

March 31, 2024

CURRICULUM VITAE

Name: Shobana Murugan, MD

Present Position and Address

Senior Faculty Anesthesiologist
Division Director Ob Gyn Anesthesia
Texas Children's Hospital, North Austin
Baylor College of Medicine

BIOGRAPHICAL

Maiden Name: Shobana Chandrasekhar
Birthplace: Chennai, India
Citizenship: US Citizen
Address: 5415 Rouchel Brook Lane
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EDUCATION

2000-2001 Obstetric Anesthesia Clinical Fellowship at Brigham & Women's Hospital
Harvard Medical School, Boston, MA

1999-2000 Pain Management Clinical Fellowship at Beth Israel Medical Center
Brigham & Women's Hospital, Children's Hospital
Harvard Medical School, Boston, MA

1997-1999 Anesthesiology and Critical Care Residency at Massachusetts General Hospital,
Harvard Medical School, Boston, MA

1995-1997 Internship and 6 months of Anesthesia Residency,
University of Texas Medical Branch, Galveston, TX

1991-1995 Residency and Senior Registrar
PGIMER (Post Graduate Institute of Medical Education and Research),
Chandigarh, India

1990-1991 Internship
Madras University, Chennai, India

1984-1990 Medical Education
Doctor of Medicine, Madras University, India

BOARD CERTIFICATIONS

2001-present American Board of Anesthesiology
2001- present American Board of Anesthesiology Fellowship Certification in Obstetric
Anesthesiology
2000- present American Board of Anesthesiology Fellowship Certification in Pain
Medicine

LICENSURE INFORMATION

2006-present Texas Medical License
2002-2006 California Medical License

PROFESSIONAL WORK HISTORY AND TEACHING EXPERIENCE

12/23-current Senior Faculty Anesthesiologist
Division Director Ob Gyn Anesthesia
Texas Children’s Hospital, North Austin
Baylor College of Medicine

06/2020-11/2023 Clinical Professor
Dept of Anesthesiology
University of Texas Medical Branch
Galveston, TX

05/2018-05/2020 Faculty Anesthesiologist
US Anesthesia Partners
In private practice at Pavilion for Women Texas Children’s Hospital, St.
Luke’s Hospital Texas Medical center and Sugar Land St. Luke’s Hospital

2011-04/2018 Associate Clinical Professor
Department of Anesthesiology
Baylor College of Medicine

2011-2018 Associate Residency Program Director
Department of Anesthesiology
Baylor College of Medicine

2006-2011 Assistant Clinical Professor
Department of Anesthesiology
Baylor College of Medicine

2002-2006 Assistant Clinical Professor of Anesthesiology
Department of Anesthesiology
University of San Diego Medical Center, San Diego, California

2002-2006 Director of Residency Education
Department of Anesthesiology
University of California, San Diego, California

RESEARCH ACTIVITIES

Trinet X Database studies planning currently
Local Anesthetic Systemic Toxicity in pregnancy 10 year Review
Hereditary Angioedema in Pregnancy 10 year Retrospective Chart Review
Supraventricular Arrhythmias and Pregnancy
Chronic Burn Injury and Pregnancy Outcomes

IRB Approved

2016 – 2017: Airway Crisis Management and the Surgical Airway:
Pi/Co PI **Chandrasekhar S**: Mahendra V, A Simulation Based Curriculum for Anesthesiology Residents, Grant provided by Baylor College of Medicine. 2 abstracts presented and article being written for publication.

2017 PI/ co PI Rajagopalan S, **Chandrasekhar S** Outcomes in pregnant patients with acute aortic dissection. Abstract presented and article published

2016 PI/ co PI **Chandrasekhar S**, Rajagopalan, S Outcomes in pregnant patients with CSF shunt. Abstract presented and article published

2015 PI **Chandrasekhar S**. Retrospective study on outcomes in parturient undergoing General Anesthesia for C-Sections Non funded. BCM IRB# H-28579 abstract presented and article published

2008 Kodali B.S., **Chandrasekhar S** (PI), Datta, S, Airway Changes during Labor and Delivery Non funded. Article published in Anesthesiology.

2001 PI/ co PI Kodali, B, **Chandrasekhar S** & Topolous, G. Use of Pharyngometer to Assess Oropharyngeal Volumes as a Predictor of Difficult Intubation in Pregnant Patients. Abstract presented. Non funded.

1999 PI/co PI Ballantyne, J., **Chandrasekhar S**. Pain and Pulmonary Function after upper Abdominal Surgery.
Presented at World Congress of Pain, Vienna, Switzerland. Non funded.

COMMITTEE RESPONSIBILITIES

International

2019-present Volunteer for Kybele global committee for preventing death from childbirth

National

2016-2023 Member, Global Outreach Subcommittee SOAP

2016-2018 Member, Patient Safety Committees SOAP

2013-Organizing faculty for SOAP resident presentations

2012-2016 Member, Resident Education Committee SOAP

2008-2012 Member ACGME committee

2008-2012 Resident Education Committee

State/Regional

2023-2024 Task Force Lead TSA Resident and Medical student poster presentation session

2020-2022 Medical Advisory Board Committee Texas Dept of State Health Services(DSHS)

2020- 2024 Member Professional Development Committee

2020-2024 Member Resident and Medical Student education Committee Member

2018-2019: Invited faculty for teaching Mock Objective Structured Clinical Examinations for residents at Texas Society of Anesthesiology (TSA)

2008-2016: Lectured every year in TACO RA (Texas Anesthesia Conference in Obstetrics)

UTMB Medical School

2023-current Anesthesia Interest Group Faculty Mentor

2020-2022 MS 2 students Remediation and feedback faculty

UTMB Department of Anesthesiology

Obstetric Anesthesia Fellowship evaluation and interview committee

Anesthesia Resident interview Committee

Baylor College of Medicine

Medical School

2010-2015: Member of Medical Student Admissions Committee

2010-2012: Medical Student Affairs Committee

Baylor College of Medicine

Department of Anesthesiology

2018-2006: Associate Residency Program Director
2018-2009: Grand Rounds Planning Committee Member.
2018-2007: Simulation committee member and teaching faculty
2018-2007: Curriculum Development Committee
2018-2012: Clinical Competence Committee member.
2018-2012: Residency Interview committee.
2018-2008: Program Evaluation and Improvement committee.
2006-2018: Quality Improvement committee faculty team leader and mentor
2018-2014: Simulation Curriculum Development
2018-2013: CA2 Resident Mentor for Semi-annual review
2010-2006: Didactic Course Director for Obstetric Anesthesia Division

SCIENTIFIC SESSIONS

Scientific Sessions Chaired/ Discussion Leader/Speaker

03/2024 International Scientific session Neuroscience track. Created and taught 4 Simulation scenarios at the World Congress of Anesthesiology. March 3-7, 2024 Singapore

09/2023 Task force Lead 1 st Digital Poster Session for Trainees. Resident Education Committee and Resident Trainee track

09/2023 Texas Society of Anesthesiology State Society Annual meeting. Speaker in Pro Con Debate on Use of Sugammadex

05/2023 Workshop Presenter and Lead for Second Victim Effect at Society for Obstetric Anesthesia and Perinatology

09/2022 Texas Society of Anesthesiologists meeting presentation, Austin TX. Speaker on Enhanced Recovery after Cesarean Section September 2022

01/ 2022 Society for Maternal Fetal Medicine Annual meeting speaker

Course Faculty Presenter 5 topics presented.

An Obstetric Anesthesiologist's Perspective on High-Risk Deliveries

Upper airway in pregnancy

Neurologic emergencies in pregnancy

Structural neurologic disease and pregnancy

Systemic Lupus Erythematosus and pregnancy

Jan 2018 Grand Rounds Speaker University of Texas Morbid Obesity and Airway Management in Pregnancy McGovern Medical School Department of Anesthesiology.

2018 and 2019 Airway workshop and Team lead for Skills station at Texas Children's Hospital Society of Critical Care Medicine

2018 Constructed scenario and Team lead for Ethical issues and conflicts -Objective Structured Clinical Examination Practice session at TSA (Texas Society of Anesthesiology)

2016-2012 Moderator for different scientific sessions at Texas Anesthesia Conference on Obstetrics

2013 Organized Teaching Core Competencies Workshop at Annual ACGME meeting

2010 "Utilizing Pro Con Debate a teaching tool for ACGME Core Competencies Workshop." Presented and conducted for the Annual Spring 2010 Society for Education in Anesthesia Meeting, Pittsburgh, PA (June 2010) Guest Conductor.

2009 "Invited Breakfast Panel Expert faculty for interesting case discussion." Society for Obstetric Anesthesia and Perinatology 41st Annual Meeting, Washington, D.C. (May 2009) Breakfast Faculty Panel Expert

2008 "Resident research forum" for the 2008 American Society of Anesthesiologist Meeting, Orlando, Florida. (October 2008) Invited faculty moderator.

2004-2007 Invited Speaker for Anesthesia Update at the University of California San Diego (about 6 topics)

TEACHING/MENTORING RESPONSIBILITIES

National/State

2018 Teaching faculty for MOSCE (Mock Objective Structured Clinical Examination) workshop at Texas Society of Anesthesiology (TSA) 2018 and 2019

2016-2014 Teaching Faculty for Difficult Airway Workshop at TSA (Texas Society of Anesthesiology)

2013 Invited lecture at TSA (CPR of a pregnant patient)

2014 Teaching faculty and workshop presenter at Annual ACGME meeting

2011 Lecture at TSA Distance Based Learning

2008-2010 Invited faculty reviewer for National ASA (American Society of Anesthesiology) resident presentations

2009 Panel expert at National SOAP (Society of Obstetrics and Perinatology) meeting

2009 Faculty conducting Teaching workshop at SEA (Society for Education in Anesthesia)

2007 "Evidence based management for common problems in the labor and delivery suite." San Diego, CA, for the Anesthesia Update Meeting at University of California, San Diego.

- 2006 "PBLD on anesthetic management of a patient with severe pre-eclampsia" San Diego, CA, for the Anesthesia Update Meeting at University of California, San Diego.
- 2006 Regional anesthesia vs General anesthesia." San Diego, CA, for the Anesthesia Update Meeting at University of California, San Diego.
- 2005 "Non-obstetric surgery for pregnant patients." San Diego, CA, for the Anesthesia Update Meeting at University of California, San Diego.
- 2005 "PBLD on regional anesthesia and anticoagulation." San Diego, CA, for the 2005 Anesthesia Update Meeting at University of California, San Diego
- 2005 "Transient Neurologic Syndrome." San Diego, CA, for the Anesthesia Update Meeting at University of California, San Diego
- 2004 Anesthesia fetal surgery." San Diego, CA, for the Anesthesia Update Meeting at University of California, San Diego
- 2004 Anesthesia management of a pregnant trauma victim." San Diego, CA, for the Anesthesia Update Meeting at University of California, San Diego.

Regional

- 2019 & 2018 Invited lecturer for "Difficult Airway Management in Pregnancy" in the Fundamentals of Critical Care Obstetrics at Texas Children's Hospital Pavilion for Women. Organized by Society for Critical Care
- 2018-2016 Invited lecturer every year on different topics for Texas Anesthesia Conference in Obstetrics and Regional Anesthesia (TACORA)
- 2008 Invited Lecture Anesthetic Management of a Pre-eclamptic parturient." Presented for the Greater Houston anesthesiology Associates at Memorial Hermann Southwest Hospital, Houston, Texas.
- 2008 "Views, attitudes, and perceptions about the use of epidural analgesia for pain management during labor among pregnant Hispanic women." Faculty discussant for OB Gynecology resident Research Day, Houston Texas, presented at Baylor College of Medicine

Departmental

- 2018-2006 Given more than 100 lectures to Anesthesiology Residents, (CA1, CA2 AND CA3) Obstetric Anesthesiology Fellows, Student resident nurse anesthetists(SRNA), UTMB Medical students Baylor Medical students, Rice University Undergraduate students at Grand Rounds, QI conferences, PBL, and teaching conferences.
- 2012 – 2006 Course Director for Obstetric Anesthesia Division Weekly 45-minute lectures given during a two-month rotation period for residents CA-1, CA-2, & CA-3. (Total 8-10 lecture series)

Lectures given every year include:

- Anesthesia for Cesarean Delivery
- Physiologic Changes of Pregnancy
- Inhalation Anesthetics
- Pacemakers for the Boards
- Aspiration and the Parturient
- PBLD: Anesthesia for Patients with Chronic Renal Disease
- Can DepoDur Be Used Safely in Obstetrics
- PBLD: Scoliosis & Myasthenia Gravis
- Scoliosis & Myasthenia Gravis
- Obstructive Sleep Apnea
- Neuraxial Techniques for Obstetrics
- Complications of Regional Anesthesia
- PBLD: Anesthetic management of the Jehovah's Witness Parturient Undergoing TOLAC
- Medication errors in Anesthesia
- Management of Complications encountered in the GI Suite
- L&D Matters of the Heart: Managing the Patient with Congenital Heart Disease Senior Seminar

Grand Rounds at Baylor College of Medicine:

- 2018: "Case Based Learning (3times/year)
- 2017 Complications in the GI Suite and Challenges in Obstetric Anesthesia
- 2016 Anesthesia for the elderly and Anesthesia in a patient with end stage liver disease
- 2015 Anesthesia for organ transplantation
- 2015Anesthesia for a morbidly obese parturient
- 2014 Debate: Is Central Venous Pressure Useful as Predictor of Fluid responsiveness?"
- 2013 Debate on nitrous Oxide use
- 2012 Debate on use of cricoid pressure
- 2012 Diabetic Parturient
- 2011 Cardiac arrest and resuscitation in pregnancy.
- 2010 Anesthesia for fetal surgery
- 2007-2009 Pregnant Trauma, Mitral stenosis in Pregnancy

Courses/Lectures taught at other institutions: (University of California San Diego and Brigham and Women's Hospital)

- "PBLD on Regional Anesthesia and Anticoagulation"
- "Local anesthetic allergy"
- "Anesthesia for In Vitro Fertilization"
- "Regional anesthesia vs General anesthesia"
- "Non-obstetric surgery for pregnant patients"
- "PBLD on anesthetic management of a patient with severe pre-eclampsia"

- “Evidence based management for common problems in the labor and delivery suite”

Non-Didactic Teaching

Resident training: 50 hours/ week

Clinical Fellows trained include:

- LaToya Mason, M.D.
- Maria Lozano Gorena, M.D.
- Alice Lam O’Brien, M.D.
- Natasha Lake, M.D.
- Kristin Falce, MD
- Ana Lisa Ramirez, MD
- Vibha Mahendra, MD
- Lakshmi Ram, MD
- Allison Mullins, MD
- Hiram Bonilla, MD

Academic and Research Mentorship:

- Brian Broaddus, M.D.
- Joyce Keck, M.D.
- Jonathan Chin, M.D.
- Jeffrey Lee, M.D.
- LaToya Mason, M.D.
- Claire Gordon, M.D.
- Maneesh Amancharla, M.D.
- Jennifer Wu, M.D.
- Kenneth Wu, M.D.
- Yoann Millet, MD
- Vibha Mahendra, MD
- About 65 medical students

Graduate Student training:

Clinical supervision, didactic teaching, and obstetric anesthesia training for SRNA’s (Nurse Anesthesia Students) in the Graduate Program of Nurse Anesthesia.

School of Medicine (SOM): Baylor College of Medicine

2017-2012	Simulation teaching and Airway workshops for Baylor Medical students
2017-2012	Respiratory physiology, Resuscitation and PBL for 3rd and 4th year Baylor Medical students
2016-2014	Course Director for Summer High School Internship program at Ben Taub General Hospital
2014-2012	Clinical Faculty Mentor for SMART Program at Baylor College of Medicine
2013	Michael DeBakey High School Annual Scientific Symposium. Invited Faculty Presenter.

- 2012-2010 Rice University Pre-Medical DOSE Program. Faculty mentor for students at Rice University.
- 2009 Anesthesiology-Past, Present, & Future” Invited lecture for the Crawford Long Society for Medical Students, Houston, Texas, Baylor College of Medicine.
- 2006-2018 Lectures and bedside teaching for SRNA’S as part of SOM Allied health Program
- 2008-2012 Interview Committee for SRNA selection in the SOM Allied Health Program
- 2011-2014 Baylor Medical Student Interview Committee

MEMBERSHIP IN SCIENTIFIC SOCIETIES/PROFESSIONAL ORGANIZATIONS

- 2017-present Texas Medical association
- 2017-present Harris County Medical Society
- 2017-present American society of Regional Anesthesia

- 2010-2014 Society for Education in Anesthesia
- 2006-present Texas Society of Anesthesiology
- 2002-present Society of Obstetric Anesthesiology and Perinatology
- 1995-present American society of Anesthesiology

HONORS AND AWARDS

- 2023 Mentored 8 medical students for presentation at the Texas Society of Anesthesiology Meeting
Round Rock, TX 3 of the medical students received an award for top poster presentations
- 2023 De Valle M, Defillippe N, **Murugan S** Hereditary Angioedema Best Case Report at Annual SOAP meeting, New Orleans, May 2023
- 2022 Received recognition for leading the Task Force on obtaining the Center of Excellence Designation from SOAP (Society of Obstetric Anesthesia)
- 2017 Mahendra V, **Chandrasekhar S.** Top trainee research award at the Society for Airway Management. Resident research project on cricothyroidotomy. Grant funding awarded by Baylor College of Medicine
- 2014 Chin J, Chandrasekhar **S.** Best case report for discussion by judges. Society of Obstetric Anesthesia and Perinatology Meeting, Toronto, Canada. Presence of a postpartum epidural in a patient with severe ARDS on ECMO with systemic anticoagulation.
- 2012 Golden Apple Faculty Teaching Award in Obstetric Anesthesiology Ben Taub General Hospital
- 2009 Chairman’s Award in Recognition of Curriculum Development in Simulator Education, Department of Anesthesiology, Baylor College of medicine
- 2007 Golden Apple Faculty Teaching Award in Obstetric Anesthesiology, Ben Taub General Hospital, Houston, Texas
- 2006 Golden Apple Faculty Teaching Award in Obstetric Anesthesiology, Ben Taub General Hospital, Houston, Texas

- 1997 Award for Highest In-Service Scores, Massachusetts General Hospital, Boston, Massachusetts
- 1996 Award for Highest In-Service Scores, University of Texas Medical Branch, Galveston, Texas
- 1995 Award Winning Session Paper Presentation, Annual Conference of Indian Association of Cardiothoracic Surgeons of India
- 1994 Silver Medal, Highest score in Anesthesiology Board Qualifying Exam, Postgraduate Institute of Medical Education and Research
- 1990 Placed First in Quiz on "Pain Relief", Indian Society of Pain
- 1988 First Prize Indian Academy of Pediatrics
- 1988 Honors in Medicine, Madras Medical College and General Hospital

PUBLICATIONS

A. ARTICLES IN PEER-REVIEWED JOURNALS:

1. Rajagopalan S, Gopinath S, Trinh VT, **Chandrasekhar S** Anesthetic considerations for labor and delivery in women with CSF shunts. *Int J Obstet Anesth.* May 2017 30: 23-29
2. Rajagopalan S, Suresh M, Clark SL, Serratos B, **Chandrasekhar S** Airway Management for Cesarean Delivery under General Anesthesia. *Int J Obstet Anesth.* Feb 2017;29: 64-69
3. Rajagopalan S, Nwazota N, **Chandrasekhar S** Outcomes in pregnant women with acute aortic dissections: a review of the literature from 2003-2013. Review article *Int J Obstet Anesth.* Nov 2014; 23(4):348-356
4. Broaddus B, **Chandrasekhar S.** Informed consent in Obstetric Anesthesia. *Anesthesia and Analgesia* April 2011; 112 (4): pp 912-915.
5. **Chandrasekhar S**, Cook, C., Collard, C.D. Cardiac surgery in the parturient. Review Article. *Anesth Analg* March 2009; 108 (3): pp.777-785.
6. Kodali, B., **Chandrasekhar S**, Datta, S. Airway changes during labor and delivery. *Anesthesiology* 2006, 108(3): pp. 357-362.
7. Rafat, J., **Chandrasekhar S.** Case report on removal of an entrapped epidural catheter. *Regional Anesth and Pain* Nov 2006; 208 (1): Supplement, pS286-287.
8. **Chandrasekhar S**, Peterfreund R. Horner's syndrome very low concentration bupivacaine infusion for labor epidural analgesia. *J Clin Anesth* May 2003 .15 (3): 217-219.

Non-Peer Reviewed Articles

1. Rajagopalan S, **Chandrasekhar S** Anesthetic management of a pregnant patient with significant post burn contractures. 2015 Semantic scholar.org Global Anesthesia and Perioperative Medicine
2. **Chandrasekhar S**, Chow, R. Transient neurologic symptoms: Anesthetic implications. A continuing education courses. *Current Reviews Clin Anesth* 2004: 3(25), pp. 29-40.
3. **Chandrasekhar S.** Anesthetic management of the pregnant trauma patient. Dannemiller Memorial Education Foundation. *Anesthesia* Jan 2004; 208 (16) pp.251-253.
4. **Chandrasekhar S**, Datta S. Anesthetic management of pre-eclamptic parturient. *Current Reviews of Anesthesia.* Jan 2001; 24 (3): 383-400.

B. OTHER

Book Chapters

1. Deng Y, Tripathy S, Wofford L, Mahendra V, **Murugan S** Anesthetic Considerations in the Critically Ill Gravida with Cardiac Disease, *Critical Care Obstetrics* Chapter 44 Lippincott and Williams 2022
2. Mahendra V, **Murugan S**: Pregnant Covid Patient: Chapter 11 in *Clinical Signs of Covid 19- Evolving and Challenging*, Prabhakar et al (1st ed)Springer 2020
3. Mahendra S **Murugan S.**: Pediatric Covid Patient: Chapter 12 in *Clinical Signs of Covid 19- Evolving and Challenging*, Prabhakar et al (1st ed)Springer 2020
4. **Murugan S**, Rajan J : Geriatric Covid Patient: Chapter 13 in *Clinical Signs of Covid 19- Evolving and Challenging*, Prabhakar et al (1st ed)Springer 2020
5. **Chandrasekhar S**, Deng C A parturient with Tetralogy of Fallot In Straker, Rajan et al *Problem Based Learning Approach Oxford University Press.*2019
6. **Chandrasekhar S** Informed consent in Obstetric Anesthesia.” In Segal et al *Obstetric Anesthesia: An Illustrated Case Based Report.* Cambridge University Press. 2019
7. **Chandrasekhar S** Chapter 155 Systemic Sclerosis in Mankowitz et al in *Consults in Obstetric Anesthesiology (1st Ed)* Springer 2018
8. **Chandrasekhar S** Chapter 93 Jehovah’s Witness in Mankowitz et al in *Consults in Obstetric Anesthesiology (1st Ed)* Springer 2018
9. **Chandrasekhar S** Mason, L Valvular disease: Specific considerations for management during labor and delivery. Editor McEvoy and Furse in *Advanced Perioperative Crisis Management.* Oxford University Press 2017
10. **Chandrasekhar S**, Suresh M. Chapter 45: Anesthetic Management of Critically ill parturient with Cardiac Disease. In Belfort, M., Saade, G.R., et al. eds. *Critical Care Obstetrics (5th Ed.)* New York: Blackwell-Wiley. 2017
11. **Chandrasekhar S**, Tolpin, D, Mangano D Chapter 30 Anesthetic Management of Cardiac Disease in Pregnancy. In Suresh, M.S., Segal, B.S., Preston, R., Fernando R., & Mason, C.L. eds. *Shnider & Levinson’s Anesthesia for Obstetrics (5th Ed.)* Philadelphia: Lippincott Williams Wilkins. 2013
12. **Chandrasekhar S**, Wilson, W. Chapter: Acute hepatic failure management. In Wilson, W., Hoyt, D. *Obstetric Trauma (1st edition.) Volume 1 Informa Health Care*2006
13. **Chandrasekhar S**, Wilson W. Chapter: Trauma and Anesthetic Management. In Wilson, W., Hoyt, D. *Obstetric Trauma (1st edition.) Volume 1 Informa Health Care*2006
14. **Chandrasekhar S**, Pian-Smith M Chapter 16: Spinal epidural and Caudal Anesthesia. In Hurford, W., Bailin, M.T., Davison, K. et al. Eds. *Clinical Anesthesia Procedures of the Massachusetts General Hospital 6th Ed. (pp. 144-154).* Philadelphia: Lippincott Williams Wilkins. 2002

Manuscript Reviews:

1. Endogenous opiates. Radhika Ravula, M.D. In *Pain Medicine.* Ed. Carol Warfield, M.D. 2nd edition.

2. Anesthetic management of ambulatory patients with HIV/AIDS. Suresh Kannan, M.D. S. Nedeljkovic, M.D. In Pain Management, Anesthesia, and the patient with HIV/AIDS. Eds. Srdjan Nedeljkovic. Butterworth Heinemann, Boston. 2002

C. ABSTRACTS AND POSTER PRESENTATIONS-INTERNATIONAL AND NATIONAL MEETINGS

1. De Valle, M Adkinson M, Maredia R, Cooper S Murugan S Abstract No. 1748719, Local Anesthetic Systemic Toxicity in Pregnancy: A Retrospective Cohort Analysis. SOAP 56th annual meeting at Denver, Colorado May 1-5, 2024 Accepted for session on Best research poster presentation category
2. Cooper S, Butt A, Murugan, S Supraventricular tachycardia after epidural neuraxial analgesia placement. Presented at the 49th American Regional Anesthesiology and Acute Pain Medicine meeting March 21-23, 2024 San Diego CA
3. Maredia, R De Valle M, Simon M, Funston S, Murugan S Abstract No. 1750152, Rescue Laryngeal Mask Airway for Difficult Airway in an Urgent C-section Complicated by Massive Hemorrhage- 2 cases SOAP 56th Annual meeting in Denver. May 1-5 2024 Accepted for oral presentation
4. M De Valle, N Defillipis, C Delaune **S. Murugan**, abstract no 1436384, SOAP abstracts 2023 Management of a Pregnant Patient with Hereditary Angioedema in the Peripartum Period SOAP 55th Annual Meeting May 3-7 2023 Selected for Best Case Reports Oral Presentation
5. Cooper S, Tripathy S, Emiri E , **Murugan S** Igel LMA causing tongue discoloration due to possible lingual ischemia Digital Poster Presentation at Texas Society of Anesthesiology Sept 7-10, 2023. Awarded 2nd Best poster in Airway Case Category
6. De Valle M, Adkinson M, , Cooper S, Marin B, **Murugan S** Retrospective study on Hereditary Angioedema in Pregnancy Tri Net X national database. Digital Poster Presentation at Texas Society of Anesthesiology Sept 7-10, 2023. Awarded 2nd Best poster in Obstetric and Pain management Category.
7. Adkinson M, De Valle M, Tripathy S, Marin B, **Murugan S** Local Anesthetic Systemic Toxicity in Pregnancy: Clinical Presentations and Treatment pathways in a Retrospective Cohort Study. Digital Poster Presentation at Texas Society of Anesthesiology Sept 7-10, 2023.
8. Marin B, Ganucheau B, De Valle M, Cooper S, Mullins A, Vadhera R, **Murugan, S** Massive Transfusion protocol activated during Cesarean Section complicated by Placenta Accreta Spectrum disorder. . Digital Poster Presentation at Texas Society of Anesthesiology Sept 7-10, 2023.
9. Kim E, Tripathy S, Esquivel E, Murugan S Management of Emergent C section in a Pregnant Patient with Severe Post-Burn Scars Digital Poster Presentation at Texas Society of Anesthesiology Sept 7-10, 2023. Awarded 2nd Best poster in Obstetric Anesthesia
10. MC 2370 Heartbroken: Perioperative care for a parturient with severe aortic stenosis, severe pulmonary hypertension, and congestive heart failure secondary to a congenital bicuspid aortic valve, Tewfeek A, Hussain M, Jabari D, **Murugan S**, ASA meeting Oct 23, 2022

11. MC 3149 Emergent Cesarean - Hysterectomy requiring Massive Blood Transfusion Protocol, in Super Morbid patient with Placenta Accreta and Symptomatic Covid 19 Vu M, Patel U, Ryan J, Cegelski J, Mullins A, **Murugan S**, ASA meeting Oct 23,2022
12. A 4159 Case failure rate of Spinal anesthesia and Combined Spinal Epidural anesthesia in the Supermorbid Obese parturient Abbas S, Weatherley T, Zuniga Palma M, Butt A, Hodgins H, Hussain M, Lane K Mullins A, **Murugan S**, Babazade R, ASA meeting Oct 2022
13. A 4165 Hemodynamics of Cesarean section in Super Morbid Obese Parturients Comparing Phenylephrine use and Estimated Blood Loss, Lane J, Hodgins H, Lane K, Butt A, Lee C, Abbas S, Mullin's A, **Murugan S**, Babazade R, ASA meeting Oct 2022
14. A4167 General Anesthesia in Super Morbid Obese Patients as compared to General Population, Lane K, Butt A, **Murugan S**, Weatherley T, Lee, C, Bonilla H, Ram L, Babazade R, ASA meeting Oct 22, 2022
15. Nguyen T, **Murugan S**, Anesthetic Management of a Parturient with Severe Tricuspid Regurgitation and Right Ventricular Dilation, ASA Oct 2021
16. T Lim, S. **Murugan, MD**, Case presentation and Literature Review on Unanticipated laryngospasm and pulmonary edema after LMA removal requiring ECMO, Published in the ASA (American Society of Anesthesiologists) website for ASA Committee for Professional Development, ASA education website Career Development Curriculum Sept 2021
17. Lane K, **Murugan S**, Hussein D, Lane J, Lehrmann A, Babazade R, Differences in neonatal outcomes in symptomatic and non-symptomatic COVID 19 positive patients Poster session SOAP 2021
18. Obstetric outcomes of SARS-Cov- 2 positive parturients with labor analgesia. Lehrmann A, Babazade R, Spicer K, Ram L, Lane J, **Murugan S**. Oral session SOAP 2021
19. Peripartum hysterectomy for placenta accreta in a patient with situs inversus and scoliosis under combined spinal-epidural anesthesia. Ram L, **Murugan S**, Simon M, Ibrahim M, Babazade M, Vadhera R Poster presentation SOAP 2021
20. Ram L, Simon M, Babazade R, **Murugan S**, Ibrahim M, Vadhera R Labor epidural placement in a patient with tinea versicolor of thoraco lumbar region. Poster session SOAP 2021
21. Neuraxial analgesia in a parturient with neurofibromatosis type 1 Volnov Y, Simon M, Ram L, Babazade R, **Murugan S**, Vadhera V
22. Neonatal outcomes in pregnant patients with SARS Cov-2 Spicer, K, Lehrman, A, Lane, J, Babazade, R, **Murugan, S**
23. Tripathy S, Rajan S, **Murugan S** National Survey on Anesthesiology Resident trainee experience during the Covid pandemic IARS 2021
24. Mahendra V, Mery M, **Chandrasekhar S** Pulmonary Hypertension in Pregnancy: A Review of Peripartum Management of 21 cases. Poster accepted in European Society of Portugal Conference 2020
25. Mahendra V, Tzan K, Mahendra G, Wali A, Suresh M, **Chandrasekhar S**. Airway Crisis Management and the Surgical Airway: A Simulation Based Curriculum for Anesthesiology Residents. The Society for Airway Management. 2017 September 16: Newport Beach, California.
26. Mahendra V, **Chandrasekhar S**. Neuroanesthetic Considerations in a Parturient with Von Hippel Lindau Disease. Society for Neuroanesthesia and Critical Care. 2017 October 20: Boston, Massachusetts.

27. Chin J, **Chandrasekhar S**. Presence of a postpartum epidural in a patient with severe ARDS on ECMO with systemic anticoagulation. Selected as best-case report for discussion by judges. Society of Obstetric Anesthesia and Perinatology Meeting, Toronto, Canada May 2014
28. Nwazota N., Nazareth K, **Chandrasekhar S**. Anesthetic Considerations in Parturients with CNS Shunts for Hydrocephalus: A case series. Abstract presented at the American Society of Anesthesiology Annual meeting, San Francisco California October 2013.
29. Azzam M, Chandrasekhar S. Obstetric pneumocephalus- A case series. Abstract presented at the Society of Obstetrics and Perinatology May 2013.
30. Serratos, B Suresh M, Oswald A, **Chandrasekhar, S**. Outcomes following General Anesthesia for Cesarean sections in Parturients- A retrospective review. Oral poster presentation at the American Society of Anesthesiology Annual meeting Oct 2012.
31. **Chandrasekhar S**, & Amancharla M. Successful Maternal and Fetal Outcome in a HIV positive cocaine abusing parturient with infective endocarditis and heart failure. Abstract presented at the Resident Poster session at the Society of Obstetric Anesthesia and Perinatology May 2012.
32. **Chandrasekhar S**. Anesthetic Challenges of a Morbidly Obese Parturient with Obstructive Sleep Apnea. American Society of Anesthesiology Annual Meeting, 2011.
33. Tippet C, **Chandrasekhar S.**, Wright C, Tolpin D. Severe Aortic Regurgitation Secondary to Endocarditis in a Parturient Requiring Urgent Cesarean Section and Cardiac Surgery. American Society of Anesthesiology Annual Meeting. Abstract Presentation 2010.
34. Wu J, **Chandrasekhar S**. Acute normovolemic hemodilution in a repeat cesarean for a Jehovah's Witness parturient. Abstract Presentation at the Annual Society for Obstetric Anesthesia and Perinatology Meeting 2009.
35. Mason L., **Chandrasekhar S**. Medically Challenging Case Presentation Anesthesia for C section in an achondroplastic dwarf. American Society of Anesthesiology Annual Meeting, Orlando FL. 2008.
36. **Chandrasekhar S.**, Munnur U, Suresh, M. "Management of Unanticipated difficult intubation with Intubating LMA and Review of literature with comparison to classic LMA. Abstract Presentation. Society of Obstetric Anesthesia and Perinatology, Dallas, Texas, February 2010
37. **Chandrasekhar S**, Suresh M. Pre and Posttest assessments in a subspecialty rotation. Poster Presentation at the ACGME annual meeting, February 2009.
38. Broaddus B, Munnur U., **Chandrasekhar S**. "Ondansetron and C-Sections" Resident Poster Presentation at American Society of Anesthesiologist Annual Meeting, Orlando, Florida October 2008
39. **Chandrasekhar S**, Raty S, Suresh M "Knowledge growth assessment in subspecialty rotation." Poster Presentation at 4th Annual Showcase of Educational Scholarship. Academy of Distinguished Educators, Baylor College of Medicine, Houston, Texas October 2007.

ONLINE CONTINUING EDUCATION PROGRAMS

Lim T, **Murugan S**, Case presentation and Literature Review on Unanticipated Laryngospasm and Pulmonary Edema after LMA removal requiring ECMO, published in the ASA website for ASA Committee for Professional Development. ASA Education website Resident Teaching Module

ONLINE Simulation Module:

Mitral stenosis and pregnancy- Simulation online module published on SOAP website June 2020
Simulation materials for national and international peer teaching
<https://soap.org/education/provider-education/simulation/>

ONLINE Simulation Module:

Maternal trauma and pregnancy- Simulation online module to be published on SOAP website
Jan 2021
Simulation materials for national and international peer teaching
<https://soap.org/education/provider-education/simulation/>