

Curriculum vitae

Dr P SARAT CHANDRA, M.Ch

Professor, Neurosurgery

website: <http://www.aiims.edu/aiims/departments/spcenter/nsc/neurosurgery/dr-pschandra.htm>

1. Current Designation:

1.1. Professor, Neurosurgery, All India Institute of Medical Sciences (AIIMS), New Delhi

2. Important Additional Designation Held :

2.1. Fellow, UCLA, Los Angeles

2.2. Ex Secretary and President Elect, Skull Base Society of India (www.sbssi.org)

2.3. Executive member and Ex Hon'ble Treasurer, Neurological Society of India

2.4. Editor in Chief, Neurology India (Impact factor 2.166)

3. Positions Experience:

<i>Jun 1991 – Jun 1998</i>	Senior Resident and Pool officer (jr Lecturer) National Institute of Mental Health and Neuro Sciences, Department of Neurosurgery Bangalore, India
<i>Jul 2005 – Aug 2006</i>	Post Doc Fellow University of California, Los Angeles, Department of Neurosurgery Los Angeles, United States
<i>Aug 1998 – 2003</i>	Asst Professor All India Institute of Medical Sciences, Department of Neurosurgery New Delhi, India
<i>2003-2008</i>	Associate Professor All India Institute of Medical Sciences, Department of Neurosurgery New Delhi, India
<i>2008-2011</i>	Additional Professor All India Institute of Medical Sciences, Department of Neurosurgery New Delhi, India
<i>2011-present</i>	Professor All India Institute of Medical Sciences, Department of Neurosurgery New Delhi, India

4. **Reviewers of Journals:** Neurosurgery, **Spine**, **The Spine Journal**, Epilepsia, Epilepsy Research, The spine journal, World Neurosurgery, Neurology India, Child Nervous System

5. Subspecialities:

5.1. Spine:

5.1.1. Craniovertebral junction and complex spine instrumentation especially for cervical spine

5.1.2. Minimally invasive spine surgery: endoscopic discectomy, percutaneous automated discectomy, percutaneous pedicle screw fixation.

5.1.3. Neuroendoscopy and minimally invasive surgery

5.2. Others:

5.2.1. Epilepsy surgery

5.2.2. Cerebrovascular

5.2.3. Tumors

6. Brief Summary:

6.1. Total publication: 246

6.2. Total number of awards and Grants: 14

6.3. Lectures presented in conferences: 250

6.4. Patents awarded: 3 (1 US patent)

6.5. **Conferences organized: 16**

7. Main Achievements in SPINE

- 7.1. Has developed expertise in treating **cranio-vertebral junction anomalies** especially congenital cranio-vertebral junction anomalies (over 1000 cases)
- 7.2. Prof Chandra has operated over 1000 of such cases and demonstrated very low mortality and morbidity in treating this condition. He has also taught this technique to hundreds of students around the country and spoke about this in various conferences and workshops (vide publications) and lectures.
- 7.3. Has developed a new technique to surgically treat this technique called **DCER** (Distraction, compression, extension and reduction) which allow a reduction, re-alignment of the CV junction through a posterior only approach. The Technique, **DCER** has been registered for the US patent **US 14/897,156**
- 7.4. He is also developing unique spine instruments and implants for CVJ
- 7.5. Developed for the first time a **new technique to by injecting alcohol to treat vertebral body haemangiomas**. Prof Chandra has demonstrated that absolute alcohol embolization was very effective, safe and cheap (just less 2 USD per patient!).

SOME PUBLICATIONS

1-10

1. Joaquim AF, Tedeschi H, Chandra PS. Controversies in the surgical management of congenital craniocervical junction disorders - A critical review. *Neurol India* 2018;66:1003-1015.
2. Chandra SP, Singh P, Kumar R, et al. Long-term outcome of treatment of vertebral body hemangiomas with direct ethanol injection and short-segment stabilization. *Spine J* 2019;19:131-143.
3. Singh PK, Chandra PS, Vaghani G, et al. Management of pediatric single-level vertebral hemangiomas presenting with myelopathy by three-pronged approach (ethanol embolization, laminectomy, and instrumentation): a single-institute experience. *Childs Nerv Syst* 2016;32:307-314.
4. Chandra PS, Prabhu M, Goyal N, Garg A, Chauhan A, Sharma BS. Distraction, Compression, Extension, and Reduction Combined With Joint Remodeling and Extra-articular Distraction: Description of 2 New Modifications for Its Application in Basilar Invagination and Atlantoaxial Dislocation: Prospective Study in 79 Cases. *Neurosurgery* 2015;77:67-80; discussion 80.
5. Chandra PS, Goyal N, Chauhan A, Ansari A, Sharma BS, Garg A. The severity of basilar invagination and atlantoaxial dislocation correlates with sagittal joint inclination, coronal joint inclination, and craniocervical tilt: a description of new indexes for the craniovertebral junction. *Neurosurgery* 2014;10 Suppl 4:621-629; discussion 629-630.
6. Chandra SP, Ramdurg SR, Kurwale N, et al. Extended costotransversectomy to achieve circumferential fusion for pathologies causing thoracic instability. *Spine J* 2014;14:2094-2101.
7. Gurjar HK, Sarkari A, Chandra PS. Surgical management of giant multilevel aneurysmal bone cyst of cervical spine in a 10-year-old boy: case report with review of literature. *Evid Based Spine Care J* 2012;3:55-59.
8. Chandra PS, Kumar A, Chauhan A, Ansari A, Mishra NK, Sharma BS. Distraction, compression, and extension reduction of basilar invagination and atlantoaxial dislocation: a novel pilot technique. *Neurosurgery* 2013;72:1040-1053; discussion 1053.
9. Kumar A, Chandra PS, Bisht A, Garg A, Mahapatra AK, Sharma MC. Successful surgical excision of a nondysraphic holodorsal intramedullary lipoma in a 14-month-old child. *Pediatr Neurosurg* 2011;47:272-274.
10. Chandra PS, Gupta A, Mishra NK, Mehta VS. Association of craniovertebral and upper cervical anomalies with dermoid and epidermoid cysts: report of four cases. *Neurosurgery* 2005;56:E1155; discussion E1155.