myelopathy and Ossification of Posterior Longitudinal Ligament. 28th May,2022. Korean Spine Society Meeting -2022(Virtual)
- Anterior decompression in OPLL : Technical Tips. Asia Pacific Spine Society Meeting. 10-12th June ,2022,Coimbatore India(Hybrid/Virtual)
- 9) How to make a mark in an institute full of stalwarts? Inaugural meeting of Neurologiocal Society of India- Young Neurosurgeon's Forum(NSI-YNF), 11-12th June,2022, Chennai, India
- Anterior odontoid Screw: Tips and Tricks.Instructional Course in Spine (ICS-2022),3-6th Nov.2022, Bhubaneswar, India
- Career planning after Neurosurgery. NSI Instructional & Foundation Course. 19-20th Nov.2022, Nagpur, India
- 12) Avoiding radiation exposure in MISS surgery. AO Spine Principles level Anatomical Specimen Course,26-27th Nov.2022, New delhi, India
- 13) MISS tubular discectomy with surgical stepwise video.AO Spine Principles level Anatomical Specimen Course,26-27th Nov.2022, New delhi, India
- 14) MIS in Spinal Cord tumours .AO Spine Principles level Anatomical Specimen Course,26-27th Nov.2022, New delhi, India
- 15) Does Cervical Laminoplasty cause Kyphosis? Annual Conference of Neuro Spinal Suregons' Association of India.15-18th Sept.2022, Mumbai, India
- 16) DCER technique for Basilar impression. Annual Conference of Neuro Spinal Suregons' Association of India. 15-18th Sept. 2022, Mumbai, India
- 17) Is transoral odontoidectomy a historic operation ?Current Indications and technique.Annual Conference of Neuro Spinal Surgeons' Association of India.15-18th Sept.2022, Mumbai, India
- Syndromic CVJ anomaly.Bimonthly meeting of Delhi Spine Society, 29th Oct.,2022, Delhi.

- Cervical kyphosis. Interactive case discussion. AIIMS Annual Spine Workshop.6-8th Sept.2022, New delhi, India
- 20) MISS Intradural tumour surgery. Neurosurgical Association of Malaysia Annual Meeting (NAM) and Penang International Neurosurgical Congress.26th Aug.2022, Penang, Malaysia(Virtual)
- 21) Pial hemangioblastoma. Surgical management. World Neurosciences Summit(WNS),
 25-28th Aug.2022, New delhi, India
- 22) CVJ anomaly : The Good, The Bad and The Ugly.World Neurosciences Summit(WNS), 25-28th Aug.2022, New delhi, India
- 23) Adjacent Segment disease after prior cervical fusion : Management strategies. World Neurosciences Summit(WNS), 25-28th Aug.2022, New delhi, India
- 24) Role of decompressive craniectomy and ICP monitoring. International Society of Pediatric Neurosurgery ISPN Course and Mid-term meeting of IndianSociety of Pediatric Neurosurgery. 12-14th Aug.2022, Kolkata, India
- 25) Pediatric trauma Interactive case presentation. International Society of Pediatric Neurosurgery ISPN Course and Mid-term meeting of IndianSociety of Pediatric Neurosurgery. 12-14th Aug.2022, Kolkata, India
- 26) Interactive case presentation.NSI masterclass CVJ anomaly.13th August ,2022.
- 27) Approach to a case of Spinal Pathology. INSRAF Webinar. 8th July,2022
- 28) Anterior dural tear during Cervical Trauma.2- 4th Dec.2022. International Spine and Spinal Cord Injury meeting(ISSICON-2022), New delhi, India.
- 29) Basics of Scoliosis for Neurosurgeons. Annual Conference of Neurological Society of India(NSI)-8-11th Dec. 2022, Agra, India

Chaiperson/Moderator/Panelist

- Epilepsy & Functional Neurosurgery session.Mid-West Chapter of Neurological Surgeons(MCNS-2022), Wardha,7-9th April,2022.
- 31) Complications Session. Inaugural meeting of Neurologiocal Society of India- Young Neurosurgeon's Forum(NSI-YNF), 11-12th June, 2022, Chennai, India(Moderator)
- 32) Nuances of TLIF.NSI Virtual OT webinar.15th June,2022(Moderator)

- 33) Did Live Operative Workshop at KIMS, Bhubaneswar during Instructional Course in Spine (ICS-2022),3-6th Nov.2022, Bhubaneswar, India
- 34) Meningitis & encephalitis session . 3rd Annual Conference of Neuro-Critical Care Society of India(NCSI).6-9th Oct.2022, New delhi, India.
- 35) Spine Oncology (extradural) session.World Neurosciences Summit(WNS), 25-28th Aug.2022, New delhi, India
- 36) MIS lumbar discectomy.World Neurosciences Summit(WNS), 25-28th Aug.2022, New delhi, India
- Minimally invasive cervical spine surgery.World Neurosciences Summit(WNS), 25-28th Aug.2022, New delhi, India
- 38) NSI masterclass CVJ anomaly.13th August ,2022.(Moderator)
- 39) Panel discussion. Spine metastasis.2- 4th Dec.2022. International Spine and Spinal Cord Injury meeting(ISSICON-2022), New delhi, India.
- 40) Conducted pre-conference saw bone workshop on spine models during Annual Conference of Neurological Society of India(NSI)-7th -11th Dec. 2022, Agra, India

S. No.	Title of talk	Name of the CME/conference	Date	City/Country (on outside India)
1	Recurrent lumbar disc : Fusion is the answer.	Delhi Spine Society Annual meeting	27 th March, 2022	Gurgaon, India.
2	Early versus late Surgery for Subaxial Cervical Spine Injury	Annual AIIMS Neurotrauma Conference	20 th March, 2022.	New delhi, India
3	C1-C2 disc Is it real?,	Bimonthly meeting of Delhi Spine Society Annual meeting	12 th march, 2022.	Delhi, India
4	Recurrent lumbar disc : For Fusion(Debate).	Nepalese Society of Neurosurgeons Meeting	26 th Nov,20 21	Virtual
5	Dural tear during anterior cervical surgery	Nepalese Society of Neurosurgeons Meeting(26 th Nov,20 21	Virtual

6	Congenital Atlantoaxial Dislocation:Anatomy, Pathophysiology and Surgical Principles.	Dislocation:Anatomy, Pathophysiology and Surgical activity . Sharda University Noida, India			
7	Cervical Trauma: Spinal cord injury assessment and management:What's In and What's Out?,.	AO Spine Course	18th Sept.2 021	Delhi, India	
8	Spine Surgery during COVID pandemic .	AIIMS Clinical Combined Round	31st Aug.20 21	Delhi ,India	
9	Odontoid Screw for odontoid fracture	Annual meeting of Neurotrauma Society of India(NTSI)	27th Aug.20 21	Virtual	
1 0	Intraop dural tear during anterior cervical decompression.	ASSI Combined ICS Live Surgery Course 2021	27- 29th Aug.20 21	Virtual	
1 1	Cervical laminoplasty : What's new ?	AO Spine In-league webinar.	16th July,20 21	Virtual	
1 2	NBE webinar.	Intradural tumors of the spine	7th July,20 21.	Virtual	
1 3	Management of complications during lumbar spine surgery- dural tear, pseudomeningocele,etc	AO Spine Advanced Webinar—Degenerative Lumbar Spine Surgery	22nd May,2 022.	Virtual	
1 4	Approach to a Spine Case in exam.	ASSI Fellows educational activity	4th April,2 021	Virtual	
1 5	Preoperative radiological evaluation for planning -	SGPGI Spine Course.	8th May,2 021	Virtual	

		T		
	anterior versus posterior			
	approaches in Dorsal Spine			
	pathologies			
1 6	MIS resection of intradural tumour.	MISSAB Surgical Symposium	9-10th April,2 021	Virtual
1 7	Panelist-Landmark papers in Spine surgery	NSI Journal Club	26th March, 2022.	Virtual
1 8	Chaiperson-ANTC Distinguished Lecture Series 1	Annual AIIMS Neurotrauma Conference	21st March, 2022	New delhi, India
1 9	Moderator – Pituitary session	Delhi Neurological Association Annual Meeting	5-6th Feb.20 22	Virtual
2 0	Panelist - NBE case based discussion on CVJ anomalies.	NBE webinar	29th Dec.21	Virtual
2 1	Moderator-NBE panel discussion on CVJ anomalies	NBE webinar	5th Jan.22	Virtual
2 2	Panelist- Severe Basilar invagi nation - Case based discussion	ISSICON-2021	18th- 20th Nov.20 21	Delhi,India
2 3	Panelist-Minimally invasive approach to intradural pathology.	MISSAB tutorials	10th Nov.20 21	Virtual
2 4	Chaiperson & Judge – Award paper session	SKULLBASECON-2021, Annual Conference of SBSSI	22- 24th Oct.20 21	Jodhpur.
2 5	Panelist-LCS (no listhesis)- decompression vs fusion	MISSAB Surgical Symposium	9-10th April,2 022	Virtual

S. No.	Title of talk	Name of the CME/conference	Date	City/Country (only if outside India)
1	Preoperative radiological	SGPGI Comprehensive Spine Course	8-9	Virtual
	evaluation for planning -	(Virtual)	May,2021	
	anterior versus posterior			
	approaches for Dorsal			
	spine pathology(Speaker)			
2	TLIF (Expert panelist)	SGPGI Comprehensive Spine Course	8-9	Virtual
		(Virtual)	May,2021	
3	MIS resection of intradural	Minimally Invasive Spine	9-10	Virtual
	tumour (Speaker)	Surgery Society of	April,202	
		Bharat(MISSAB)Surgical	1	
		Symposium		
4	Topic - LCS (no listhesis)-	Minimally Invasive Spine	9-10	Virtual
	decompression vs fusion	Surgery Society of	April,202	
	(Expert Panelist)	Bharat(MISSAB)Surgical	1	
		Symposium		
5	Surgical video session	Minimally Invasive Spine	9-10	Virtual
	(Panelist)	Surgery Society of	April,202	
		Bharat(MISSAB)Surgical	1	
		Symposium		
6	Neurological Examination	Association of Spine Surgeon's	4 th	Virtual
	of the Spine- Approach to a	of India(ASSI) Spine fellows	April,202	
	Spine case in exam	Training Course	1	
7	Video session by	23rd AIIMS Annual	18-20	Delhi

	residents(Moderator)	Microneurosurgery Workshop	March,20 21	
8	Debate- Decompression versus Fixation in Chiari malformation (Expert)	23rd AIIMS Annual Microneurosurgery Workshop	18-20 March,20 21	Delhi
9	Video- Parasagittal meningioma -Operative Nuances	23rd AIIMS Annual Microneurosurgery Workshop	18-20 March,20 21	Delhi
10	Craniosynostosis session(moderator)	3rd Dr DK Chhabra oration and Dr VK Jain oration with SGPGI Pediatric Neurosurgery update.	28th Feb.2021	Virtual
11	Pediatric spinal deformity- Os odontoideum with Cervical Kyphosis	Association of Spine Surgeon's of India Conference ASSICON Virtual -2021	29-31st January, 2021	Virtual
12	Cervical Laminoplasty : Newer Perspectives	Annual meeting of Delhi Neurological Association-2021	7th Feb.2021	Virtual
13	Deformity case(Moderator)	NSI master-class in Spine Surgery	6th Feb.2021	Virtual
14	Dual spinal injuries case(Moderator)	NSI master-class in Spine surgery	16th Jan.2021	Virtual
15	Complications Case (Moderator)	NSI master-class in Spine surgery	26th Dec.2020	Virtual

16	Vertebral hemangioma case (Presenter)	SUPER SPECIALITY COURSE (NSI-CNS) Controversies in Neurovascular Surgery	9th Dec.2020	Virtual
17	Cervical laminoplasty technique	AO Spine Surgical Video Discussion Advanced Webinar— Cervical laminoplasty and Lateral mass & C1-2	6th Dec.2020	Virtual
18	Tumour case (Presenter)	NSI master-class in Spine surgery	21st Nov.2020	Virtual
19	Degenerative case(Presenter)	NSI masterclass in Spine surgery	31st Oct.2020	Virtual
20	Interactive Case discussion- Aneurysmal bone cyst of spine & Post-laminectomy cervical kyphosis	Pune Spine Weekend	31st Oct.2020	Virtual

21	Dynamic Extension Reserve(DER) & T1 slope (T1S) predict loss of Cervical Lordosis following Cervical laminoplasty	Association of Spine Surgeon's of India Conference ASSICON Virtual -2020	18-20th Sept.2020	Virtual
22	Presenter & Moderator	AIIMS Surgical Workflow in Covid Era - Lessons Learnt	14th August,20 20	Virtual
23	AAD and Complex CVJ Anomalies : Tips & Tricks of Management	AO Spine Hangout- Case based discussion webinar	28th May,2020	Virtual
24	Moderator	AO Spine webinar on Diagnosis, investigations and medical management of spinal tuberculosis	26th May,2020	Virtual
25	Moderator	Medtronic Educational Webinar on Degenerative CSM and Chiari malformation	18th April,202 0	Virtual

S. No.	Title of talk	Name of the CME/conference		City/Country
				(only if outside
				India)
1	Outcome predictors of	5th Congress of Middle East Spine	4-6 th	Delhi
	laminoplasty for	Society & Interim Meeting of World	April,201	
	CSM/OPLL	Spinal column Society – Spine	9	
		Congress 2019		

2	Role and t	iming of surgery	Annual Mee	ting of Neurotrauma	23-25 th		Agra	
-		os regarding early	Society of In	-	August,		8	
	surgery	os regularing euriy	Society of In	ulu	2019			
	Surgery				2019			
3	Surgical M	lanagement in	Annual Mee	ting of Neurotrauma	23-25 th		Agra	
	acute TBI-	Surgical Indica-	Society of In	dia	August,			
	tions and to	echnique of DC			2019			
4	Spine Wor	kshop- Lumbar	Annual Mee	ting of Neurotrauma	23-25 th		Agra	
	_	ews : anatomy	Society of In	dia	August,		-	
	and technie	2	2		2019			
		1						
5	Spine Wor	kshop- Odontoid	Annual Mee	nnual Meeting of Neurotrauma 23-25 th			Agra	
	screw fixat	tion	Society of In	August,				
			·		2019			
6	P S Ramar	ni oration (Annual Meeting of Neurotrauma 23-25 th				Agra	
	Introductio	on of Orator – Dr.			August,		-	
	K ganapatl	hy)			2019			
	7	Does cervical la	minoplasty	Annual meeting of Neu	ıro-spinal	30A	ugust-	Koch
		cause kyphosis	?: Analysis Surgeons Association of		of India 1 ^s			
		of factors respo	nsible for	(NSSA)		Sep	tembe	
		cervical alignment	ent			r,20	019	
		following lamin	iopasty					
	8	Embolization	of	Annual meeting of Neu	Iro-spinal	304	August-	Koch
		vertebral	body	Surgeons Association	-	1 st		
		tumours	oouy	(NSSA)	or man		tembe	
			(INSSA))19	
	9	Asia Pacific Ce	ervical spine Annual meeting of Neuro-spinal		ıro-spinal	-	August-	Koch
		Society session	on	Surgeons Association	of India	1^{st}	-	
		Degenerative C	ervical	(NSSA)		Sep	tembe	
		spine(Moderate				r,20		

		10		DF vs PCF .What is the	he	Annual meeting of Mir invasive Surgeons'Association Bharat(MISSICON -2019);	Spine of	1-3 201	rd Nov 9	Char	ndigar
		11	ORA	AGGARWAL ATION aiperson)		Annual meeting of Neurological Association	Delhi	1-2 Feb 202	oruary,	Delh	i
	_	12 C1-C2 transarticular screw : Indications & Technique		w:	APSS-BSS Cervical Spine workshop				Mun	Mumbai	
		13	Neu Surg	aoperative romonitoring in Spin gery: Technique, Pear Pitfalls		Mastering Advanced Techr Skills Congress in Neurosu (MATS 2020)	•	20- Feb ,20	oruary	Gurg	gaon
		14		er trunk BPI : strateg reanimation	ies	Annual meeting of Indian S of Peripheral nerve surgery			29 th oruary, 0	Coin	nbator
S. No.	Aut	hors		Title of presentation	N	ame of the conference	Date	(City/Country only if outside ndia)	•	
15.	Sharma R, Borkar SA, Kale SS		ale	Cervical rotation before and after hinge door cervical laminoplasty	Sp M cc	h Congress of Middle East pine Society & Interim feeting of World Spinal plumn Society – Spine ongress 2019	4-6 th April,2 019	Delhi			
16.		rma D, kar SA, Ka	le	Lumbo pelvic fixation in intractable back pain : What is the	B	elhi Spine Society imonthly meeting	25 th May,2019	I	Delhi		

				evidence ?						
1	Sh	Sharma D, Borkar		Unusual case	nusual case of Delhi Sp		Society	7 th	Delhi	
7	SA	SA, Kale SS		Sacral tumou	our Bimonthly m		neeting July,2019			
		1 Shrijith		h	CVJ TI	3	Delhi Spine Soc	iety	5 th Oct.2019	Delhi
		8 MB,Bor		orkar SA,			Bimonthly meeting			
			Kale S	SS						
		1	Jain A	"Borkar SA,	Difficu	lt case of	Delhi Spine Soc	iety Bimonthly	16 th Nov	Delhi
		9 Kale S		SS	dorsal myelopathy		meeting		.2019	
		2	Faiz A	Akram	Revisio	n	Delhi Spine	Society	8 th feb	Delhi
		0	Siddiq	ui,	ACDF	:	Bimonthly meet	ing	2020	
			Borka	r SA,	Techni	cal				
			Kale S	SS	Nuance	es				

S. No.	Title of talk	Name of the CME/conference	Date	City/Country (only if outside India)
1	O –arm navigation –	Annual meeting of Minimally	26-28 th	Hyderabad ,
	Necessity or luxury ?	invasive Spine	Sept.	India
		Surgeons'Association of	2018	
		Bharat(MISSICON -2018);		
2	Evidence based management	Paras Neurocon	14-16	Gurgaon,
	of Recurrent gliomas .		Septemb	India
			er , 2018	
3	ACDF complication	Preconference cadaveric	22 nd	delhi
	avoidance.	workshop DOACON 2018 (Delhi	Nov.201	
		Orthopedic Association Annual	8	
		Conference)		
4	Overview of various surgical	2 nd SPINECON-2019 Annual	18-20 Th	Gurgaon,
	strategies in AIS .	Master Course in Spine Surgery	January,	India

			2019.	
5	Minimally invasive spine	Instructional course in spine -	9-11 th	Amritsar,
	surgery for Intradural tumours	2018	August	India
			2018	

S. No.	Authors	Title of	Name of the conference	Date	City/Country
		presentation			(only if outside
					India)
6.	Borkar SA,	Extramedullary	Global Spine Congress , ,	2-5 th May	Singapore
	Samala R, Kale	foramen magnum	Singapore.	,2018	
	SS	tumors : technical			
		nuances and			
		outcome analysis.			
7.	Borkar SA,	Facial nerve DTI	WFNS Symposium	16-19 th Aug	Kualalumpur ,
	Samala R, Suri A,	tractography in		2018(Malaysia
	Gupta D, Kumar	Large Vestibular		Awarded	
	R,Kale SS	schwannoma : Is it		best paper	
		really helpful ?,		award)	
8	Borkar SA,	Pediatric	Annual Conference of	15-17 th	Delhi
•	Kale SS	CVJ and	Indian society of	Feb.20	
		cervical	pediatric	19	
		spine	neurosurgery		
		anomalies :			
		complicatio			
		n avoidance			
		and bailout			

Before 2018

- 119)Post-laminectomy cervical kyphosis. Annual Meeting of Delhi Spine Society,31st March -1st April, 2018; Manesar, India(Oral)
- 120)Pediatric CVJ and cervical spine anomalies : Problems and Bailout .Cervical Spine Research Society(CSRS) – Asia Pacific Section Annual Meeting, 22-24th March, 2018; Gurgaon, India(Oral)
- 121)Extramedullary foramen magnum tumors : Technical nuances and outcome.Cervical Spine Research Society(CSRS) – Asia Pacific Section Annual Meeting, 22-24th March, 2018; Gurgaon, India(E-poster)
- 122)Surgical Site Infection.Hospital Infection Control Conference, 15-16th March,2018, New delhi, India(Oral)
- 123)Recent Advances in Neurosurgery. AIIMS nursing update, 8-9th March,2018, New delhi, India(Oral)
- 124)Facial nerve DTI tractography in large vestibular schwannomas: Is it useful? Delhi Neurological Association Monthly meeting, March 2018, New delhi, India
- 125)Cervical Disc Replacement versus ACDF. AIIMS Microneurosurgery Workshop.13-15th Feb.2018, New delhi, India(Oral)
- 126)Primary Vertebral body tumors: Diagnosis and management ; SPINECON-2018
 1st Annual Master Course in Spine Surgery , 2-4th Feb. 2018.(Oral)
- 127)Traumatic atlanto-axial dislocation. SPINECON-2018; 1st Annual Master Course in Spine Surgery , 2-4th Feb. 2018.(Oral)
- 128)Cervical Disc Arthroplasty . SPINECON-2018; 1st Annual Master Course in Spine Surgery , 2-4th Feb. 2018.(Oral)
- 129)Cervical lateral mass screw placement . Cadaveric workshop during SPINECON 2018; 1st Annual Master Course in Spine Surgery , 2-4th Feb. 2018.(Oral)
- 130)A newer technique to reduce AAD and BI. Delhi Spine Society bimonthly meeting , Jan 2018, New delhi, India(Oral)
- 131)Effectiveness of preoperative facial nerve DTI tractography for preservation of facial nerve function in surgery for large vestibular schwannoma: Interim results of a Prospective randomized study. Annual Meeting of Neurological Society of India, Nov.30- Dec.3, 2017; Nagpur, India(Oral)
- 132)Degenerative Lumbar Spondylolisthesis : When to fuse? Annual AIIMS Spine Workshop, Nov 16- 18, 2017 ;New delhi, India(Oral)
- 133)CVJ nomalies in Achondroplasia. Delhi Spine Society bimonthly meeting , Nov.17, New delhi, India(Oral)

- 134)Complex Thoracolumbar Spinal Trauma : Current management Overview and What is New? Annual Neurotrauma Conference(ANTC-2017),26-29th Oct.2017, New delhi, India
- 135)Complex Spinal Deformities : Challenges, opportunities & Outcome. Annual Meeting of Neuro-Spinal Surgeons'Association(NSSA) India, 29 Sept – 1st Oct, 2017, New delhi, India(Platform)
- 136)Effectiveness of preoperative facial nerve DTI tractography for preservation of facial nerve function in surgery for large vestibular schwannoma: Interim results of a Prospective randomized study, XVI WFNS World Congress, August 2017,Istanbul(Platform)
- 137)Mature teratoma of petrous temporal bone. XVI WFNS World Congress, Aug.2017 ;Istanbul(E-poster))
- 138)Tandem Spinal Stenoses : Institutional experience. XVI WFNS World Congress, Aug.2017,Istanbul(E-poster))
- 139)Approach to a surgical lesion.World Neurosciences Summit, 18-20 August, 2017; New delhi.(Platform)
- 140)Cranial nerve 360 degree anatomy. World Neurosciences Summit, 18-20 August, 2017;New delhi.(Platform, Workshop)
- 141)Free hand versus C-arm/O-arm guided pedicle screw placement in Complex Thoracolumbar Trauma.Annual Conference of Neurotrauma Society of India, Aug.2017;Ooty, India(Platform)
- 142)Complex Spinal deformities: Challenges, Opportunities and Outcome. Delhi Neurological Association Meeting, New delhi 4th March ,2017(Platform)
- 143)Prediction of facial nerve position in Large Vestibular Schwannoma using Diffusion Tensor Imaging Tractography and its intraoperative correlation. European Cancer Congress, 27-30 January,2017; Amsterdam(E-poster)
- 144)Prediction of facial nerve position in Large Vestibular Schwannoma using Diffusion Tensor Imaging Tractography and its intraoperative correlation.International Neurosurgery Update, 4-5th June, 2016, Mumbai India.(Awarded Neurosurgery NEXTGEN Award)
- 145)Prediction of facial nerve position in Large Vestibular Schwannoma using Diffusion Tensor Imaging Tractography and its intraoperative correlation.5th Annual Conference of Neurological Surgeons' Society of India, 31st March-2nd April,2016, Srinagar,India.

- 146)Prediction of facial nerve position in Large Vestibular Schwannoma using Diffusion Tensor Imaging Tractography and its intraoperative correlation.International Conference on Cerbrovascular Surgery(ICCVS) and 1st Interim meeting of Asian Australasian Society of Neurological Surgeons(AASNS). 26-28th February,2016, Mumbai, India.(E-poster)
- 147)Prediction of facial nerve position in Large Vestibular Schwannoma using Diffusion Tensor Imaging Tractography and its intraoperative correlation.Tata Memorial Center Platinum Jubilee Cancer Congress.New Ideas in cancer treatment : Challenging dogmas. 26-28th February, 2016,Mumbai, India.(Poster)
- 148)Prediction of facial nerve position in Large Vestibular Schwannoma using Diffusion Tensor Imaging Tractography and its intraoperative correlation.Delhi Neurological Association Annual Meeting ,23-24 January, 2016; New delhi, India.(Awarded Neurosurgery Best Paper Award)
- 149)Role of 3D CT angiography in CV junction anomalies and perioperative correlation. UK-UP Neurocon 2016, 22nd Annual Conference of Neuroscience Society, 19-20th March,2016, Nainital,UK (Awarded Best Paper Award 1st prize) (Co-author)
- 150)Surgical management of third ventricular colloid cyst. UK-UP Neurocon 2016,
 22nd Annual Conference of Neuroscience Society, 19-20th March,2016,
 Nainital,UK (Awarded Best Paper Award 2nd prize) (Co-author)
- 151)C7-D1 Aneurysmal bone cyst : Management of a complex case. AO Spine Advances Cadaver Course on Pearls & Pitfalls in Junctional approaches to Spine, February 27-28, 2015, Ahmedabad, India
- 152)Spinal Arachnoid Cysts :An Institutional Experience. European Association of Neurosurgical Societies(EANS) Annual Meeting, Prague, Czech Republic. 12-17th October,2014(E-poster)
- 153)Spinal CSF drainage for prevention of vasospasm in aneurysmal subarachnoid haemorrage: A prospective randomized controlled study.(Poster) WFNS World Congress, September 8-13, Seoul, South Korea.
- 154)Endovascular versus surgical management for VA-PICA aneurysms: Experience at a tertiary care centre (Poster). WFNS Cadaveric workshop International Skull Base CME & 9th Annual Conference of Skull Base Surgery Society of India, New delhi, India,2007.

- 155)Posterior fossa dermoid cyst : An unusual presentation (Poster). Neurocon-2007,
 56th Annual Meeting of Neurological Society of India, Agra, India, 2007.
- 156)Pediatric glioblastoma : A clinico-pathological study of 45 cases at a tertiary care centre (Oral). Neuropedicon-2008, 19th Annual Meeting of Indian Society of Pediatric Neurosurgery, Coimbatore, India, 2008.(Awarded ' Resident Paper Award').
- 157)Severe head injury in elderly population(Oral). TRAUMA-2008, International CME & Inaugural Conference of Indian Society of Trauma & Acute Care, November 2008, New delhi, India.
- 158)Remote site intracranial haemorrhage(**Poster**). DNACON-2009, XIth Annual Conference of Delhi Neurological Association, New delhi, India.
- 159)Metabolic alkalosis as an early marker of renal failure in head injury patients (Poster). Annual Conference of Neurotrauma Society of India, August 2009, Jaipur, India.
- 160)Severe head injury in elderly : Risk factor assessment & Outcome analysis(Oral).
 XIV World Congress of Neurological Surgery, 30th August -4th September, 2009
 , Boston, MA, USA.
- **161)**Severe head injury in elderly population(**Oral**). Neurocon-2009, 58th Annual Meeting of Neurological Society of India, Lucknow, India, December 2009.
- 162)Role of lumbar cerebrospinal fluid drainage for the prevention of vasospasm in aneurysmal subarachnoid haemorrhage : A prospective randomized study(Oral). Neurological Society of India(NSI) – Congress of Neurological Surgeons(CNS, USA) Joint Conference, 15-19th December, 2010; Jaipur, India.
- 163)Remote site intracranial haemorrhage: A clinical series of six patients with review of literature(Poster). Neurological Society of India(NSI) – Congress of Neurological Surgeons(CNS, USA) Joint Conference, 15-19th December, 2010; Jaipur, India.

Courses & Conferences attended -

Actively participated in the following national & international conferences -

- 1) OLIF Cadaveric and Live Surgery workshop, April 12-13th ,2018; New delhi, India
- Annual Conference of Indian Society of Neuro-oncology and WFNS 3D Anatomy Workshop, April 5-8, 2018, New delhi, India
- 3) Annual Meeting of Delhi Spine Society, 31st March -1st April, 2018; Manesar, India

- Cervical Spine Research Society(CSRS) Asia Pacific Section Annual Meeting, 22-24th March, 2018; Gurgaon, India
- 5) 20th AIIMS Microneurosurgery Workshop, Feb.13-15th, 2018, New delhi, India.
- Annual Meeting of Neurological Society of India, Nov.30- Dec.3, 2017; Nagpur, India
- 7) Annual AIIMS Spine Workshop, Nov 16-18, 2017 ;New delhi, India
- 8) Annual Neurotrauma Conference, 27-30th Oct.2017, New delhi, India
- 9) XVI WFNS World Congress of Neurosurgery,20-25th August,2017; Istanbul, Turkey
- 10) Annual Conference of Neurotrauma Society of India,11-13th August,Ooty, India
- 11) 7th AIIMS Operative Workshop on Complex Spine Trauma, 7-8th May, 2017, New delhi, India
- 12) SRS- Ganga Spine Course, 2017, April 26-28, Coimbatore, India.
- 13) 19th AIIMS Microneurosurgery Workshop, 2-4 March, 2017, New delhi, India.
- 14) Annual Meeting of Minimally Invasive Spine Surgery Society of India(MISSICON-2016), 14-16th October, 2016; New Delhi, India
- 15) Annual Meeting of Neurotrauma Society of India(NTSI), 12-14th August 2016, New delhi, India.
- 16) Operative Workshop on Complex Spinal Trauma, 7-8th May, 2016, New delhi, India
- 17) AO Spine Scoliosis Week, 1-7th May, 2016, Kochi, India.
- 18) 5th Annual Conference of Neurological Surgeons' Society of India, 31st March-2nd April,2016, Srinagar,India.
- 19) 18th AIIMS Microneurosurgery Workshop, 2-4 March, 2016, New delhi, India.
- 20) International Conference on Cerbrovascular Surgery(ICCVS) and 1st Interim meeting of Asian Australasian Society of Neurological Surgeons(AASNS). 26-28th February,2016, Mumbai, India.
- 21) World Congress of Nerve surgery, WCNS-2016 (under the auspices of WFNS Peripheral nerve section and Indian Society of Peripheral Nerve Surgery,4-6th February,2016, New delhi,India
- 22) Annual Conference of Association of Spine Surgeons of India(ASSICON), 27-29th November, Goa, India
- 23) WFNS Skull Base Neuroendoscopy Live Operative, Cadaveric and Simulation Workshop, 25-26th November, 2015, New delhi, India
- 24) AIIMS Neurosciences Golden Jubilee Congress, 23-24th November, 2015, New Delhi, India

- 25) AIIMS Annual Neurotrauma Conference(ANTC), 28-30th October, 2015, New Delhi, India
- 26) AIIMS Annual Spine Workshop (Theme: Deformity correction), 22-24th October, 2015, New delhi, India
- 27) AO Spine Advances Cadaveric Workshop on Metastatic spinal tumors, 10-11th October, 2015, Bangalore, India
- 28) WFNS Interim meeting , 8-12th September, Rome, Italy
- 29) Operative Workshop on Complex Spine Trauma(Theme: Kyphoscoliosis), 8-10th May,2015,New delhi, India
- 30) Operative Workshop on Epilepsy, April 2015, New delhi, India
- 31) AO Spine Advances Cadaver Course on Pearls & Pitfalls in Junctional approaches to Spine, February 27-28, 2015, Ahmedabad, India.
- 32) 17th AIIMS Microneurosurgery Workshop, 13-15th February, 2015, New delhi, India
- 33) Annual Conference of Association of Spine Surgeons of India(ASSICON), 23-25th January ,2015, Pune , India
- 34) AO Spine Masters Symposium ,November 28-29,2014, Chennai , India
- 35) AO Spine National Symposium ,November 29-30,2014, Chennai , India
- 36) AIIMS Annual Neurotrauma Conference, 30th Oct-1st Nov.2014, New delhi, India
- 37) AIIMS Annual Spine Workshop, Oct.2014, New delhi, India
- 38) Operative Workshop on Complex Spinal Trauma, May 2014, New delhi, India
- 39) AIIMS Spasticity and Pain Surgery Live Operative Workshop, 20-21st March, 2014, New Delhi, India
- 40) 16th AIIMS Microneurosurgery Workshop, Feb. 2014, New delhi, India.
- 41) AO Advances Deformity Seminar, Novemeber 23-24,2013; Chennai, India.
- 42) AO Advances Operative Course on Degenerative Spine Diseases, September 27-29, 2013,Coimbatore, India
- 43) World Congress of Endoscopic and Navigated Spinal Surgery(WENMISS), November 8-10,2013; New delhi, India.
- 44) AIIMS Annual Spine Workshop(Minimally Invasive Spine Surgery), October 22-24,2013; New delhi, India.
- 45) AIIMS Annual Neurotrauma Conference, August 31-Sept.1,2013; New delhi, India
- 46) BRACHIALCON -2013, AIIMS, New delhi. Live surgery workshop on Brachial plexus and peripheral nerve injuries, 8-10 March,2013 JPNATC, New delhi
- 47) 15th AIIMS Microneurosurgery Workshop, Feb. 2013, New delhi, India.

- 48) AO Spine Principles Course, February 22-24, Ahmedabad, India
- 49) Neurocon-2012,61st Annual Conference of Neurological Society of India(NSI), Delhi NCR, December 2012.
- 50) NEUROPEDICON-2012, ISPN CME and Annual Conference of Indian Society of Pediatric Neurosurgery,1-3 October, 2012, New delhi, India.
- 51) BRACHIALCON -2011, AIIMS, New delhi. Live surgery workshop on Brachial plexus and peripheral nerve injuries, 19-21 December, JPNATC, New delhi
- 52) 11th Annual Conference of Indian Society of Cerebrovascular Surgery, Live Neurosurgery & Neuro-intervention Workshop, 6-9 October, 2011, New delhi, India.
- 53) 5th AIIMS NETS Neurosurgery Skills Training Workshop (INDO-GERMAN Collaboration), August 2011, New delhi, India.
- 54) 13th AIIMS Microneurosurgery Workshop, Feb. 2011, New delhi, India.
- 55) Neurological Society of India(NSI) Congress of Neurological Surgeons(CNS, USA) Joint Conference, 15-19th December, 2010; Jaipur, India.
- 56) AIIMS SPINE CONFERENCE, 12-14TH Nov.2010, New delhi, India
- 57) 12th AIIMS Microneurosurgery Workshop, Feb. 2010, New delhi, India.
- 58) International League against Epilepsy (ILAE) & Indian Epilepsy Society Annual Conference, New delhi, India, 2010.
- 59) Neurocon-2009, 58th Annual Meeting of Neurological Society of India, Lucknow, India, December 2009.7)
- 60) MIDAS REX Drill course; New delhi, India, 2009.
- 61) XIV World Congress of Neurological Surgery, 30th August -4th September, 2009, Boston, MA, USA.
- 62) Annual Conference of Neurotrauma Society of India, August 2009, Jaipur, India
- 63) 1st Live surgery and Cadaveric Hands On workshop on Minimal access spinal surgery
 , 23-25th July, 2009; New delhi, India.
- 64) 11th AIIMS Microneurosurgery Workshop, Feb. 2009, New delhi, India.
- 65) DNACON-2009, XIth Annual Conference of Delhi Neurological Association, New delhi, India.
- 66) TRAUMA-2008, International CME & Inaugural Conference of Indian Society of Trauma & Acute Care, November 2008, New delhi, India.
- 67) Neuropedicon-2008, 19th Annual Meeting of Indian Society of Pediatric Neurosurgery, Coimbatore, India.
- 68) 10th AIIMS Microneurosurgery Workshop, Feb. 2008, New delhi, India.

- 69) WFNS Cadaveric workshop, International Skull Base CME & 9th Annual Conference of Skull Base Surgery Society of India, New delhi, India, 2007.
- 70) Neurocon-2007, 56th Annual Meeting of Neurological Society of India, Agra, India.
- 71) Ist National Radiosurgery Update, April 2007, New delhi, India.
- 72) 9th AIIMS Microneurosurgery Workshop, Feb. 2007, New delhi, India.
- 73) 8th AIIMS Microneurosurgery Workshop, Feb. 2006, New delhi, India.