

Dr. Edmond Jonathan Gandham

MBBS, MCh (Neurosurgery), FRCS (London), FMISS (South Korea)

Professor of Neurosurgery | Skull Base & Cerebrovascular Specialist | Minimally

Invasive Spine Surgeon

Head of Neurosurgery III

Christian Medical College, Vellore, Ranipet Campus, India

About Dr. Edmond Jonathan Gandham

Dr. Edmond Jonathan is a **leading neurosurgeon** at Christian Medical College, Vellore, specializing in **complex skull base surgery, cerebrovascular disorders, and minimally invasive spine procedures**. With **over 12 years** of experience, he is recognized for his **technical precision, innovative surgical approaches, and compassionate patient care**.

Board-certified and fellowship-trained, Dr. Jonathan has performed **hundreds of successful surgeries** for brain tumors, vascular malformations, and degenerative spine conditions. His expertise combines **microsurgical mastery with cutting-edge endoscopic techniques** to deliver safer, more effective treatments. He is a lead speaker and well known across the neurosurgical fraternity in India and worldwide. He is a prominent national and international faculty in the field of Neurosurgery.

Areas of Expertise

1. Skull Base & Brain Tumor Surgery

- **Pituitary adenomas, meningiomas, acoustic neuromas**
- **Endoscopic & microscopic approaches**

2. Cerebrovascular Neurosurgery

- **Aneurysm clipping & AVM excision**
- **STA-MCA bypass** for moyamoya disease
- **Neuroendoscopic ICH evacuation**

3. Minimally Invasive Spine Surgery

- **Unilateral Biportal Endoscopy (UBE)** – Faster recovery, less pain
- **TLIF & microdiscectomy** for slipped discs & spinal instability
- **Motion-preserving techniques**

✓ **Pioneer in minimally invasive neurosurgery** – Smaller incisions, quicker recovery

✓ **High-volume experience** in complex brain & spine cases

✓ **Patient-first philosophy** – Clear communication, personalized care

✓ **Academic leader** – Training future neurosurgeons in advanced techniques

Academic Contributions

- **Published** in *Journal of Neurosurgery*, *Neurosurgical Focus*, *World Neurosurgery*
- **Faculty** at national & international neurosurgery conferences
- **Research interests:** Outcomes of endoscopic techniques, cost-effective neurosurgical solutions

Publications:

1. Gandham EJ, Vasudevan P, Moorthy RK, Narasimhan K, Murthy M, Rebekah G, Rajshekhar V. Cortical Aquaporin-4 in relation to brain oedema and neurological function of cortical cryo-injured mice. *Journal of Clinical Neuroscience*. 2017 Oct 1;44:294-9.
2. Nair BR, Jonathan E, Moorthy RK, Rajshekhar V, George O. An adult with atrial septal defect presenting with a brain abscess. *Asian Journal of Neurosurgery*. 2017 Oct 1;12(4):743.
3. Gandham EJ, Sundaresan R, Thomas R, Chacko AG. A novel nasoseptal flap harvesting technique in revision expanded endoscopic transsphenoidal approaches. *Neurology India*. 2017;65(1):129-33.
4. Abraham AP, Gandham EJ, Prabhu K, Chacko AG. Subgaleoatrial shunt: Further progress in the management of iatrogenic cranial pseudomeningoceles. *Neurology India*. 2017 Sep 1;65(5):1178.
5. Swaminathan G, Jonathan GE, Patel B, Prabhu K. Xanthogranulomatous colloid cyst of the third ventricle: Alter your surgical strategy. *The Neuroradiology Journal*. 2017 Jan 1;1971400917703988.
6. Jonathan GE, Nair BR, Joseph V, Mani S, Chacko G. Lumbar extradural arteriovenous malformation mimicking a schwannoma in a child: Rare presentation of neurofibromatosis type-1. *Neurology India*. 2017 Jul 1;65(4):900.
7. Mariappan R, Philip A, Gandham EJ, Raju K. Simultaneous Surgical Decompression of Bilateral Subdural Hematoma and an Administration of Epidural Blood Patch for Spontaneous Intracranial Hypotension. *Journal of Neurosurgical Anesthesiology*. 2017 May.
8. Authors' Reply: In defence of subgaleoatrial shunt! Abraham AP, Gandham EJ, Prabhu K, **Chacko AG**. *Neurol India*. 2018 Jan-Feb;66(1):286-287.
9. Subramanian S, Jonathan GE, Patel B, Prabhu K. Synovial sarcoma mimicking a thoracic dumbell schwannoma-a case report. *British journal of neurosurgery*. 2018 Feb 13:1-4
10. Mariappan R, Philip A, Gandham EJ, Raju K. Simultaneous Surgical Decompression of Bilateral Subdural Hematoma and an Administration of Epidural Blood Patch for Spontaneous Intracranial Hypotension. *Journal of neurosurgical anesthesiology*. 2018 Oct 1;30(4):376-9.
11. Jonathan GE, Sarkar S, Singh G, Mani S, Thomas R, Chacko AG. A randomized controlled trial to determine the role of intraoperative lumbar cerebrospinal fluid drainage in patients undergoing endoscopic transsphenoidal surgery for pituitary adenomas. *Neurology India*. 2018 Jan 1;66(1):133.

12. Jayachandran A, Jonathan GE, Patel B, Prabhu K. Primary spinal cord glioblastoma metastasizing to the cerebellum: A missed entity. *Neurology India*. 2018 Jan 5;66(3):854.
13. Ganesh S, Jonathan G, Patel B, Prabhu K. Solitary facet joint osteochondroma of the upper thoracic spine: An unusual cause of cord compression in the pediatric age group. *Neurology India*. 2018 Mar 1;66(2).
14. Chacko AG, Prabhu K, Nayak R, Jonathan E, Subhashini P. Recurrence of Pilocytic Astrocytoma Responding to Chemohormonal Treatment. *Clin Case Rep Int*. 2019; 3.;1089.
15. Abraham AP, Thomas MM, Mathew V, Muthusamy K, Yoganathan S, Jonathan GE, Prabhu K, Daniel RT, Chacko AG. EEG lateralization and seizure outcome following peri-insular hemispherotomy for pediatric hemispheric epilepsy. *Child's Nervous System*. 2019 Jan 30;1-7.
16. Gandham EJ, Tyagi A, Prabhu K. An Unusual Cause of Cervical Radicular Pain-Foreign Body in Esophagus. *Iranian journal of otorhinolaryngology*. 2018 Jul;30(99):237.
17. Vupputuri H, Gandham EJ, Mani SA, Raju KP, Aaron S, Chacko AG. Dynamic imaging of the craniovertebral junction is mandatory in patients with posterior circulation strokes. *Eur Spine J*. 2020
18. Pandey SK, Gandham EJ, Prabhu K. Clinical and surgical outcomes of enneking stage III aneurysmal bone cysts of the spine. *Indian Spine Journal*. 2021 Jul 1;4(2):155.
19. Mariappan R, Gandham EJ, Stephenson SJ, Cherian NE, Lionel KR. Lumbar Erector Spinae Plane Block for Posterior-Superior Iliac Spine Bone Graft Site Pain in Patients Undergoing Occipitocervical and C1-C2 Fusion for Atlantoaxial Dislocation/Odontoid Fracture-A Case Series. *J Neurosci Rural Pract*. 2021 Jan;12(1):213-216.
20. Gandham EJ, Uvaraj N, Eum Jin Hwa. Unilateral Biportal Percutaneous Transforaminal Endoscopic Lumbar foraminal decompression and discectomy - A technical note accepted in *Neurology India* Dec 2020
21. Baldia M, Gandham E, Prabhu K. Clinico-surgical outcomes of giant intracranial epidermoids: Gross total resection vs Subtotal resection which is better?. *Turkish Neurosurgery*. 2021 Jan 1;31(4).
22. Kuryan P, Gandham EJ, Mariappan R. Role of Transesophageal ECHO in Ventriculoperitoneal Shunt Surgery for a Child with Dandy–Walker Malformation: A Case Report. *Journal of Neuroanaesthesiology and Critical Care*. 2020 Mar;7(01):A025.

23. Naina P, Jonathan GE, Prabhakar M, Irodi A, Syed KA, John M, Varghese AM. Pediatric nasal dermoid- a decade's experience from a South Indian tertiary care centre. *Int J Pediatr Otorhinolaryngol.* 2020 Dec;139:110418.
24. Gupta A, Goyal-Honavar A, Jonathan GE, Prabhu K, Varghese GM, Rupali P, Chacko AG. Adapting management strategies for sellar-suprasellar lesions during the COVID-19 pandemic: a pragmatic approach from the frontline. *British Journal of Neurosurgery.* 2021 Jun 20:1-8.
25. Baldia M, Gandham EJ, Prabhu K 2021. Atypical Intracranial Epidermoid Cysts—Radiological Diversity. *University Journal of Surgery and Surgical Specialities*, 7(3).
26. Kuryan P, Gandham EJ, Mariappan R. A023 Airway Management in Frontonasal Encephalocele. *Journal of Neuroanaesthesiology and Critical Care.* 2020;7:S1.
27. Edmond Jonathan Gandham, Bimal Patel, Vivek Mathew, Krishna Prabhu Raju, Primary CNS angitis mimicking a space occupying lesion, accepted in *Indian Journal of Neurosurgery*: 2021
28. Gandham EJ, Goyal-Honavar A, Johnson LR, Gupta A, Thomas R, Devasahayam SR, Prabhu K, Chacko AG. A negative-pressure face-mounted system reduces aerosol spread during endonasal endoscopic surgery. *Journal of Neurological Surgery Part B: Skull Base.* 2022 Feb 17(AAM).
29. Gandham EJ, D'Souza WP, Mahasampath G, Moorthy RK, Rajshekhar V. Prognostic significance of modified Pignatti score in patients with World Health Organization grade II diffuse astrocytomas. *International Journal of Neurooncology.* 2021 Jul 1;4(2):29
30. Abi Manesh, Priyanka Gautam, Rajiv Karthik, Ooriapadickal Cherian Abraham, Harshad A Vanjare, Ajith Sivadasan, Prabhakar Thirumal Appaswamy, Edmond Jonathan G, Joy S Michael, Prasanna Samuel, George M Varghese. Effectiveness of Adjunctive High-Dose Infliximab Therapy to Improve Disability-Free Survival Among Patients With Severe Central Nervous System Tuberculosis: A Matched Retrospective Cohort Study. *Clinical Infectious Diseases.* 2023 Jul 5.
31. Joseph J, Raju KP, Jonathan E, Makkina C. Spinal Arachnoid Cyst-Analysis of surgical experience in a single tertiary care centre and review of literature. *World Neurosurgery.* 2023 Aug 6.
32. Krishnaprabhu R, Chacko AG, Desouza WP, Jonathan E, Sundaresan R, Thomas R, HS A. Simultaneous Endoscopic Endonasal and Transcranial Excision of Giant Pituitary Adenomas. *Journal of Neurological Surgery Part B: Skull Base.* 2023 Feb 1;84:S1-344.

33. Goyal-Honavar A, Joseph J, Jonathan GE, Prabhu K. Recurrent post-operative extradural and subdural collections due to intracranial hypotension following a lumbar subarachnoid drain. *Journal of Neurosciences in Rural Practice*.:1-3.
34. Upreti G, Jonathan GE, Sundaresan R, Thomas R. Tension Pneumocephalus: A Potentially Fatal Complication of Expanded Endoscopic Endonasal Approach. *Indian Journal of Otolaryngology and Head & Neck Surgery*. 2023 Apr 27:1-6.
35. Garg D, Radhakrishnan DM, Agrawal U, Vanjare HA, Gandham EJ, Manesh A. Tuberculosis of the Spinal Cord. *Ann Indian Acad Neurol*. 2023;26(2):112-126. doi:10.4103/aian.aian_578_22
36. Gandham EJ, Goyal-Honavar A, Beno D, et al. Impact of Grade on Survival in Pleomorphic Xanthoastrocytoma and Low Prevalence of BRAF V600E Mutation. *World Neurosurg*. 2022;164:e922-e928.
37. GANDHAM EJ. Posterior fossa hematoma in Factor XIII deficiency-An uncommon cause of stroke in young. *University Journal of Surgery and Surgical Specialities*. 2016 Jul 14;2(1).
38. Joseph J, Raju KP, Jonathan GE, Ganesh S, Godson HF. Hypofractionated stereotactic radiotherapy in Spetzler Martin grades 4 and 5 arteriovenous malformations in the pediatric population: Is it a viable alternative? *Child's Nervous System*. 2023 Dec 10:1-8.
39. Swaminathan G, Jonathan GE, Mani SA, Keshava SN, Moses V, Prabhu K. Surgical strategies in the management of aggressive spinal haemangiomas: Retrospective case series with literature review and a practical treatment algorithm. *Brain and Spine*. 2023 Dec 14:102736.
40. Goyal-Honavar A, Markose AP, Gupta A, Manesh A, Varghese GM, Rose W, Jonathan GE, Prabhu K, Chacko AG. Distinct patterns of postoperative fever in paediatric neurosurgery patients. *Child Nervous system* 2023
41. Ahmed B, Jonathan E, Paul MJ, Prabhu K. Spinal metastases in primary thyroid malignancies: Single center experience of 44 cases. *World Journal of Surgery*. 2025 Feb;49(2):409-18.
42. Verma P, Tirkey AJ, Jyothi GV, Singh V, Gandham EJ. Pleomorphic Adenoma of the Submandibular Gland with Skull Metastasis: A Case Report. *Ear, Nose & Throat Journal*. 2025 Jan 27:01455613251314609.

43. Joseph J, Govind A, Vediappan RS, Thomas R, Jonathan GE, Raju K. Anterior Skull Base Reconstruction Using a Vascularized Pericranial Flap: A Promising Alternative in Sinonasal Malignancies. *Journal of Neurological Surgery Part B: Skull Base*. 2024 Oct 28.
44. Ahmed B, Jonathan E, Raju K. Disseminated Cryptococcomas in an Immunocompetent Adult: A Unique Case Report. *Journal of Clinical Infectious Diseases Society*. 2024 Oct 1;2(4):317-9.
45. Joseph J, Prabhu K, Jonathan E, Jesudason MR, Gupta AK. En bloc resection followed by gluteal advancement flap for sacral Ewing's sarcoma: A novel technique. *Journal of Craniovertebral Junction and Spine*. 2024 Jan 1;15(1):110-3.
46. Nayak R, Akash J, Patel B, Gandham EJ, Krishnaprabhu R. Primary Gliosarcoma: A 15-Year Experience at a Tertiary Care Center. *Neurology India*. 2024 Nov 1;72(6):1213-7.
47. Yadav A, Chaudhary PK, Kafle P, Jonathan E, Shah SJ. Dyke–Davidoff–Masson Syndrome in a 28 years old pregnant woman–A rare case report. *Eastern Green Neurosurgery*. 2024 Aug 6;5(01):44-7.
48. Kafle P, Rufus P, Paudyal N, Joshi NP, Khanal B, Jonathan E, Bhandari BR, Sharma MR. Perioperative Outcomes following Surgery of Brain Tumors: Assessment and Analysis of Risk Factors. *Journal of Institute of Medicine Nepal*. 2023 Aug 31;45(2):31-6.
49. Prasannakumar Palanikumar , Priyanka Gautam , Harshad Arvind Vanjare , Nagaraj Veerasamy , Mithun Mohan George , Leebark Raja Inbaraj , Edmond Jonathan Gandham , Ajith Sivadasan , Rajiv Karthik , Abi Manesh Large Tuberculous Mass Lesions Involving the Brain: Outcomes and Management 2025 Apr 1;112(6):1264-1266.
50. Katti Blessi Sara , Garima Upreti , Habie Thomas , Ajay Philip , Rajan Sundaresan , Edmond Jonathan Gandham , Regi Thomas Spontaneous Clival Leaks and Their Management 2024 May 3;86(2):165-172

International Journal:

1. Ankush Gupta, Abhijit Goyal-Honavar, Gandham Edmond Jonathan, Krishna Prabhu, George M Varghese, Priscilla Rupali, Ari George Chacko Adapting **management strategies for sellar-suprasellar lesions during the COVID-19 pandemic: a pragmatic approach from the frontline**