Information Brochure of the Department of Anesthesiology, Critical Care and Pain, MPMMCC & HBCH (Tata Memorial Centre) Varanasi, for website publication.

Version dated: 25 May 2025

About

The Department of Anesthesiology, Critical Care and Pain offers services in the Major Operation Theater, Minor Operation Theater, Post-operative Recovery Room, Acute Pain Services in the Ward, Brachytherapy OT, Non-operating Room Anesthesia (NORA – pediatric diagnostic radiology and pediatric radiotherapy under anesthesia, Interventional Radiology under anesthesia), Surgical ICU, Medical & Pediatric ICU, and Pre-Anesthesia Check-up (PAC) OPD.

Mission

Our mission is to achieve excellence in delivering high-quality anesthesia, intensive care, and pain relief services to patients. We are dedicated to developing competent caregivers and innovating safe, cost-effective clinical pathways through research. Emphasizing empathy and compassion, we ensure our doctors provide patient-centered care with the utmost commitment.

We strive to foster an environment of trust and mutual respect within the workplace, enabling our caregivers to excel in serving patients, even in the most critical and demanding situations.

The department is committed to offering every patient safe and consistently high-quality anesthesia care, effective postoperative pain relief, and reliable intensive care for critically ill patients. We have a consistent track record in achieving favorable outcomes for patients with complex medical conditions undergoing major or high-risk surgeries.

The department offers for motivated doctors an unmatched high quality and high-volume opportunity to gain experience and competence in the following areas, under guidance of experienced teaching faculty:

- 1. Anesthesia and perioperative management of a wide variety of patient population spanning across ten surgical specialties thoracic, GI-hepatobiliary-pancreatic, colorectal, breast, head and neck, pediatric, gynecology, urology, bone and soft tissue (orthopedic), neurosurgery, plastic and reconstructive surgery.
- 2. Management of anticipated difficult airway by video-bronchoscopic awake tracheal intubation, video-laryngoscopic intubation, management of compromised airway, and USG guided percutaneous dilatational tracheostomy. Management of one lung ventilation using endobronchial tubes (DLT) and various types of bronchial blockers; including one lung ventilation in anticipated difficult airway and tracheostomized patients both adult and small children.
- 3. Performing USG guided vascular access procedures (Central Venous Catheters, Hemodialysis catheters, Arterial catheters) and USG guided regional anesthesia procedures in adults and small children.

- 4. Advanced hemodynamic monitoring with continuous cardiac output monitor and bedside RUSH scan (point of care echocardiography, Rapid Ultrasound for Shock and Hypotension to find the cause of undifferentiated hypotension in critically ill patients quickly).
- 5. Management of acute postoperative pain through a wide variety of modalities continuous epidural analgesia, continuous opioid infusion, IV PCA, intrathecal morphine analgesia, continuous nerve block analgesia, and other multimodal analgesia in opioid tolerant and difficult acute pain scenarios.
- 6. Management of a wide variety of critically ill patients adults, children, toddlers, infants and medically high-risk patients. Multiple organ support: respiratory support (HFNC, NIV, Invasive Mechanical Ventilation), circulatory support, and renal replacement therapy (bedside hemodialysis).

Anesthesia Services

The department currently provides anesthesia services at nine (09) major operation theaters, one (01) minor operation theater, brachytherapy OT, NORA services at CT scan, MRI, pediatric radiotherapy, and Interventional Radiology.

- Anesthesia care for thoracic surgeries like transthoracic esophagectomy, mediastinoscopy procedures, VATS, mediastinal tumor surgery, lung lobectomy, pneumonectomy, chest wall tumor & chest wall reconstructions, EBUS (endobronchial ultrasonography guided biopsies).
- 2. Anesthesia care for gastrointestinal & hepato-biliary-pancreatic surgeries like gastrectomy, GIST resections, Whipple's pancreatico-duodenectomy, extrahepatic biliary tract resection and hepatico-jejunostomy, major liver resection, radical cholecystectomy, retroperitoneal tumor resection, CRS with HIPEC, multivisceral resections.
- 3. Anesthesia care for colorectal surgeries like hemicolectomy, total colectomy, laparoscopic anterior resection, laparoscopic abdomino-perineal resections.
- 4. Anesthesia care for gynecological surgeries like TLH, Wertheim's hysterectomy, interval debulking surgery, CRS with HIPEC, pelvic exenteration, TAH BSO, ovarian cystectomy.
- 5. Anesthesia care for urology procedures like TURBT, radical cystectomy with ileal conduit, radical nephrectomy, radical nephroureterectomy, partial nephrectomy, anterior pelvic exenteration with ileal conduit, high inguinal orchiectomy.
- 6. Anesthesia care for neurosurgery like craniotomies, posterior fossa tumor resection, VP shunt, spine tumor resection, awake craniotomy.
- 7. Anesthesia care for pediatric surgery like chemoport insertion, intra-abdominal extragonadal germ cell tumor resection, hepatoblastoma resection, Wilms tumor resection, mediastinal tumor resection, intrathoracic neuroectodermal tumor resection, presacral teratoma resection, neuroblastoma resection, retinoblastoma enucleation, maxillectomy and free flap reconstruction, pediatric biopsies under general anesthesia.
- 8. Anesthesia care for breast surgeries like simple mastectomy and axillary clearance, modified radical mastectomy, breast conservation surgery, mastectomy with latissimus dorsi flap reconstruction.
- 9. Anesthesia care for head and neck surgeries like segmental mandibulectomy with neck dissection and PMMC flap reconstruction, bite composite resection with neck dissection

- and PMMC flap reconstruction, glossectomy with neck dissection, marginal mandibulectomy with neck dissection, total thyroidectomy with neck dissection, total laryngectomy, laryngo-pharyngectomy, laser surgery of larynx & trachea, microvascular free-flap reconstructions after major resections, maxillectomy and reconstruction.
- 10. Anesthesia care for bone and soft tissue surgery like forequarter amputation, hind quarter amputation, resection of sarcoma and total humerus replacement, resection of sarcoma and total femur replacement, resection of sarcoma and total knee replacement, resection of sarcoma and flap closure, amputations.
- 11. Tracheobronchial stenting for malignant central airway obstruction rigid bronchoscopy and stenting, as well as TIVA are conducted by the Department of Anesthesia.
- 12. Anesthesia care for interventional radiology procedures.
- 13. Anesthesia for robot assisted surgeries (RAS) urological procedures and gynecological procedures.

The anesthetic management of patients undergoing major and supra-major cancer surgery offers challenging problems including the management of difficult airway, management of shared airway, management of acute massive hemorrhage, massive blood transfusion, anesthesia for emergency surgery in patients with severe sepsis and hemorrhage.

Training facility of our MD Anesthesiology Post Graduate Students in Obstetric Anesthesia (3 months), Trauma Anesthesia (2 months), Cardiac Anesthesia (1 month) and UG Teaching is available at IMS BHU Varanasi by order of the competent authority of IMS BHU. (vide IMS BHU letter no. F.PA/N8/2022/233 dated 21 April 2023).

OT Timings:

General Anesthesia services are provided in 09 (nine) major OTs and 01 (one) minor OT.

Major OTs run Monday to Saturday from 9am to 6pm, or through till the last case is completed. Emergency cases are taken up in major OT irrespective of time and day. Cases under anesthesia at minor OT are done Monday, Wednesday to Saturday 11 am to 3 pm.

The Department provides anesthesia services for **Brachytherapy OT** at MPMMCC – Mon, Wednesday, Friday, 9am to 1pm.

Non-operating Room Anesthesia (NORA) timings: Monday to Friday 9am to 10 am (Pediatric radiotherapy at HBCH); Tuesday, Thursday, Friday 10 am to 1 pm (CT, MRI under anesthesia at MPMMCC); Tuesday 10 am to 4 pm (Elective cases at Interventional Radiology at MPMMCC); 24x7 (Emergency Interventional Radiology cases at MPMMCC).

Postoperative Recovery Room

The department runs an eight bedded postoperative recovery room within the 4th floor OT complex at MPMMC and a six bedded postoperative recovery room within the 1st OT complex at HBCH for immediate postoperative care of patients after major and minor surgical procedures. Patients are shifted to the postoperative recovery room for monitoring & treatment before being transferred to the ward or home discharge. During this period, they are monitored by a team of anesthetists and nurses, who perform an

initial postoperative evaluation, pain management, manage any acute postoperative event and also decide when the patient is ready for transfer.

Pre-anesthesia Check-up (PAC) OPD

The department operates a clinic on the 4th floor to conduct preoperative anesthetic evaluations for patients scheduled for surgery. Upon arrival at the PAC OPD, patients and their attendants scan a QR code on their mobile phones to complete an online self-health declaration form in a simple format and in their native language. For patients without access to smartphones or those with disabilities, a Kevat (patient navigator) assists in completing the form using a computer. This information is automatically transcribed to the doctor's dashboard, ensuring the clinical history is more focused, accurate, and time-efficient.

A team of anesthetists evaluates the patient's physical condition, screens for co-existing medical illnesses, recommends corrective treatments to manage these conditions, assesses perioperative risk factors, and formulates an anesthetic plan tailored to the patient's physical status. This plan is then discussed with the patient, including the benefits and risks of the anesthesia procedure, details of any perioperative interventions, and informed consent for the anesthesia procedure is recorded.

Preventive and prehabilitation measures are also advised at the PAC OPD. These include interventions such as correcting iron deficiency anemia, smoking and tobacco cessation, managing hypertension, diabetes mellitus, COPD, and asthma; engaging in graded exercises, using incentive spirometry, and undertaking nutritional conditioning before surgery.

PAC OPD Timings:

9am to 5pm, Monday to Friday. Prior appointment from Central Registration Counter is required for OPD consultation. Urgent and emergency patients are attended at the bedside in IPD or in the preoperative holding area.

Acute Pain Service:

The department routinely offers USG guided nerve blocks to reduce acute postoperative pain, viz. quadratus lumborum plane block, serratus anterior plane block, PECS block, erector spinae plane block, thoracic paravertebral block, TAP block, sciatic nerve block, fascia iliaca plane block, femoral nerve block, interscalene brachial plexus block, suprascapular nerve block. Thoracic epidural analgesia, intrathecal morphine analgesia, IV Fentanyl ambulatory PCA (Patient Controlled Analgesia with CADD pump) are routinely used to suit the particular needs of individual patients and surgical procedures. Patients are followed up by bedside visits in the ward by the pain team (consultant, resident doctor and nurse) for optimum control of acute postoperative pain.

Interventional Pain Procedures for Chronic Pain: The department collaborates with Intervention Radiology Department for Interventional Pain Management for chronic cancer pain with cryoablation and radiofrequency ablation devices.

Pain Clinic: At present, chronic pain patients are managed using a multimodal approach, ranging from the use of oral analgesics including NSAIDs, co-analgesics, various forms of morphine, transdermal fentanyl patch, sublingual buprenorphine, at the Palliative Medicine OPD run by the Department of Palliative Medicine.

Critical Care

The department runs a thirteen-bedded ICU for surgical oncology, medical oncology, and pediatric oncology patients at the 4th Floor of MPMMCC Varanasi.

The department also runs a six-bedded ICU for Hemato-Oncology and Medical Oncology patients at the 1st Floor of HBCH Varanasi.

Both these ICUs meet the ISCCM level IIIA standards.

Consultants, Junior Resident and Senior Residents manage these ICUs round the clock on a rotational basis.

A wide variety of critically ill patients – adults, children, toddlers, infants and medically high-risk patients are managed in the ICU. Respiratory support (HFNC, NIV, Invasive Mechanical Ventilation), advanced hemodynamic monitoring and circulatory support, and renal replacement therapy (bedside hemodialysis) are offered in our ICU.

Clinical workload of the department:

Particulars	Year 1 (2019)	Year 2 (2020)	Year 3 (2021)	Year 4 (2022)	Year 5 (2023)	Year 6 (2024)	
Number of patients attended at PAC OPD	2869	4838	7348	8715	9764	8638	
Number of Major operations	1270	2159	3906	4430	4454	4819	
Number of Minor operations	3297	5740	7373	7864	10160	11574	
Number of patients in Brachytherapy OT under anesthesia			425	357	311	389	
Number of patients in NORA (CT, MRI, Pediatric radiotherapy, Interventional Radiology Procedure under anesthesia)			331	576	567	742	
Number of Recovery Room (PACU) admissions			2162	2635	4152	4507	
Medical & Pediatric ICU admissions			209	225	186	137 + 229	
Surgical ICU admissions			1529	1740	1747	1627	
Number of bedside dialysis sessions in ICU			90	191	143	140	
Number of patients attended Acute Pain Services team			502	1156	1074	871	
Number of patients seen in Pain Clinic			Data displayed ι	ınder Palliative M	ledicine	<u> </u>	
Number of Interventional Pain Procedures		Data displayed under Interventional Radiology					

In position staff (as on 26 Apr 2025)

• Professor: 2

Associate Professor: 4

Assistant Professor: 6

Part-time Anesthesia Consultant: 2

• Senior Resident: 3 + 6

• Junior Resident (MD Anesthesiology): 2 + 2 + 2

• ICU Medical Officer (JR): 1

• OT Technician: 23

• ICU Technician: 14

Research Assistant: 1

Information on the availability of Training Facilities in Anesthesia Care for Surgical Specialties

S/N	Surgical Specialty
1	Breast Oncosurgery
2	Gynecologic Oncosurgery
3	Bone and Soft Tissue Oncosurgery
4	Head and Neck Oncosurgery
5	Gastrointestinal & Hepato-biliary-pancreatic Oncosurgery
6	Thoracic Oncosurgery
7	Urology Oncosurgery
8	Pediatric Surgical Oncology
9	Neuro Surgical Oncology
10	Plastic and Reconstructive Surgery

Training facility for our MD Anesthesiology Students in Obstetric Anesthesia, Trauma Anesthesia, Cardiac Anesthesia and UG Teaching is available at IMS BHU Varanasi, (order of the competent authority of IMS BHU. (vide IMS BHU letter no. F.PA/N8/2022/233 dated 21 April 2023). IMS BHU is within 2 km of road distance from MPMMCC.

The District Residency Program at UCHC Durgakund Varanasi (under CMO Varanasi) provides additional training opportunities in obstetric anesthesia for MD Anesthesiology Students at the community hospital level.

COVID19 pandemic service by the department:

The Consultants and Senior Residents of department provided round the clock on-site services for the 28 bedded COVID19 HCU (level 2 & level 3 care facility) at HBCH Varanasi between 3rd week of April 2021 and 3rd week of June 2021 (2nd wave of COVID 19 pandemic in 2021). At the same time, anesthesia services for major cancer surgeries, NORA services and ICU services were provided uninterruptedly at MPMMCC Varanasi.

Medical Teaching Faculty:

There are currently twelve (12) Medical Teaching Faculty Members.

Teaching Faculty of Department of Anesthesiology, Critical Care & Pain

MPMMCC / HBCH (Tata Memorial Centre) Varanasi (Permission for MD Anesthesia Course received from NMC on 18 Aug 2022)

S/N	Name	Qualifications	Designation	Experience	Areas of interest	No. of publications	Email id
1.	Dr Jyotirmay Kirtania	MD Anesthesiology	Professor & HoD	NMC recognized teaching experience: 13 y, 4 m, 16 d (prior) 2 y, 9 m, 1 d (present, calculated from date of LoP for MD Anesthesiology at TMC Varanasi) Total post PG experience: 19 years	Patient safety, Medical Simulation, Medical Instrumentation, Competency Based Medical Education, Transplant Anesthesia, Intensive Care	19	jyotirmay@mpm mcc.tmc.gov.in
2.	Dr Shreyasi Ray	MD Anesthesiology, MBA (HCS)	Professor	NMC recognized teaching experience: 10 y, 7 m, 4 d (prior) + 2 y, 9 m, 1 d (present) Total post PG experience: 15 years	Pain, Airway Management, Competency Based Medical Education	12	shreyasi@mpmm cc.tmc.gov.in

3.	Dr Uddalak Chattopadhyay	MD Anesthesiology, DNB Anesthesiology	Associate Professor	NMC recognized teaching experience: 3 y 5 m (prior) + 2 y, 9 m, 1 d (present) Total post PG experience: 9 years	Regional anesthesia, Airway Management	7	uddalak@mpmm cc.tmc.gov.in
4.	Dr Nikhil Kumar Singh	MD Anesthesiology, PDCC Neuroanesthesia, PDCC Critical Care	Assistant Professor	NMC recognized teaching experience: 3 y 1 m (prior) + 2 y, 9 m, 1 d (present) Total post PG experience: 8 years	Neuroanesthesia, Intensive Care	5	nikhilgsvm@gmai I.com

5.	Dr Sandipan Banerjee	MD Anesthesiology	Associate Professor	NMC recognized teaching experience: 5 y (prior) + 2 y, 9 m, 1 d (present) Total post PG experience: 9 years	Pediatric Anesthesia, Thoracic anesthesia	4	sandipan@mpm mcc.tmc.gov.in
6.	Dr Shalini Chaudhuri	MD Anesthesiology	Associate Professor	NMC recognized teaching experience: 5 y (prior) + 2 y, 9 m, 1 d (present) Total post PG experience: 9 years	Pediatric anesthesia	6	shalini@mpmmcc .tmc.gov.in

7. Dr Syed Sadaqat Hussain MD Anesthesiology Professor NMC recognized teaching experience: 10 years NMC recognized teaching experience: 10 years		D C 1C 1				5 1 1 1111 11	_	
8. Dr Monotosh Pramanik MD Anesthesiology Pramanik MD Anesthesiology Professor Assistant Professor MD Anesthesiology Professor Assistant Professor NMC recognized teaching experience: 1 y 9 m (prior) + 2 y, 9 m, 1 d (present) Total post PG experience: 1 y 9 m (prior) + 2 y, 9 m, 1 d (present) Total post PG experience:	/.		MD Anesthesiology	I			5	
8. Dr Monotosh Pramanik MD Anesthesiology Pramanik MD Anesthesiology Professor MD Anesthesiology Professor NMC recognized teaching experience: 1 y 9 m (prior) + 2 y, 9 m, 1 d (present) Total post PG experience: Total post PG experience: Skills Acute Pain 6 monotosh@mpm mcc.tmc.gov.in		Hussain		Professor	l :	Clinical		mc.gov.in
2 y, 9 m, 1 d (present) Total post PG experience: 10 years NMC recognized teaching experience: 1 y 9 m (prior) + 2 y, 9 m, 1 d (present) Total post PG experience: 1 y 9 m (prior) + 2 y, 9 m, 1 d (present) Total post PG experience:					6 y 4 m (prior)	Communication		
8. Dr Monotosh Pramanik MD Anesthesiology Professor Assistant Professor Assistant Professor NMC recognized teaching experience: 1 y 9 m (prior) + 2 y, 9 m, 1 d (present) Total post PG experience: 1 y 9 m (prior) + 2 y, 9 m, 1 d (present) Total post PG experience: 1 y 9 m (prior) + 2 y, 9 m, 1 d (present) Total post PG experience:					+	Skills		
8. Dr Monotosh Pramanik MD Anesthesiology Pramanik Assistant Professor NMC recognized teaching experience: 1 y 9 m (prior) + 2 y, 9 m, 1 d (present) Total post PG experience: 1 y 9 m, 1 d (present) Total post PG experience:					2 y, 9 m, 1 d (present)			
8. Dr Monotosh Pramanik MD Anesthesiology Professor MMC recognized teaching experience: 1 y 9 m (prior) + 2 y, 9 m, 1 d (present) Total post PG experience:								
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8. Dr Monotosh Pramanik MD Anesthesiology Professor Assistant Professor Assistant Professor NMC recognized teaching experience: 1 y 9 m (prior) + 2 y, 9 m, 1 d (present) Total post PG experience:		-						
Professor experience: 1 y 9 m (prior) + 2 y, 9 m, 1 d (present) Total post PG experience:					15 years			
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Professor experience: 1 y 9 m (prior) + 2 y, 9 m, 1 d (present) Total post PG experience:	0	Dr Manatach	MD Aposthosiology	Assistant	NIMC recognized teaching	Acuto Dain	6	manatash@mnm
1 y 9 m (prior) + 2 y, 9 m, 1 d (present) Total post PG experience:	0.		IVID Allestriesiology	1		Acute Palli	0	· .
+ 2 y, 9 m, 1 d (present) Total post PG experience:		Pramanik		Professor	1 -			mcc.tmc.gov.in
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9 years					Total post PG experience:			
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9. Dr	Shashank Tiwari	MD Anesthesiology, PDCC Critical Care	Assistant Professor	NMC recognized teaching experience: 2 y (prior) + 2 y, 9 m, 1 d (present) Total post PG experience: 6 years	Critical Care, Infectious disease	3	shashank@mpm mcc.tmc.gov.in
10 Dr	Anamika Mishra	DNB Anesthesiology	Assistant Professor	NMC recognized teaching experience: 2 y, 9 m, 1 d (present) Total post PG experience: 4 years	Pediatric Anesthesia	1	anamika@mpmm cc.tmc.gov.in

11	Dr Souvik Mukherjee	DNB Anesthesiology, DM Onco-anesthesiology & Palliative Care	Assistant Professor (20 Aug 2024)	NMC recognized teaching experience: 4y (prior) 9 m, 7 d (present) Total post PG experience: 4 years	Oncoanesthesia, Regional Anesthesia	2	souvikm@mpmm cc.tmc.gov.in
12	Dr Mrunmayai H Jadhav	MD Anesthesiology	Assistant Professor (18 Mar 2025)	NMC recognized teaching experience: 2y (prior) 2 m 9 d (present) Total post PG experience: 2 years	Oncoanesthesia, Regional Anesthesia		mrunmayai@gma il.com

S/N	Faculty Name	S/N	Publications	Pubmed Indexed	DOAJ / Scopus Indexed
1	Dr Jyotirmay Kirtania	1	Pramanik M, Chattopadhyay U, Chaudhuri S, Hussain SS, Singh NK, Banerjee S, Ray S, Kirtania J. Comparison between transtracheal and intravenous 2% lignocaine in attenuating hemodynamic stress response following direct laryngoscopy and endotracheal intubation: a randomized controlled trial. BMC Anesthesiol. 2025;25(1):262.	Yes	Yes
		2	Batra VB, Kirtania J, Tiwari S, Kumar P, Kumar A, Chakraborty S. Role of Antimicrobial Air Purifier in Reducing the Microbial Load in the Critical Care Unit in Oncology Center: An Intervention Study. Indian J Crit Care Med 2025;29(4):327–332.	Yes	Yes
		3	Pramanik M, Chaudhuri S, Banerjee S, Chattopadhyay U, Hussain SS, Kumar Singh NK, & Kirtania J. Combination of ultrasound-guided pectoral nerve block I and serratus anterior plane block for attenuation of surgical stress response during modified radical mastectomy: A prospective interventional randomized controlled trial. Asian Journal of Medical Sciences. 2024;15(12):6–12.	No	Yes
		4	Ray S, Kirtania J. Effects of Passive Head-and-Neck Movements on the Performance of i-gel® Supraglottic Airway Device in Anesthetized Patients - A Randomized Crossover Trial. Anesth Essays Res. 2020;14(2):305-311.	Yes	Yes
		5	Ray S, Kirtania J. Waiting time of inpatients before elective surgical procedures at a State Government Teaching Hospital in India. Indian J Public Health. 2017;61(4):284-289.	Yes	Yes
		6	Ray S, Kirtania J. Randomised double-blind study of intrathecal bupivacaine-morphine versus systemic morphine analgesia for major abdominal surgery in a resource poor setting. J. Evolution Med. Dent. Sci. 2017;6(75):5345-5352.	Yes (Select Citations of the Journal) NLM ID: 101602123	No
		7	Kirtania J, Ray S. Test-retest reliability of assessment of anaesthetist's performance in managing serious adverse events on a screen-based computer simulator. J. Evolution Med. Dent. Sci. 2017;6(79):5575-5579.	Yes (Select Citations of the Journal) NLM ID: 101602123	No
		8	Kirtania J, Ray S. New Onset Generalized Tonic Clonic Seizures after Intravenous Tramadol with Ondansetron. International Journal of Medical and Pharmaceutical Case Reports. 2015;5:1-5.	Yes. NLM ID: 101648033	No
		9	Maitra S, Kirtania J, Pal S, Bhattacharjee S, Layek A, Ray S. Intraoperative blood glucose levels in nondiabetic patients undergoing elective major surgery under general anaesthesia receiving different crystalloid solutions for maintenance fluid. Anesth Essays Res. 2013;7(2):183-188.	Yes	Yes

		10	Ray S, Kirtania J, Das A, Halder B, Kundu AK. General Anesthesia Preceded by Awake-Trial of LMA in a Child with Freeman-Sheldon Syndrome. J Anesth Clin Res. 2013;4:269-271.	No	Yes
		11	Kirtania J, Ray S. Beware of lung complications when using guidewire-assisted nasogastric tube insertion. Anesth Analg. 2013;116(1):263-264.	Yes	Yes
		12	Kirtania J, Ghose T, Garai D, Ray S. Esophageal guidewire-assisted nasogastric tube insertion in anesthetized and intubated patients: a prospective randomized controlled study. Anesth Analg. 2012;114(2):343-348.	Yes	Yes
		13	Mandal S, Basu M, Kirtania J, Sarbapalli D, Pal R, Kar S, Kundu KK, Sarkar U, Gupta SD. Impact of general versus epidural anesthesia on early post-operative cognitive dysfunction following hip and knee surgery. J Emerg Trauma Shock. 2011;4(1):23-28.	Yes	Yes
		14	Ray S, Pal R, Pal S, Kirtania J, Sarbapalli D, Sarkar U, Kundu KK. Preclusion of pain on injection with propofol: Evaluating the effects of lignocaine or fentanyl pretreatment. Anesth Essays Res. 2011;5(1):33-38.	Yes	Yes
		15	Chowdhury A, Gupta S, Ghatak S, Goyal N, Ray S, Ray R, Das K, Kirtania J, Ghose T. Developing a transplant program: The beginning of liver transplant activity in eastern India. Indian Journal of Transplantation. 2011;5(2):114-115.	No	Yes
		16	Rudra A, Ray A, Chatterjee S, Bhattacharya C, Kirtania J, Kumar P, Das T, Ray V. Trauma in pregnancy. Indian Journal of Anaesthesia. 2007;51(2):100-105.	Yes	No
		17	Rudra A, Chatterjee S, Kirtania J, Sengupta S, Moitra G, Sirohia S, Wankhade R, Banerjee S. Postoperative delirium. Indian Journal of Critical Care Medicine. 2006;10(4):235-240.	Yes	No
		18	Dutta Gupta S (Editor). Anesthesiology Updates for Postgraduates (2010), Edition: 1/e. Book Chapter: Hepatic physiology and anaesthetic considerations in acute and chronic liver diseases. Jyotirmay Kirtania. ISBN: 9789351520962. Jaypee Brothers Medical Publishers (P) Ltd.	ISBN: 9789351520962	2
		19	Chapter 72: Cancer and Venous Thrombembolism. Textbook of Onco-Anaesthesia and Critical Care, edited by Dr Atul Prabhakar Kulkarni and Dr Sohan Lal Solanki, and published by Jaypee Brothers Medical Publishers Pvt. Ltd. (2025)	ISBN: 978-93-6616-84	0-1
II	Dr Shreyasi Ray	1	Pramanik M, Chattopadhyay U, Chaudhuri S, Hussain SS, Singh NK, Banerjee S, Ray S, Kirtania J. Comparison between transtracheal and intravenous 2% lignocaine in attenuating hemodynamic stress response following direct laryngoscopy and endotracheal intubation: a randomized controlled trial. BMC Anesthesiol. 2025;25(1):262.	Yes	Yes
		2	Ray S, Kirtania J. Effects of Passive Head-and-Neck Movements on the Performance of	Yes	Yes

			i-gel* Supraglottic Airway Device in Anesthetized Patients - A Randomized Crossover Trial. Anesth Essays Res. 2020;14(2):305-311.		
		3	Ray S, Kirtania J. Waiting time of inpatients before elective surgical procedures at a State Government Teaching Hospital in India. Indian J Public Health. 2017;61(4):284-289.	Yes	Yes
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		10	Kirtania J, Ghose T, Garai D, Ray S. Esophageal guidewire-assisted nasogastric tube insertion in anesthetized and intubated patients: a prospective randomized controlled study. Anesth Analg. 2012;114(2):343-348.	Yes	Yes
		11	Ray S, Pal R, Pal S, Kirtania J, Sarbapalli D, Sarkar U, Kundu KK. Preclusion of pain on injection with propofol: Evaluating the effects of lignocaine or fentanyl pretreatment. Anesth Essays Res. 2011;5(1):33-38.	Yes	Yes
		12	Chapter 72: Cancer and Venous Thrombembolism. Textbook of Onco-Anaesthesia and Critical Care, edited by Dr Atul Prabhakar Kulkarni and Dr Sohan Lal Solanki, and published by Jaypee Brothers Medical Publishers Pvt. Ltd. (2025)	ISBN: 978-93-6616-84	0-1
III	Dr Uddalak Chattopadhyay	1	Pramanik M, Chattopadhyay U, Chaudhuri S, Hussain SS, Singh NK, Banerjee S, Ray S, Kirtania J. Comparison between transtracheal and intravenous 2% lignocaine in attenuating hemodynamic stress response following direct laryngoscopy and	Yes	Yes

			endotracheal intubation: a randomized controlled trial. BMC Anesthesiol. 2025;25(1):262.		
		2	Chaudhuri S, Banerjee S, Hussain SS.; Pramanik M; Chattopadhyay U, Singh NK. Efficacy of lingual nerve block in preventing haemodynamic response due to surgical stimulation in patients undergoing tongue cancer resections: A randomised controlled trial. Indian J Anaesth. 2025; 69(4):358-364.	Yes	Yes
		3	Pramanik M, Chaudhuri S, Banerjee S, Chattopadhyay U, Hussain SS, Kumar Singh NK, & Kirtania J. Combination of ultrasound-guided pectoral nerve block I and serratus anterior plane block for attenuation of surgical stress response during modified radical mastectomy: A prospective interventional randomized controlled trial. Asian Journal of Medical Sciences. 2024;15(12):6–12.	No	Yes
		4	Chaudhuri S, Banerjee S, Chattopadhyay U, Hussain SS. Comparison of recovery times by using bispectral index monitoring versus end-tidal agent concentration monitoring in patients undergoing inhalational general anaesthesia. Indian J Anaesth. 2022;66(Suppl 3):S161-S168.	Yes	Yes
		5	Daga D, Mishra A, Sharma SS, Rai AK, Valsareddy SK, Singh U, Chattopadhyay U, Prakash G. Safe Delivery of Surgical Care in Head and Neck Cancer Patients During COVID-19-an Audit of Pattern of Presentation and Treatment Strategies in an Oncology Centre in the Northern India. Indian J Surg Oncol. 2021;30:1-7.	Yes	Yes
		6	Chattopadhyay U, Mallik S, Ghosh S, Bhattacharya S, Bisai S, Biswas H. Comparison between propofol and dexmedetomidine on depth of anesthesia: A prospective randomized trial. J Anaesthesiol Clin Pharmacol. 2014;30(4):550-554.	Yes	Yes
		7	Chapter 72: Cancer and Venous Thrombembolism. Textbook of Onco-Anaesthesia and Critical Care, edited by Dr Atul Prabhakar Kulkarni and Dr Sohan Lal Solanki, and published by Jaypee Brothers Medical Publishers Pvt. Ltd. (2025)	ISBN: 978-93-6616-84	0-1
IV	Dr Nikhil Kumar Singh	1	Pramanik M, Chattopadhyay U, Chaudhuri S, Hussain SS, Singh NK, Banerjee S, Ray S, Kirtania J. Comparison between transtracheal and intravenous 2% lignocaine in attenuating hemodynamic stress response following direct laryngoscopy and endotracheal intubation: a randomized controlled trial. BMC Anesthesiol. 2025;25(1):262.	Yes	Yes
		2	Chaudhuri S, Banerjee S, Hussain SS.; Pramanik M; Chattopadhyay U, Singh NK. Efficacy of lingual nerve block in preventing haemodynamic response due to surgical stimulation	Yes	Yes

		3	in patients undergoing tongue cancer resections: A randomised controlled trial. Indian J Anaesth. 2025; 69(4):358-364. Pramanik M, Chaudhuri S, Banerjee S, Chattopadhyay U, Hussain SS, Kumar Singh NK, & Kirtania J. Combination of ultrasound-guided pectoral nerve block I and serratus anterior plane block for attenuation of surgical stress response during modified radical mastectomy: A prospective interventional randomized controlled trial. Asian Journal of Medical Sciences. 2024;15(12):6–12.	No	Yes
		4	Sachan M, Singh NK, Naithani B, Abbas H, Dube M, Naithani B. Comparative study of intubating conditions and hemodynamic changes during awake fiber-optic intubation using midazolam with fentanyl versus dexmedetomidine in cases of difficult airway. Natl J Maxillofac Surg. 2022;13(2):201-207.	Yes	Yes
		5	Valasareddy SK, Singh NK, Chaudhari G, Mishra A. Unanticipated intraoperative airway emergency due to near-total transection of endotracheal tube during partial maxillectomy. Airway 2021;4:48-50.	No	No
V	Dr Shalini Chaudhuri	1	Pramanik M, Chattopadhyay U, Chaudhuri S, Hussain SS, Singh NK, Banerjee S, Ray S, Kirtania J. Comparison between transtracheal and intravenous 2% lignocaine in attenuating hemodynamic stress response following direct laryngoscopy and endotracheal intubation: a randomized controlled trial. BMC Anesthesiol. 2025;25(1):262.	Yes	Yes
		2	Chaudhuri S, Banerjee S, Hussain SS.; Pramanik M; Chattopadhyay U, Singh NK. Efficacy of lingual nerve block in preventing haemodynamic response due to surgical stimulation in patients undergoing tongue cancer resections: A randomised controlled trial. Indian J Anaesth. 2025; 69(4):358-364.	Yes	Yes
		3	Pramanik M, Chaudhuri S, Banerjee S, Chattopadhyay U, Hussain SS, Kumar Singh NK, & Kirtania J. Combination of ultrasound-guided pectoral nerve block I and serratus anterior plane block for attenuation of surgical stress response during modified radical mastectomy: A prospective interventional randomized controlled trial. Asian Journal of Medical Sciences. 2024;15(12):6–12.	No	Yes
		4	Chaudhuri S, Banerjee S, Chattopadhyay U, Hussain SS. Comparison of recovery times by using bispectral index monitoring versus end-tidal agent concentration monitoring in patients undergoing inhalational general anaesthesia. Indian J Anaesth. 2022;66(Suppl 3):S161-S168.	Yes	Yes
I		5	Chaudhuri S, SenDasgupta C, Goswami A, Sinha S. Comparison of Effects of Prophylactic	No	No

		6	Amiodarone versus Lignocaine and Magnesium Sulphate versus Placebo in Prevention of Arrhythmias in Patients Undergoing Valve Replacement Surgery. Clinical and Interventional Cardiology. 2021;1(1):004. Anesthesiology Updates for Postgraduates (2014), Edition: 4/e. Pediatric Anesthesia: An Overview. Purnima Mukherjee, Shalini Chaudhuri. ISBN: 9789351520962. Jaypee Brothers Medical Publishers (P) Ltd.	ISBN: 9789351520962	2
VI	Dr Sandipan Banerjee	1	Pramanik M, Chattopadhyay U, Chaudhuri S, Hussain SS, Singh NK, Banerjee S, Ray S, Kirtania J. Comparison between transtracheal and intravenous 2% lignocaine in attenuating hemodynamic stress response following direct laryngoscopy and endotracheal intubation: a randomized controlled trial. BMC Anesthesiol. 2025;25(1):262.	Yes	Yes
		2	Chaudhuri S, Banerjee S, Hussain SS.; Pramanik M; Chattopadhyay U, Singh NK. Efficacy of lingual nerve block in preventing haemodynamic response due to surgical stimulation in patients undergoing tongue cancer resections: A randomised controlled trial. Indian J Anaesth. 2025; 69(4):358-364.	Yes	Yes
		3	Pramanik M, Chaudhuri S, Banerjee S, Chattopadhyay U, Hussain SS, Kumar Singh NK, & Kirtania J. Combination of ultrasound-guided pectoral nerve block I and serratus anterior plane block for attenuation of surgical stress response during modified radical mastectomy: A prospective interventional randomized controlled trial. Asian Journal of Medical Sciences. 2024;15(12):6–12.	No	Yes
		4	Chaudhuri S, Banerjee S, Chattopadhyay U, Hussain SS. Comparison of recovery times by using bispectral index monitoring versus end-tidal agent concentration monitoring in patients undergoing inhalational general anaesthesia. Indian J Anaesth. 2022;66(Suppl 3):S161-S168.	Yes	Yes
VII	Dr Syed Sadaqat Hussain	1	Pramanik M, Chattopadhyay U, Chaudhuri S, Hussain SS, Singh NK, Banerjee S, Ray S, Kirtania J. Comparison between transtracheal and intravenous 2% lignocaine in attenuating hemodynamic stress response following direct laryngoscopy and endotracheal intubation: a randomized controlled trial. BMC Anesthesiol. 2025;25(1):262.	Yes	Yes
		2	Chaudhuri S, Banerjee S, Hussain SS.; Pramanik M; Chattopadhyay U, Singh NK. Efficacy of lingual nerve block in preventing haemodynamic response due to surgical stimulation in patients undergoing tongue cancer resections: A randomised controlled trial. Indian J	Yes	Yes

		Anaesth. 2025; 69(4):358-364.		
	3	Pramanik M, Chaudhuri S, Banerjee S, Chattopadhyay U, Hussain SS, Kumar Singh NK, & Kirtania J. Combination of ultrasound-guided pectoral nerve block I and serratus anterior plane block for attenuation of surgical stress response during modified radical mastectomy: A prospective interventional randomized controlled trial. Asian Journal of Medical Sciences. 2024;15(12):6–12.	No	Yes
	4	Chaudhuri S, Banerjee S, Chattopadhyay U, Hussain SS. Comparison of recovery times by using bispectral index monitoring versus end-tidal agent concentration monitoring in patients undergoing inhalational general anaesthesia. Indian J Anaesth. 2022;66(Suppl 3):S161-S168.	Yes	Yes
	5	Pramanick S, Hussain SS. Attenuation of haemodynamic response to different doses of dexmedetomidine during extubation in patients undergoing peripheral vascular surgery. Indian Journal of Basic and Applied Medical Research 2016;5(4):740-751	No	No
Dr Monotosh Pramanik	1	Pramanik M, Chattopadhyay U, Chaudhuri S, Hussain SS, Singh NK, Banerjee S, Ray S, Kirtania J. Comparison between transtracheal and intravenous 2% lignocaine in attenuating hemodynamic stress response following direct laryngoscopy and endotracheal intubation: a randomized controlled trial. BMC Anesthesiol. 2025;25(1):262.	Yes	Yes
	2	Chaudhuri S, Banerjee S, Hussain SS.; Pramanik M; Chattopadhyay U, Singh NK. Efficacy of lingual nerve block in preventing haemodynamic response due to surgical stimulation in patients undergoing tongue cancer resections: A randomised controlled trial. Indian J Anaesth. 2025; 69(4):358-364.	Yes	Yes
	3	Pramanik M, Chaudhuri S, Banerjee S, Chattopadhyay U, Hussain SS, Kumar Singh NK, & Kirtania J. Combination of ultrasound-guided pectoral nerve block I and serratus anterior plane block for attenuation of surgical stress response during modified radical mastectomy: A prospective interventional randomized controlled trial. Asian Journal of Medical Sciences. 2024;15(12):6–12.	No	Yes
	4	Pramanik M, Chattopadhyay M, Sarkar A. Anaesthetic management of cytoreductive surgery and hyperthermic intraperitoneal chemotherapy (HIPEC) in a patient with severe uncorrected coarctation of aorta (CoA): A case report. Indian Journal of Anaesthesia. 2020;64(5):441.	Yes	Yes
	5	Pramanik M, Sarkar A, Gupta A, Chattopadhyay M. Postoperative pulmonary complications in robot-assisted uro-oncological surgeries: Our experience in a tertiary	Yes	Yes

			cancer care centre. Indian journal of anaesthesia. 2020;64(3):238.		
		6	Chakrabarti A, Pramanik M, Das SR. A clinical study on effect of dexmedetomidine added to spinal hyperbaric bupivacaine in lower abdominal surgeries. International Journal of Contemporary Medical Research 2016;3(8):2434-2437.	No	No
IX	Dr Shashank Tiwari	1	Batra VB, Kirtania J, Tiwari S, Kumar P, Kumar A, Chakraborty S. Role of Antimicrobial Air Purifier in Reducing the Microbial Load in the Critical Care Unit in Oncology Center: An Intervention Study. Indian J Crit Care Med 2025;29(4):327–332.	Yes	Yes
		2	Bakshi S, Rana M, Gulia A, Puri A, Harsha TS, Tiwari S, Gotur A. Prevalence of chronic pain following resection of pelvic bone tumours: A single centre prospective observational survey. Br J Pain. 2022;16(3):263-269.	Yes	Yes
		3	Sharma S, Tiwari S, Sharma K, Nair N. Randomized controlled trial comparing the efficacy of pectoral nerve block with general anesthesia alone in patients undergoing unilateral mastectomy. Indian J Surg Oncol. 2021 Mar;12(1):158-163.	Yes	Yes
X	Dr Souvik Mukherjee	1	Mukherjee S, Jain A, S S, Waindeskar V. Clinical outcome of perioperative airway and ventilatory management in patients undergoing surgery for oral cavity cancer: a prospective observational study. J Korean Assoc Oral Maxillofac Surg. 2024;50(3):146-152.	Yes	Yes
		2	Mukherjee S, Waindeskar V, Molli K, Koovakattil AK. An unusual case of delayed recovery from spinal anesthesia in a patient with Lambert-Eaton myasthenic syndrome—a case report. Ain-Shams Journal of Anesthesiology. 2023;15(1).	No	No
XI	Dr Anamika Mishra	1	Sarkar SR, Singhavi HR, Das A, Dhal I, Shukla S, Nanda SS, Mishra A, Lamba K, Mishra A. Effects of Viral Infections Like COVID-19 on Head and Neck Cancers: The Role of Neutrophil-Lymphocyte Counts and Ratios. Cureus. 2024;16(6):e61733.		Yes

Educational Program:

MD Anesthesiology course (3 years full time PG degree course) – two (02) seats permitted by the National Medical Commission, admission of students commenced from the academic year 2022-23.

P.G students presently studying in the Department:

Name	Joining date	E-mail
Dr Aayushi Kumar	26 Oct 2022	aayushikumar998@gmail.com
Dr Artee Sharma	24 Nov 2022	artee.sharma11@gmail.com
Dr Nancy Saxena	4 Oct 2023	nan.csaxena@gmail.com
Dr Aakriti Srivastava	6 Oct 2023	aakritisri14@gmail.com
Dr Vandita Singh	1 Feb 2025	vanditasingh2297@gmail.com
Dr Aastha Gupta	27 Feb 2025	aasthajune99@gmail.com

Schedule of Post Graduate Academic Sessions at Department of Anesthesiology, Critical Care & Pain					
Teaching-Learning Session	Day of the week				
Theory Classes*	Monday				
Clinical Seminars*	Tuesday				
Central Multidisciplinary Academic Meetings (held at 5th Floor Lecture Hall, on various topics): CPC, Monthly Morbidity Mortality Meetings, Guest Lectures, Departmental Audit, Landmark Paper, Topic of Medical Interest	Wednesday				
Journal Clubs Meetings*	Thursday				
Group Discussions (Clinical Case Discussion / Problem Based Learning)*	Friday				
Tutorials (Clinical Skills Workshop)*	1st, 2nd, 3rd Saturday				
Research Project Meetings*	4th Saturday				

^{*}held at 4th Floor OT complex classroom

Ongoing Research Activities:

All the faculty and resident doctors are encouraged to involve themselves in biomedical research addressing contemporary and relevant research questions that directly impact the practice of anesthesia, critical care and pain.

S/N	Name of the Study
1.	Effects of aNaesthesia in COloREctal cancer outcome trial – ENCORE: The effects of anaesthetic techniques on time to start of adjuvant chemotherapy, and early and late outcomes following surgery for colorectal cancer (Stage I - III). WHO ICTRP ID: NCT04493905
2.	Practice pattern of INtraoperative FlUid therapy in elective major gaStrointestinal cancEr surgeries in India (I-INFUSE)— A multicentre observational study. CTRI Registration no. CTRI/2023/04/052011
3.	Evaluation of ventilator associated events in critically ill patients with invasive mechanical ventilation: A prospective observational study at a tertiary care cancer centre in Northern India.
4.	Is nasotracheal intubation a better choice over orotracheal intubation in prolonged laparoscopic abdominal surgeries? A prospective observational study. CTRI Registration no. CTRI/2024/02/063253
5.	Postoperative outcomes of oncology patients undergoing radical visceral resections - a multi-centric observational study (RaVisRO study). CTRI registration no. CTRI/2024/08/072057
6.	Comparison of flexible bronchoscope guided nasotracheal intubation with videolaryngoscopic nasotracheal intubation after induction of general anesthesia in patients with normal airway: A single-blinded pilot randomised controlled trial. CTRI/2024/05/068087
7.	Incidence and risk factors of postoperative acute kidney injury after major abdominal and thoracic cancer surgeries - a prospective observational cohort study. CTRI registration no. CTRI/2024/10/075760
8.	Prevalence of Comorbidities among Oncosurgical Patients at Pre Anesthesia Checkup. CTRI registration no. CTRI/2025/05/086828

List of important equipment available and their functional status in the Department of Anesthesia.

	Equipment	Numbers / functional status / comments:
		All are functional.
1. Anesthesia Workstations		20 Anesthesia Workstations (Draeger Atlan - 4 nos., Draeger Fabius Plus - 8 nos., GE 9100c NXT - 6 nos., MindRay Wato EX30 - 2 nos.) 02 MRI compatible Anesthesia Workstations (GE).
2.	Multi-channel Anesthesia Patient Monitor	15 Multiparameter Anesthesia Monitors with Anesthesia Gas Module 02 MRI compatible Multiparameter Anesthesia Monitors
3.	Fiberoptic Laryngoscope	12
4.	Video Bronchoscope	AMBU aView Monitor: 09 sets (7 sets in OT, 2 sets in ICU) with aScope Broncho 4 slim and regular
5.	Resuscitation equipment (for teaching)	AmbuMan Advanced (High Fidelity ACLS Simulator): 1 set AmbuMan Airway (High Fidelity BLS Manikin with Airway): 2 sets AMBU Airway Management Trainer with cut section: 2 sets
6.	Other equipment	 Video Laryngoscope (Karl Storz C-MAC): 03 BPL Video laryngoscope: 02 Cardiac Monitor for ICU: 18 Cardiac monitor with NMT: 03 Multiparameter Monitor for OT Recovery Room: 12 Biphasic Cardiac Defibrillator with manual and AED Modes and transcutaneous pacemaker: 03 Biphasic Cardiac Defibrillator with manual and AED Modes: 02 Automated External Defibrillator (AED): 03 Continuous Cardiac Output Monitor Module (Nihon Kohden ProAQT with PiCCO): 02 Bispectral Index (BIS) Monitor: 02

- Non-invasive Continuous Cardiac Output (PWTT based esCCO): 1
- Peripheral nerve stimulator (Plexygon) for regional anesthesia: 02
- Forced Air Warmer (Convective Patient Warmer): 25
- Fluid & Blood Warmer: 12
- ICU Ventilator: 19
- Portable USG Machine for point of care USG guided procedures in OT & ICU: 04
- Portable Echocardiography machine with adult and pediatric echocardiography probes: 01
- Hemodialysis Machine with portable RO plant (for bedside dialysis in ICU): 04
- ABG Machine (Radiometer ABL800 flex): 02
- HemoCue 201+ point-of-care hemoglobinometer: 01
- Syringe Infusion Pump: 50
- Volumetric Infusion Pump: 40
- 2nd generation supraglottic airway devices: 12 sets
- Portable Electric Suction Machine: 12
- Target Controlled Infusion Pump (BD Alaris Plus TCI pump): 02
- Manual jet ventilators (Manujet): 04
- Portable Multi Programmable PCA (Patient Controlled Analgesia Pumps): 36
- 12 channel ECG Machine with recorder: 04
- HFNC Machine: 06
- Crash Cart: 14

List of book titles in Anesthesiology, Critical Care and Pain, available in Library

ISBN	Author	Title	Location
	Keating, V	Anesthetic accidents	нвсн
9780323654074	Waldman, Steven D.	Atlas of interventional pain management	НВСН
9781496349033	Ballantyne, Jane C. (Ed.)	Bonica's management of pain	НВСН
9789386691323	Barash, Paul. G	Clinical anesthesia	НВСН
	Lundy, John	Clinical anesthesia : a manual of clinical anesthesiology	НВСН
	Evans, Frankis, T.	General anaesthesia techniques, special fields & hazards, Vol. 2	НВСН
978-9811508974	Chawla, Rajesh (Ed.)	ICU protocols : a stepwise approach, 2 Vol	НВСН
	Guedel, Arthur Ernest	Inhalation anesthesia : a fundamental guide	НВСН
	Davies, N. J.H (Ed.)	Lee's synopsis of anesthesia	НВСН
	Pryor, William J	Manual of anesthetic techniques	НВСН
978-0323612630	Gropper, Michael. A	Miller's anesthesia, 2 Vol	нвсн
	Evans, Frankis Tilney	Modern practice in anesthesia	нвсн
	Evans, Frankis T. (Ed.)	Modern trends in anesthesia	НВСН

9788190458351	Kulkarni. A.P (Ed.)	Objective anaesthesia review : A comprehensive textbook for the examinee	НВСН
	Leigh, Digby	Pediatrics anesthesia	НВСН
	Ballantine, Robert I.W	Practice of general anesthesia for neurosurgery	НВСН
	Hewer, Langton. C	Recent advances in anesthesia and analgesia	НВСН
	Hertzler, Arthur. E	Techniques of local anesthesia	НВСН
	Ostlere, Gordon	Trichlorethylene anesthesia	НВСН
9789390612406	Yao, Fun-Sun F.	Yao & Artusio's anesthesiology : problem-oriented patient management	НВСН
0808915800	Benumof, Jonathon, L. (Ed.)	Clinical frontiers in anesthesiology	НВСН
978-1119371502	George A. Gregory (Editor), Dean B. Andropoulos (Editor)	Gregory's Pediatric Anesthesia	МРММСС
9781493977529	Samer N. Narouze (Editor)	Atlas of Ultrasound-Guided Procedures in Interventional Pain Management	МРММСС
978-1496371256	JAFFE R.A. (Author)	ANESTHESIOLOGISTS MANUAL OF SURGICAL PROCEDURES	МРММСС
978-1975126896	Pamela Flood (Author), James P. Rathmell (Author), Richard D. Urman (Author), Pamela Flood MD MA (Editor), James P. Rathmell MD (Editor), Richard D. Urman MD (Editor)	Stoelting's Pharmacology & Physiology in Anesthetic Practice	МРММСС

978-0367386764	Pamela Macintyre (Author), David Rowbotham (Author), Suellen Walker (Author)	Clinical Pain Management : Acute Pain	МРММСС
978-3030724863	Roshan Fernando (Editor), Pervez Sultan (Editor), Sioned Phillips (Editor)	Quick Hits in Obstetric Anesthesia	МРММСС
9783319431673	Anna Clebone (Editor), Corey S. Scher (Editor), J. David Roccaforte (Editor), Levon M. Capan (Editor), Sanford M. Miller (Editor)	You're Wrong, I'm Right: Dueling Authors Reexamine Classic Teachings in Anesthesia	МРММСС
978-3030513337	Chula Goonasekera (Editor), Zoka Milan (Editor)	Anesthesia for Hepatico-Pancreatic-Biliary Surgery and Transplantation	МРММСС
978-1455704118	Lee A. Fleisher (Author), Stanley H. Rosenbaum (Author)	Complications in Anesthesia	МРММСС
978-8131248935	Jean-Louis Vincent MD PhD (Author), Edward Abraham MD (Author), Frederick A. Moore MD MCCM (Author), Patrick Kochanek MD MCCM (Author), Mitchell P. Fink MD (Author)	Textbook of Critical Care: First South Asia Edition	МРММСС
978-0323497985	Joel A. Kaplan MD (Author)	Kaplan's Essentials of Cardiac Anesthesia	МРММСС
9789811507458	Jayashree Sood (Editor), Shikha Sharma (Editor)	Clinical Thoracic Anesthesia	МРММСС
978-3030264765	Thomas L. Archer (Editor)	Obstetric Anesthesia: A Case-Based and Visual Approach	МРММСС
978-9811309588	M.M. Begani (Editor), Dheeraj V. Mulchandani (Editor), Shagufta choudhary (Editor)	Anesthesia in Day Care Surgery	МРММСС
978-0323796774	Manuel Pardo (Editor)	Miller's Basics of Anesthesia	МРММСС

978-1108419536	Tim Cook (Editor), Michael Seltz Kristensen (Editor)	Core Topics in Airway Management	МРММСС
978-1316636718	Albert J. Varon (Editor), Charles E. Smith (Editor)	Essentials of Trauma Anesthesia	МРММСС
978-9389859911	Dr. Nishkarsh Gupta & Dr. Anju Gupta (Author)	Clinical Anesthesia- 2 Vol. set	МРММСС
978-1108710961	Tom Peck, Benjamin Harris	Pharmacology for Anaesthesia and Intensive Care	МРММСС
9783319493848	Ban C.H. Tsui (Editor), Brendan T. Finucane (Editor)	Complications of Regional Anesthesia: Principles of Safe Practice in Local and Regional Anesthesia	МРММСС
978-0323848459	Baha Al-Shaikh (Author), Simon G. Stacey FRCA FFICM (Author)	Essentials of Equipment in Anaesthesia, Critical Care and Perioperative Medicine	МРММСС
978-9390020508	Atul P Kulkarni (Author), JV Divatia (Author), Sohan Lal Solanki (Author)	Perioperative Critical Care	МРММСС
978-8131256572	Agarwal Jyotsna (Editor), Aruna Parameswari (Editor)	Stoelting's Anesthesia & Co-Existing Disease, Third South Asia Edition	МРММСС
978-0323277914	Charles E. Argoff MD (Author), Andrew Dubin MD MS (Author), Julie Pilitsis MD PhD (Author)	Pain Management Secrets	МРММСС
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978-0198758143	Alastair Martin (Editor), Keith Allman (Editor), Andrew McIndoe (Editor)	Emergencies in Anaesthesia	МРММСС

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978-8131255056	Polly E. Parsons MD (Author), Jeanine P. Wiener-Kronish MD (Author), Lorenzo Berra MD (Author), Renee D Stapleton MD PhD (Author)	Critical Care Secrets	МРММСС
978-9390709021	TEMPE D.K. (Author)	CLINICAL PRACTICE OF CARDIAC ANAESTHESIA	МРММСС
978-9380206929	BAHETI D K (Author)	NEUROANAESTHESIA PRACTICAL TIPS	МРММСС
978-9385915239	PADVI A. (Author)	TEXTBOOK OF OBSTETRIC ANESTHESIA	МРММСС

E-Books

Ovid	Access Mode	
Bonica's Management of Pain	Read Only	
Perioperative Transfusion Medicine	Read Only	

List of Journals in Anesthesiology, Critical Care and Pain, available in Library

Journal Name with ISSN	Pubmed Indexed	Latest journal available upto
Anesthesia & Analgesia ISSN: 0003-2999	Υ	Current issue
A&A Practice, ISSN: 2575-3126	Y	Current issue
Anesthesiology, ISSN 1528-1175	Υ	Current issue
Critical Care Medicine, ISSN: 1530-0293	Υ	Current issue
British Journal of Anaesthesia, ISSN: 1471-6771	Υ	Current issue
Pain, ISSN: 1872-6623	Υ	Current issue
Anesthesiology Clinics, ISSN 1932-2275	Υ	Current issue
European Journal of Anaesthesiology, ISSN: 0265-0215	Υ	Current issue
BJA Education, ISSN: 2058-5349	Υ	Current issue

Journal of Clinical Anesthesia, ISSN: 0952-8180	Υ	Current issue
The Journal of Pain, ISSN: 1526-5900	Υ	Current issue
Critical Care Clinics, ISSN:0749-0704	Υ	Current issue
Critical Care and Resuscitation, ISSN: 2652-9335	Υ	Current issue
