



- **Name:** Dr. Soumya Sarkar
- **Department:** Anaesthesiology
- **Qualification:** MD (PGIMER, Chandigarh), MBBS (Medical College, Kolkata)
- **About myself :** I, Dr Soumya Sarkar, Assistant professor in the Department of Anaesthesiology, have the privilege of experience in working at two apex institutes (PGIMER Chandigarh, AIIMS New Delhi) and two Institutes of National Importance (AIIMS Bhubaneswar, AIIMS Kalyani) of this country actively involved in teaching and training postgraduate (MD), post-doctorate (DM), undergraduate medical(MBBS) students, and OT technicians (BSC) in PGIMER Chandigarh, AIIMS New Delhi, AIIMS Bhubaneswar, and have witnessed the evolving landscape of health education and the increasing importance of adopting innovative teaching methodologies. I have experience in treating and managing an overwhelming number of patients (>15,000 cases) working in tandem with all the surgical sub-specialities, including arthroplasty, scoliosis, robotic urological, thoracic, paediatric, ophthalmic, ENT, obstetrics & gynaecology, vascular, laparoscopic, transplant Surgery, dental, GI, &Plastic Surgeries along with Critical Care and Management of patients in ICU. I am also a reviewer of 21 Pub med indexed journals & my research work has been acknowledged in various national & international platforms.
- **Area(s) of interest:** Paediatric Anaesthesia, Solid organ Transplant, regional Anaesthesia, Critical Care , Research Methodology

- **Research publications and/or book chapters (in last five years):**

[**Research Publications: 47 (h index = 9, i10 index= 9, Citations=541)**

Book edited: 1, Book Chapter's: 2, Presentations: 25 (International: 7)]

1. Singh A, Iyer KV, Maitra S, Khanna P, Sarkar S, Ahuja V, et al. Ketamine and dexmedetomidine (Keto-dex) or ketamine and propofol (Keto-fol) for procedural sedation during endoscopic retrograde cholangiopancreatography: Which is safer? **A randomized clinical trial**. Indian J Gastroenterol. 2022

Dec;41(6):583-590. doi: 10.1007/s12664-022-01291-y. Epub 2022 Dec 28.

[Journal impact factor: 3.4; Citations: 6]

2. Sarkar S, Parthiban M, Haritha D, et al. Impact of intravenous dexamethasone on the initiation and recovery of atracurium in children: **A double-blinded randomized controlled trial** [published online ahead of print, 2022 Oct 21].

Paediatr Anaesth. 2022;10.1111/pan.14581. doi:10.1111/pan.14581

[Journal impact factor: 2.1]

3. Bhardwaj N, Sarkar S, Yaddanapudi S, Jain D. Effect of two different levels of positive end-expiratory pressure (PEEP) on oxygenation and ventilation during pneumoperitoneum for laparoscopic surgery in children: **A randomized controlled study**. Saudi J Anaesth 2022;16:430-6

[Journal impact factor: 1.2]

4. Kurup MT, Sarkar S, Verma R, et al. Comparative evaluation of intraoperative dexmedetomidine versus lidocaine for reducing postoperative cognitive decline in the elderly: **a prospective randomized controlled trial**. Anaesthesiol Intensive Ther 2023; 55, 4: 1–9. doi: <https://doi.org/10.5114/ait.2023.134251>

[Journal impact factor: 1.3]

5. Haritha D, Sarkar S, Maitra S, et al. Comparative evaluation of isoflurane and desflurane for postoperative cognitive decline in elderly patients: A prospective observational pilot study. *J Perioper Pract.* 2023 Aug 30:17504589231180737. doi: 10.1177/17504589231180737. Epub ahead of print.

[Journal impact factor: 1.2]

6. Shanmugam N, Verma R, Sarkar S, et al. Functional near-infrared spectroscopy guided mapping of frontal cortex, a novel modality for assessing emergence delirium in children: A prospective observational study. *Pediatr Anaesth.* 2023; 33: 844-854. doi:[10.1111/pan.14708](https://doi.org/10.1111/pan.14708)

[Journal impact factor: 2.1]

7. Sarkar S, Khanna P, Singh AK. Impact of COVID-19 in patients with concurrent coinfections: A systematic review and meta-analyses. *J Med Virol.* 2021;93(4):2385-2395. doi:10.1002/jmv.26740

[Journal impact factor:20; Citations:103]

8. Sarkar S, Kannan S, Khanna P, Singh AK. Role of platelet-to-lymphocyte count Ratio (PLR), as a prognostic indicator in COVID-19: A systematic review and meta-analysis [published online ahead of print, 2021 Aug 26]. *J Med Virol.* 2021;10.1002/jmv.27297. doi:10.1002/jmv.27297

[Journal impact factor:20; Citations: 90]

9. Sarkar S, Soni KD, Khanna P. Convalescent plasma is a clutch at straws in COVID-19 management! A systematic review and meta-analysis. *J Med Virol.* 2021;93(2):1111-1118. doi:10.1002/jmv.26408

[Journal impact factor:20; Citations:75]

10. Sarkar S, Khanna P, Soni KD. Are the steroids a blanket solution for COVID-19? A systematic review and meta-analysis. *J Med Virol.* 2021;93(3):1538-1547. doi:10.1002/jmv.26483

[Journal impact factor: 20; Citations: 58]

11. Sarkar S, Khanna P, Singh AK. The Impact of Neutrophil-Lymphocyte Count Ratio in COVID-19: A Systematic Review and Meta-Analysis. *J Intensive Care Med.* 2022 Jul;37(7):857-869. doi: 10.1177/08850666211045626
[Journal impact factor:2.9; Citations: 50]
12. Sarkar S, Kannan S, Khanna P, Singh AK. Role of red blood cell distribution width, as a prognostic indicator in COVID-19: A systematic review and metaanalysis. *Rev Med Virol.* 2022 Mar;32(2):e2264. Epub 2021 Jun 6. doi:10.1002/rmv.2264. *[Journal impact factor: 11; Citations: 35]*
13. Jain S, Khanna P, Sarkar S. Comparative evaluation of ventilator-associated pneumonia in critically ill COVID- 19 and patients infected with other corona viruses: a systematic review and meta-analysis. *Monaldi Arch Chest Dis.* 2021 Sep 28;92(2). doi: 10.4081/monaldi.2021.1610.
[Journal impact factor: 2.2; Citations: 9]
14. Khanna P, Haritha D, Das A, Sarkar S, Roy A. Utility of high-flow nasal oxygen in comparison to conventional oxygen therapy during upper gastrointestinal endoscopic procedures under sedation: A systematic review and meta-analyses. *Indian J Gastroenterol.* 2023 Feb;42(1):53-63. doi: 10.1007/s12664-022-01308-6.
[Journal impact factor: 3.4; Citations: 5]
15. Roy A, Khanna P, Chowdhury SR, Haritha D, Sarkar S. The Impact of High-flow Nasal Cannula vs Other Oxygen Delivery Devices during Bronchoscopy under Sedation: A Systematic Review and Meta-analyses. *Indian J Crit Care Med* 2022;26(10):1131–1140
[Journal impact factor:1.09; citations 5]

16. Khanna P, Sinha C, Singh AK, Kumar A, Sarkar S. The role of point of care thromboelastography (TEG) and thromboelastometry (ROTEM) in management of Primary postpartum haemorrhage: A meta-analysis and systematic review. *Saudi J Anaesth.* 2023 Jan-Mar;17(1):23-32. doi: 10.4103/sja.sja_529_22. Epub 2023 Jan 2.

[Journal impact factor:1.2; citations 4]

17. Sarkar S, Khanna P, Singh AK. Convalescent Plasma-A Light at the End of the Tunnel: A Systematic Review and Meta-analysis of Randomized Controlled Trials. *Indian J Crit Care Med.* 2021;25(11):1292-1300. doi:10.5005/jp-journals-10071-24023

[Journal impact factor:1.09]

18. Khanna P, Das A, Sarkar S. Co-administration of intravenous calcium along with neostigmine for rapid neuromuscular blockade recovery: a systematic review and meta-analysis. *J Anaesthesiol Clin Pharmacol.* 40(1):15-21. doi: 10.4103/joacp.joacp_139_22

[Journal impact factor:1.5]

19. Misra S, Singh S, Sarkar S, Behera BK, Jena SS. The Effect of Prophylactic Steroids on Shivering in Adults Undergoing Surgery: A Systematic Review and Metaanalysis of Randomized Controlled Trials. *Anesth Analg.* 2023;137(2):332-344.

doi:10.1213/ANE.0000000000006578.

[Journal impact factor:6.6]

20. Khanna P, Sarkar S, Sinha C. The utility of pericapsular nerve group (PENG) block in hip surgeries in comparison to other conventional regional techniques: a meta-analysis. *Regional Anesthesia & Pain Medicine* 2022;47:A143-A144.

[Journal impact factor:2.7]

21. Khanna P, Sarkar S, Yalla B, Roy A, Baishya M. The utility of Electrical Impedance Tomography (EIT)-guided Positive End-Expiratory Pressure (PEEP) titration in Acute Respiratory Distress Syndrome (ARDS): A systematic review and meta-analysis of randomized control trials. *Journal of Critical Care*. 2024 Jun 1;81:154643.

[Journal impact factor:2.1]

22. Tripathy SK, Varghese P, Kumarasamy AKN, Mishra NP, Neradi D, Jain M, Sarkar S, Sen RK. Safety and Efficacy of Tranexamic Acid in Hip Hemiarthroplasty for Fracture Neck Femur: a Systematic Review and Meta-analysis. *Indian J Orthop*. 2022 Nov 27;57(1):33-43. doi: 10.1007/s43465-022-00779-1

[Journal impact factor:1.3]

23. Swaroop S, Vaishnav M, Arora U, Biswas S, Aggarwal A, Sarkar S, et al. Etiological Spectrum of Cirrhosis in India: A Systematic Review and Meta-analysis. *Journal of Clinical and Experimental Hepatology*. 2024 Mar 1;14(2):101291. doi:10.1016/j.jceh.2023.10.002

[Journal impact factor:3]

24. Sarkar S, Bhardwaj N, Yaddanapudi S, Jain D. Effect of 5 vs 10 cm H₂O PEEP in paediatric laparoscopic surgery: a randomized controlled study. *Anesth Analg*. 2021;133(3S Suppl 2):1296-1297. doi:10.1213/01.ane.0000791544.44545.82

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25. Khanna P, Sarkar S, Garg B. Anesthetic considerations in spine surgery: What orthopaedic surgeon should know!. *J Clin Orthop Trauma*. 2020;11(5):742-748. doi:10.1016/j.jcot.2020.05.005

[Journal impact factor:1.87; Citations: 13]

26. Singh A, Khanna P, Sarkar S. High-Flow Nasal Cannula, a Boon or a Bane for COVID-19 Patients? An Evidence-Based Review [published online ahead of print, 2021 Mar 2]. *Curr Anesthesiol Rep.* 2021;1-6. doi:10.1007/s40140-021-00439-4
[Journal impact factor:0.87; Citations: 9]
27. Sarkar S, Khanna P, Gunjan D. Anesthesia for Per-oral endoscopic myotomy (POEM) – not so poetic!, *Anaesthesiol Clin Pharmacol* 2021. [published online ahead of print, December 03, 2021].doi: 10.4103/joacp.JOACP_179_20
[Journal impact factor:0.99; citations:2]
28. Sarkar S, Khanna P, Dube SK. Spectrum of neurological complications in COVID-19: an evidence-based review. *J Neuroanesthesiol Crit Care* 2020; 20(02) 07(02):062-066. DOI:10.1055/s-0040-1713017
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29. Sarkar S, Khanna P, Garg R. Air pollution: A new challenge for anaesthesiologists! *Indian J Anaesth.* 2020;64(4):333-337.
doi:10.4103/ija.IJA_927_1913.
[Journal impact factor:1.4; Citations: 1]
30. Singh AK, Sarkar S, Khanna P. Parturient with Endocrine Disorders in the Intensive Care Unit. *Indian J Crit Care Med* 2021;25(Suppl 3):S255–S260.
[Journal impact factor:1.09]
31. Kayarat B, Khanna P, Sarkar S. Pulmonary Fibrosis in COVID-19 Recovered Patients:Problem and Potential Management. *Indian J Crit Care Med.* 2021;25(2):242-244. doi:10.5005/jp-journals-10071-23733
[Journal impact factor:1.09; Citations: 6]
32. Kayarat B, Khanna P, Sarkar S. Superadded Coinfections and Antibiotic Resistance in the Context of COVID-19: Where do We Stand?. *Indian J Crit Care Med.* 2021;25(6):699-703.doi:10.5005/jp-journals-10071-23855
[Journal impact factor:1.09; Citations: 7]

33. Sarkar S, Khanna P. In Pursuit of Freedom from COVID-19 Awareness in India: An Infodemiological Analysis. Indian J Crit Care Med. 2021;25(4):470-472.

doi:10.5005/jpjournals-10071-23780

[Journal impact factor:1.09]

34. Sarkar S, Jafra A, Mathew P. Emergency airway management in Pierre Robin Sequence, our nightmare experiences. Trends in Anaesthesia and Critical Care. 2021;36:55-59. doi:10.1016/j.tacc.2020.10.003

[Journal impact factor: 1.5; Citations: 3]

35. Sarkar S, Luthra A, Gupta A, Chauhan R, Tiwana H. Hopkins rod endoscope, the saviour for securing airway in tonsillar lymphoma: A case report. Indian J Anaesth. 2019;63(6):503-505. doi:10.4103/ija.IJA_72_19

[Journal impact factor:1.4; Citations: 2]

36. Sarkar S, Ganesan R, Kumar B, Singh H, Basher R, Sood A. Intraoperative transesophageal echocardiography: A complement to 18F-fluorodeoxyglucose positron emission tomography-computed tomography in localizing pacemaker lead endocarditis. Ann Card Anaesth. 2020;23(4):524-527.

doi:10.4103/aca.ACA_9_19

[Journal impact factor:1.4]

37. Gupta A, Bhardwaj N, Sarkar S, Kanojia RP. Endoscopic excision of hydatid cyst: A case of delayed anaphylaxis in postoperative period - "The risk is not over until it is over". J Clin Anesth. 2019;52:63-64. doi:10.1016/j.jclinane.2018.09.019

[Journal impact factor:6.03; Citations: 2]

38. Sarkar S, Kuberan A, Yaddanapudi LN. Postoperative Acute Superficial Thrombophlebitis, an interesting case. *J Anaesthesiol Clin Pharmacol*. 2021;37(2):307-309. doi:10.4103/joacp.JOACP_331_18
[Journal impact factor:0.99]
39. Sarkar S, Khanna P. Eyes Have It: From COVID-19 Perspective. *Indian J Crit Care Med*.2020;24(11):1139-1140. doi:10.5005/jp-journals-10071-23644
[Journal impact factor:1.09]
40. Sarkar S, Anand RK, Ray BR, Baidya DK, Maitra S. Role of electronic devices in obtaining informed consent for critically ill COVID-19 patients: where do we stand? *J Anaesthesiol Clin Pharmacol* 2021[published online ahead of print, December 08,2021]. doi: 10.4103/joacp.JOACP_598_20
[Journal impact factor:0.99]
41. Sinha R, Kaur M, Sarkar S, Subramaniam R. Awake C-MAC® video laryngoscopy for cystic hygroma in neonatal intensive care:A land less travelled. *Trends in Anaesthesia and Critical Care*. Published online May 19, 2022. doi:10.1016/j.tacc.2022.05.003
[Journal impact factor:1.5]
42. Lalwani P, Sarkar S, Gupta B, Bagaria D, Kashyap L. Successful Management of a Threatened Airway in a Child With Near Complete Supraglottic Transection of the Larynx: Case Report. *J Anaesth Surg Res*. 2022;3(1):1-5.
doi: [https://doi.org/10.37191/Mapsci-JASR-3\(1\)-017](https://doi.org/10.37191/Mapsci-JASR-3(1)-017)
43. Sarkar S, Sinha R. Child with retinoblastoma for orbital exenteration. In: Gupta N, editor. *Problem based learning discussions in Onco-anesthesia and Onco-critical care*. Cham, Switzerland: Springer Nature;2022.
44. Lalwani P, Sinha R, Sarkar S, Subramaniam R, Mishra A K, Anaesthetic challenges of coronavirus disease (COVID-19) associated mucormycosis: A case series. *Indian J Clin Anaesth* 2023;10(1):89-97 doi: 10.18231/j.ijca.2023.016

45. Sarkar S. Procedural Sedation and Analgesia with Spontaneous Ventilation Outside the Operating Room in Non-Emergency Scenario: The Search for “Most Effective and Safe” Drugs to Combine with Racemic or Es- Ketamine, and Some Answers Regarding Patient and Examiner Satisfaction. In: Himmelseher S, editor. Neurobiology and New Clinical Uses for Ketamine. Cham, Switzerland: Springer Nature; 2024.

46. Maitra S, Sarkar S, Behera S, et al. Happy hypoxemia in COVID-19 patients: Fact or myth? J Anaesthesiol Clin Pharmacol . 2024;40(1).

doi: 10.4103/joacp.joacp_171_22

[Journal impact factor: 1.5]

47. Sarkar S, Yalla B, Khanna P, Baishya M. Is EIT-guided positive end-expiratory pressure titration for optimizing PEEP in ARDS the white elephant in the room? A systematic review with meta-analysis and trial sequential analysis. J Clin Monit

Comput. Published online April 15, 2024. doi:10.1007/s10877-024-01158-x

[Journal impact factor: 2]

- **Research gate / PubMed link / Google scholar link:**

1. [Soumya Sarkar \(researchgate.net\)](https://www.researchgate.net/profile/Soumya-Sarkar)

2. [My Bibliography - NCBI \(nih.gov\)](https://pubmed.ncbi.nlm.nih.gov/)

3. [Soumya Sarkar - Google Scholar](https://scholar.google.com/citations?user=Soumya-Sarkar)

• **Achievements:** (Award/Prize, Professional Recognitions, etc.)

1. Mamraj Agarwal Rashtriya Puraskar by GOVERNOR of West Bengal, 2004
2. National Merit Scholarship 2004, & 2006
3. Top 10 best abstracts at the 10th European Congress on Paediatric Anaesthesia, Brussels, Belgium, September 6–8th, 2018
4. Top 5 Oral paper at 28th Criticare, Ahmedabad, April 8-10th, 2022

Membership of Professional Bodies:

1. European Society of Paediatric Anaesthesiology
2. European Society of Anaesthesiology
3. Indian Society of Anaesthesiologist.
4. Academy of Regional Anaesthesia India
5. Indian Association of Paediatric Anaesthesiologists
6. Neonatal Anesthesia Society
7. Association of Indian Ophthalmic Anaesthesiologists
8. Emergency Medicine Association of India