SOCIETY FOR AMBULATORY ANESTHESIA
Outpatient • Office Based • Non-Operating Room
@samba_hq

SAMBA 2024 Annual Meeting
May 2-4, 2024

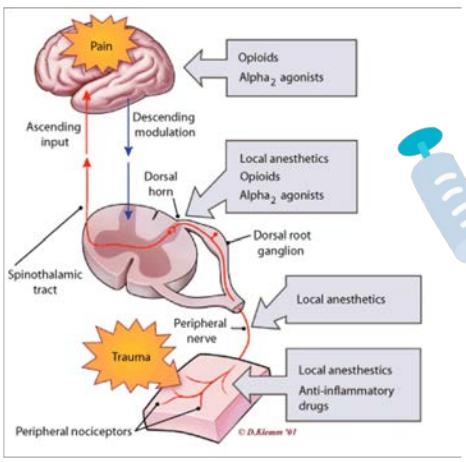
Strategies for Post-Op and Post-discharge Management

JP Ouanes, DO
Site Director
Department of Anesthesiology and Critical Care Medicine
HSS Florida

1

Multimodal analgesia

SOCIETY FOR AMBULATORY ANESTHESIA
Outpatient • Office Based • Non-Operating Room
www.SAMBAhq.org



Gottschalk A, Smith DS.New Concepts in Acute Pain Therapy: Preemptive Analgesia Am Fam Physician. 2001 May 15;63(10):1979-84
Kehlet H, Dahl JB. The value of "multimodal" or "balanced analgesia" in postoperative pain treatment. Anesth Analg 1993;77:1049.
Image acquired from: tylenol.com/produts/tylenol-rapid-release-gels. Accessed Feb 28, 2021
Image acquired from: https://www.advil.com/our-products/advil-liqui-gels-minis/ Accessed Feb 28, 2021
Images https://infinitepack.com/products/10-lb-heavy-duty-ice-bags-with-drawstring?variant=39703918706824. Accessed Jan 11, 2024

SAMBA 2024 Annual Meeting • May 2-4, 2024 @samba_hq

2

PONV Prophylaxis

Perioperative Medicine

SPECIAL ARTICLE

Fourth Consensus Guidelines for the Management of Postoperative Nausea and Vomiting

Tong J. Gan, MD, MBA, MHS, FRCA,* Kumar G. Belani, MBBS, MS,† Sergio Bergese, MD,‡ Frances Chung, MBBS,§ Pierre Diemunsch, MD, PhD,‖¶ Ashraf S. Habib, MBBCh, MSc, MHSc. FRCA,# Zhaosheng Jin, MBBS, BSc,* Anthony L. Kovac, MD,** Tricia A. Meyer PharmD, MS, FASHP, FTSHP,†‡‡ Richard D. Urman, MD, MBA,†‡†† Christian C. Apfel, MD, PhD,§§ Sabry Ayad, MD, MBA, FASA,‖‖¶¶ Linda Beagley, MS, RN, CPAN, FASPAN,## Keith Candiotti, MD,*** Marina Englesakis, BA (Hons), MLIS,††† Traci L. Hedrick, MD, MSc,‡‡‡ Peter Kranke, MD, MBA,§§§ Samuel Lee, CAA,‖‖‖ Daniel Lipman, DNP, CRNA,¶¶¶ Harold S. Minkowitz, MD,### John Morton, MD, MPH, MHA,**** and Beverly K. Philip, MD††††

Anesth Analg 2020;131:411–48

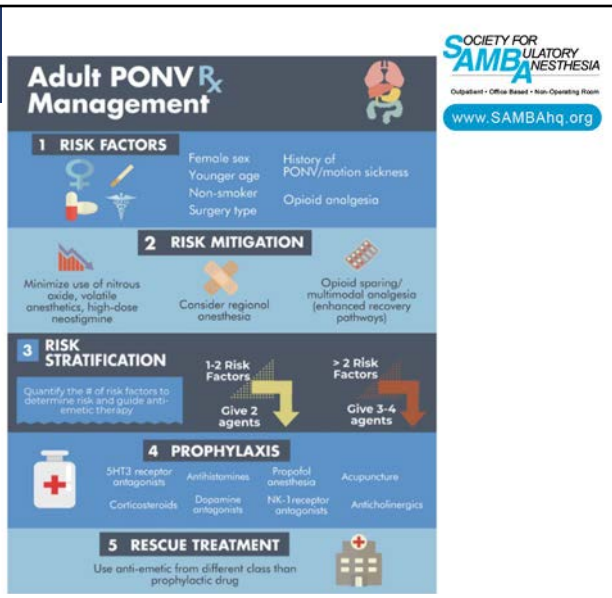
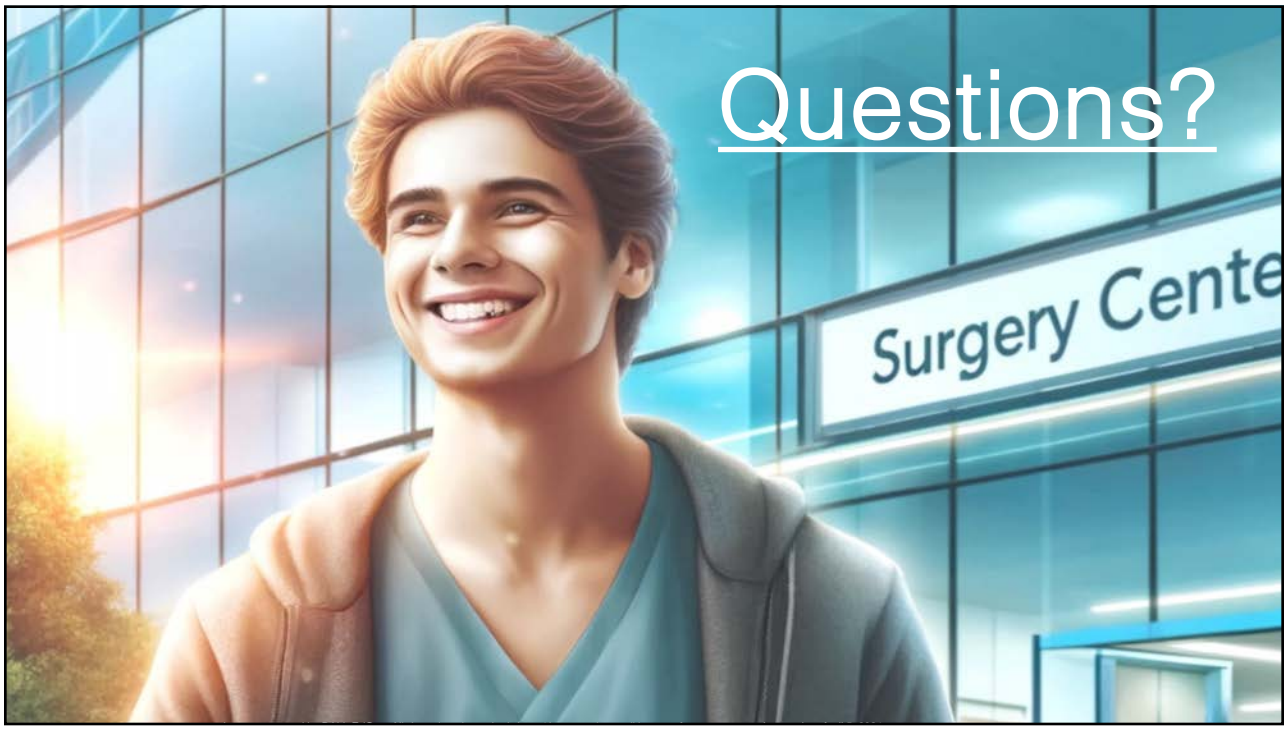


Figure 6. Algorithm for PONV management in adults. Summary of recommendations for PONV management in adults, including risk identification, stratified prophylaxis, and treatment of established postoperative nausea and vomiting. Note that 2 antiemetics are now recommended for PONV prophylaxis in patients with 1–2 risk factors. 5-HT$_3$ indicates 5-hydroxytryptamine 3; PONV, postoperative nausea and vomiting. The

SAMBA 2024 Annual Meeting • May 2-4, 2024 @samba_hq

3



4

Modified Aldrete Score

for ambulatory surgeries

SOCIETY FOR AMBULATORY ANESTHESIA
Outpatient • Office Based • Non-Operating Room
www.SAMBAhq.org

Variable	Assessment Interpretation	Score
Activity	Able to move all extremities voluntarily or on command	2
	Able to move two extremities voluntarily or on command	1
	Unable to move extremities voluntarily or on command	0
Respiration	Able to breathe deeply and cough freely	2
	Dyspnea or limited breathing	1
	Apneic or on a mechanical ventilator	0
Circulation	Blood pressure +/- 20% or less of the preanesthetic level	2
	Blood pressure +/- 20% to 49% of the preanesthetic level	1
	Blood pressure +/- 50% or more of the preanesthetic level	0
Consciousness	Fully awake	2
	Arousable on calling	1
	Not responding	0
Oxygenation	Able to maintain O_2 saturation >92% on room air	2
	Needs supplemental O2 to maintain O_2 saturation >90%	1
	O_2 saturation <90% even with supplemental oxygen	0

Variable	Assessment Interpretation	Score
Dressing	Dry and clean	2
	Wet but marked and not increasing	1
	A growing area of wetness	0
Pain	No pain	2
	Mild pain handled by oral medication	1
	Severe pain requiring parenteral medication	0
Ambulation	Able to stand up and walk straight	2
	Vertigo when erect	1
	Dizziness when supine	0
Fast-feeding	Able to drink fluids	2
	Nauseated	1
	Nausea and vomiting	0
Urine output	Has voided	2
	Unable to void but comfortable	1
	Unable to void and uncomfortable	0

Ding D, Ishag S. Aldrete Scoring System. In: StatPearls. Treasure Island (FL): StatPearls Publishing, 2023. Available at: https://www.ncbi.nlm.nih.gov/pubmed/37603628.

5

Modified Aldrete Score

for ambulatory surgeries

SOCIETY FOR AMBULATORY ANESTHESIA
Outpatient • Office Based • Non-Operating Room
www.SAMBAhq.org

Variable	Assessment Interpretation	Score
Pain	No pain	2
	Mild pain handled by oral medication	1
	Severe pain requiring parenteral medication	0
Ambulation	Able to stand up and walk straight	2
	Vertigo when erect	1
	Dizziness when supine	0
Fast-feeding	Able to drink fluids	2
	Nauseated	1
	Nausea and vomiting	0
Urine output	Has voided	2
	Unable to void but comfortable	1
	Unable to void and uncomfortable	0

Ding D, Ishag S. Aldrete Scoring System. In: StatPearls. Treasure Island (FL): StatPearls Publishing, 2023. Available at: https://www.ncbi.nlm.nih.gov/pubmed/37603628.

SAMBA 2024 Annual Meeting • May 2-4, 2024 @samba_hq

6

Variable	Assessment Interpretation	Score
Pain	No pain	2
	Mild pain handled by oral medication	1
	Severe pain requiring parenteral medication	0
Ambulation	Able to stand up and walk straight	2
	Vertigo when erect	1
	Dizziness when supine	0
Fast-feeding	Able to drink fluids	2
	Nauseated	1
	Nausea and vomiting	0
Urine output	Has voided	2
	Unable to void but comfortable	1
	Unable to void and uncomfortable	0

SOCIETY FOR AMBULATORY ANESTHESIA
www.SAMBAhq.org

Pain & PONV

Ambulation & Voiding

SAMBA 2024 Annual Meeting • May 2-4, 2024 @samba_hq

7

PONV

SOCIETY FOR AMBULATORY ANESTHESIA
www.SAMBAhq.org

Perioperative Medicine

SPECIAL ARTICLE

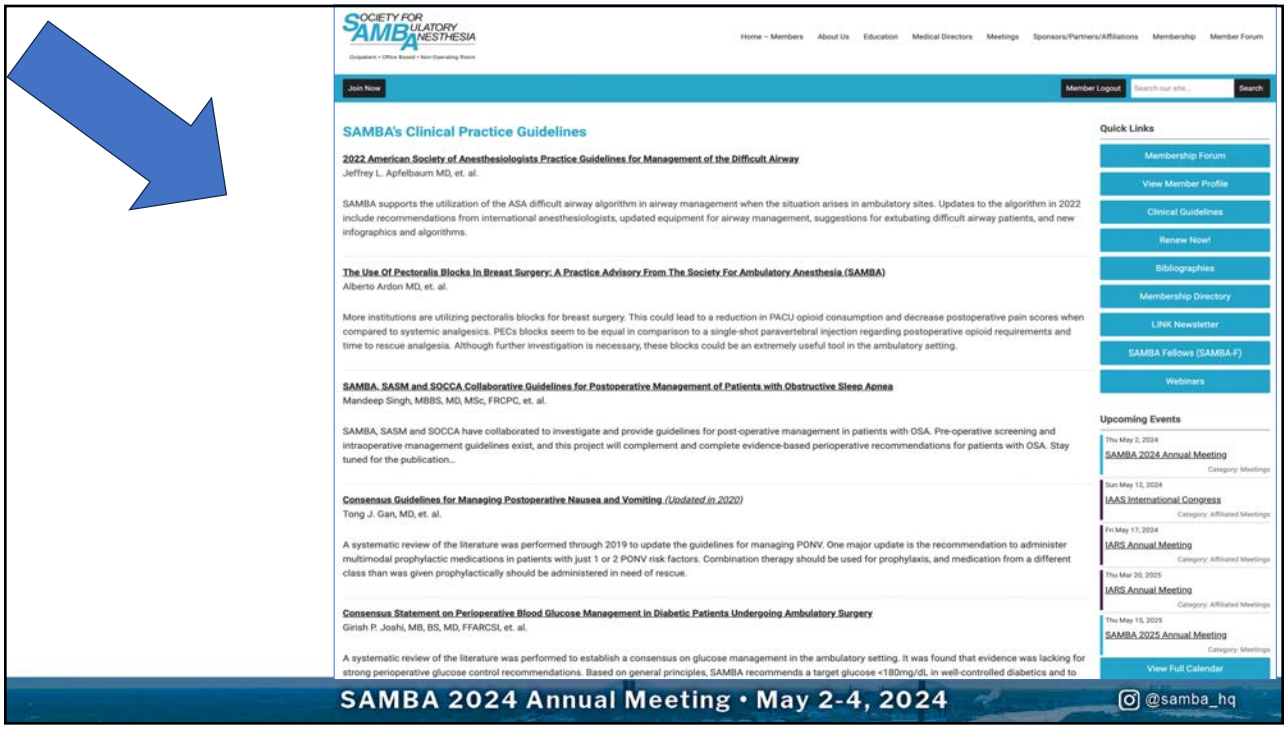
Fourth Consensus Guidelines for the Management of Postoperative Nausea and Vomiting

Tong J. Gan, MD, MBA, MHS, FRCA,* Kumar G. Belani, MBBS, MS,† Sergio Bergese, MD,‡ Frances Chung, MBBS,§ Pierre Diemunsch, MD, PhD,‖¶ Ashraf S. Habib, MBBCh, MSc, MHSc, FRCA,# Zhaosheng Jin, MBBS, BSc,* Anthony L. Kovac, MD,** Tricia A. Meyer, PharmD, MS, FASHP, FTSHP,††‡‡ Richard D. Urman, MD, MBA,†††† Christian C. Apfel, MD, PhD,§§ Sabry Ayad, MD, MBA, FASA,‖‖¶¶ Linda Beagley, MS, RN, CPAN, FASPAN,## Keith Candiotti, MD,*** Marina Englesakis, BA (Hons), MLIS,††† Traci L. Hedrick, MD, MSc,‡‡‡ Peter Kranke, MD, MBA,§§§ Samuel Lee, CAA,‖‖‖ Daniel Lipman, DNP, CRNA,¶¶¶ Harold S. Minkowitz, MD,### John Morton, MD, MPH, MHA,**** and Beverly K. Philip, MD††††

Anesth Analg 2020;131:411–48

SAMBA 2024 Annual Meeting • May 2-4, 2024 @samba_hq

8



9

PONV Rescue Tx

SOCIETY FOR AMBULATORY ANESTHESIA
Outpatient • Office Based • Non-Operating Room
www.SAMBAhq.org

Patient Safety

SYSTEMATIC REVIEW ARTICLE

Rescue Treatment of Postoperative Nausea and Vomiting: A Systematic Review of Current Clinical Evidence

Tong J. Gan, MD, MBA, MHS, FRCA,* Zhaosheng Jin, MBBS,* and Tricia A. Meyer, PharmD, MS, FASHP†

Anesth Analg 2022;135:986–1000)

SAMBA 2024 Annual Meeting • May 2-4, 2024 @samba_hq

10

PONV Rescue Tx

Rescue Treatment of Postoperative Nausea and Vomiting: A Systematic Review of Current Clinical Evidence

Tong J. Gan, MD, MBA, MHS, FRCA,* Zhaosheng Jin, MBBS,* and Tricia A. Meyer, PharmD, MS, FASHP

Anesth Analg 2022;135:986–1000)

SOCIETY FOR AMBULATORY ANESTHESIA
Outpatient • Office Based • Non-Operating Room
www.SAMBAhq.org

Use anti-emetic from different class than prophylactic drug

SAMBA 2024 Annual Meeting • May 2-4, 2024 @samba_hq

11

PONV Rescue Tx

Rescue Treatment of Postoperative Nausea and Vomiting: A Systematic Review of Current Clinical Evidence

Tong J. Gan, MD, MBA, MHS, FRCA,* Zhaosheng Jin, MBBS,* and Tricia A. Meyer, PharmD, MS, FASHP

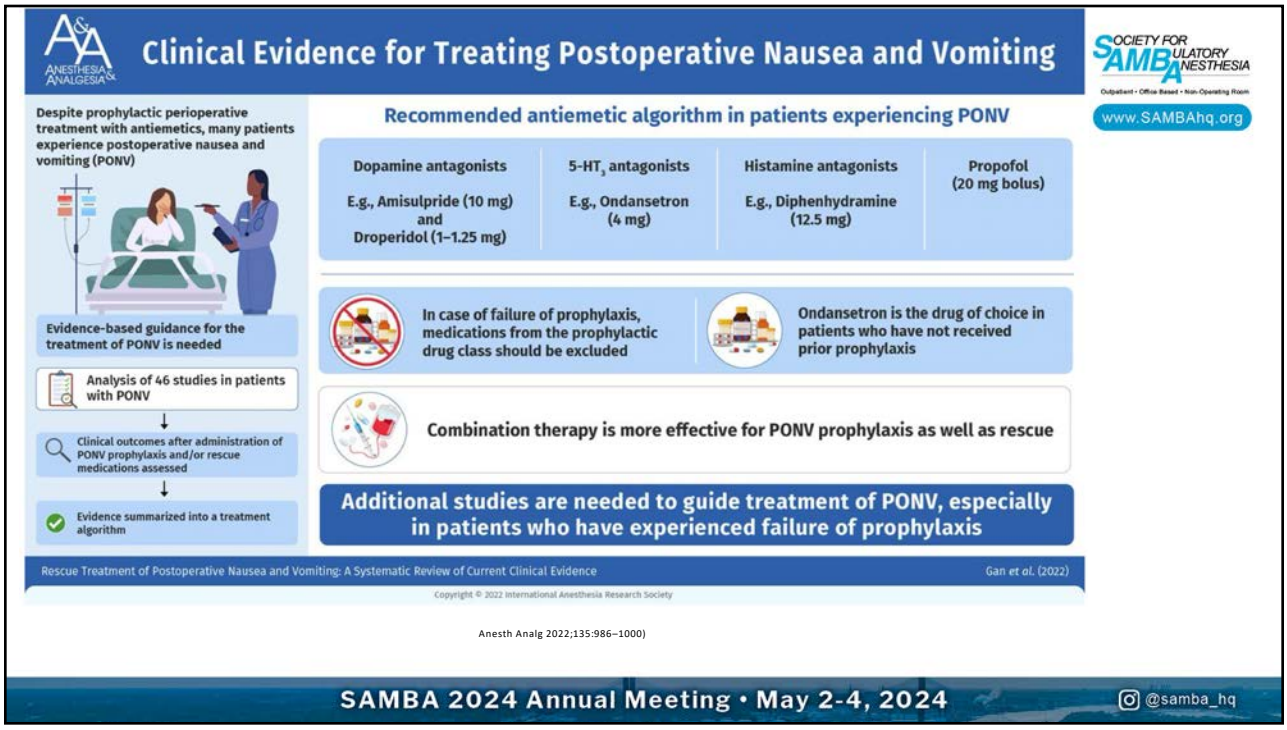
Anesth Analg 2022;135:986–1000)

SOCIETY FOR AMBULATORY ANESTHESIA
Outpatient • Office Based • Non-Operating Room
www.SAMBAhq.org

Combination therapy is more effective

SAMBA 2024 Annual Meeting • May 2-4, 2024 @samba_hq

12


Clinical Evidence for Treating Postoperative Nausea and Vomiting
SOCIETY FOR AMBULATORY ANESTHESIA
www.SAMBAhq.org
Despite prophylactic perioperative treatment with antiemetics, many patients experience postoperative nausea and vomiting (PONV)
Evidence-based guidance for the treatment of PONV is needed
Analysis of 46 studies in patients with PONV
Clinical outcomes after administration of PONV prophylaxis and/or rescue medications assessed
Evidence summarized into a treatment algorithm
Recommended antiemetic algorithm in patients experiencing PONV
Dopamine antagonists
E.g., Amisulpride (10 mg) and Droperidol (1–1.25 mg)
5-HT3 antagonists
E.g., Ondansetron (4 mg)
Histamine antagonists
E.g., Diphenhydramine (12.5 mg)
Propofol (20 mg bolus)
In case of failure of prophylaxis, medications from the prophylactic drug class should be excluded
Ondansetron is the drug of choice in patients who have not received prior prophylaxis
Combination therapy is more effective for PONV prophylaxis as well as rescue
Additional studies are needed to guide treatment of PONV, especially in patients who have experienced failure of prophylaxis
Rescue Treatment of Postoperative Nausea and Vomiting: A Systematic Review of Current Clinical Evidence
Gan et al. (2022)
Copyright © 2022 International Anesthesia Research Society
Anesth Analg 2022;135:986–1000)
SAMBA 2024 Annual Meeting • May 2-4, 2024
@samba_hq

13

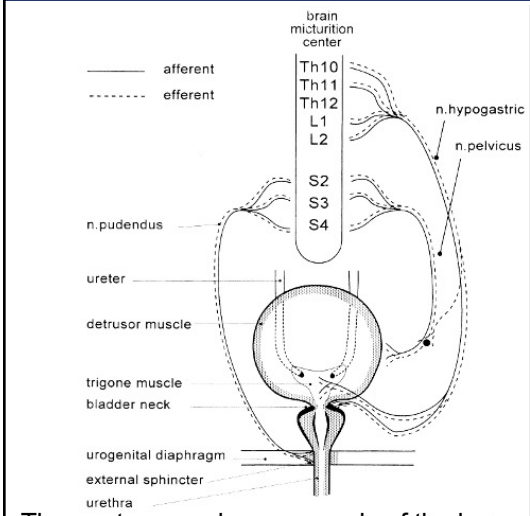

SOCIETY FOR AMBULATORY ANESTHESIA
www.SAMBAhq.org
5.3 cm
ASC
HSS FL
C5-1
*MSK
MI: 1.5 TIS: 0.5
SAMBA 2024 Annual Meeting • May 2-4, 2024
@samba_hq

14

Voiding

15

Postoperative Voiding



The anatomy and nerve supply of the lower urinary tract.

From: Recovery of Storage and Emptying Functions of the Urinary Bladder after Spinal Anesthesia with Lidocaine and with Bupivacaine in Men Anesthesiology. 998;88(2):310-316.

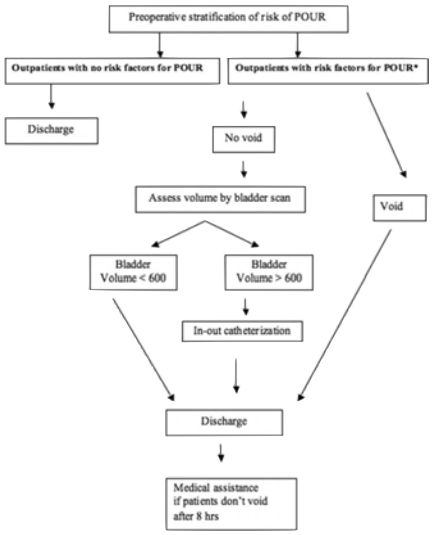
Risk factors for POUR

History of postoperative urinary retention
History of prostatic hypertrophy
High opioid utilization in the OR or PACU
Neuraxial anesthesia [unless short-acting]

Ruhl M.. AORN J 2009 May;89(5):871-4.
Mulroy Anesthesiology 2002 Aug;97(2):315-9.

16

Postoperative Voiding



Bypass Voiding?

Low risk for POUR
Short acting spinal anesthesia
Fluids under 1500mL with spinal anesthesia
Bladder scan: urine volume

Anesthesiology 2009; 110:1139–57
Arthroplasty 2021;36:S345–50.

SAMBA 2024 Annual Meeting • May 2-4, 2024 @samba_hq

17

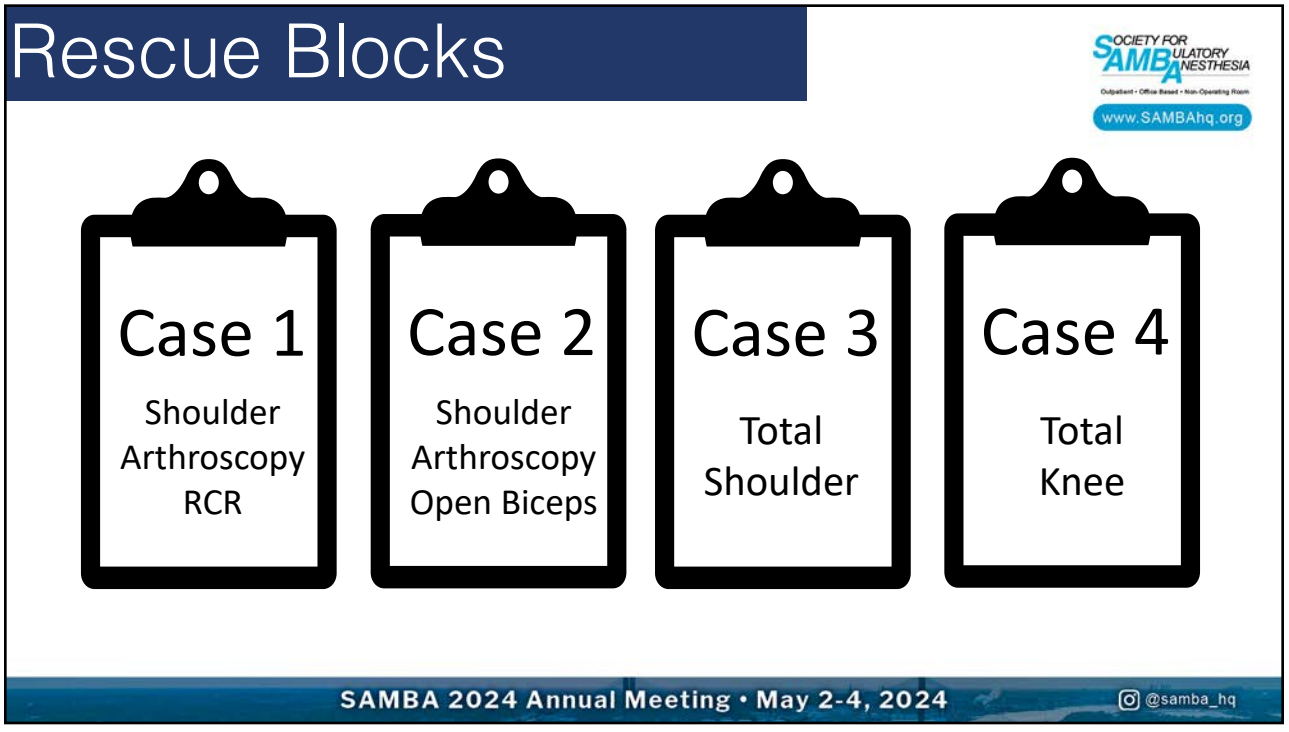
Image generated by DALL-E (OpenAI), based on the author's input a patient coming out of the restroom with a relieved look on his face, created on April 5, 2024.

SAMBA 2024 Annual Meeting • May 2-4, 2024 @samba_hq

18


Clinical Cases
PAIN
SOCIETY FOR AMBULATORY ANESTHESIA
www.SAMBAhq.org
SAMBA 2024 Annual Meeting • May 2-4, 2024
@samba_hq

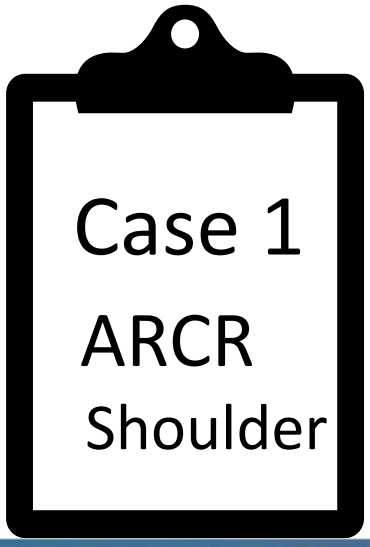
19


Rescue Blocks
SOCIETY FOR AMBULATORY ANESTHESIA
www.SAMBAhq.org
Case 1
Shoulder Arthroscopy RCR
Case 2
Shoulder Arthroscopy Open Biceps
Case 3
Total Shoulder
Case 4
Total Knee
SAMBA 2024 Annual Meeting • May 2-4, 2024
@samba_hq

20

Rescue Blocks

SOCIETY FOR AMBULATORY ANESTHESIA
Outpatient • Office Based • Non-Operating Room
www.SAMBAhq.org



Pre-op block

Superior Trunk

Intra-op Anesthesia

Propofol 50mcg/kg/min + 20-40mg bolus PRN
Fentanyl 50mcg
Dexamethasone 8mg, TXA 1000mg
Ondansetron 4mg, Ketorolac 15mg

SAMBA 2024 Annual Meeting • May 2-4, 2024 @samba_hq

21

Brachial Plexus Block

SOCIETY FOR AMBULATORY ANESTHESIA
Outpatient • Office Based • Non-Operating Room
www.SAMBAhq.org

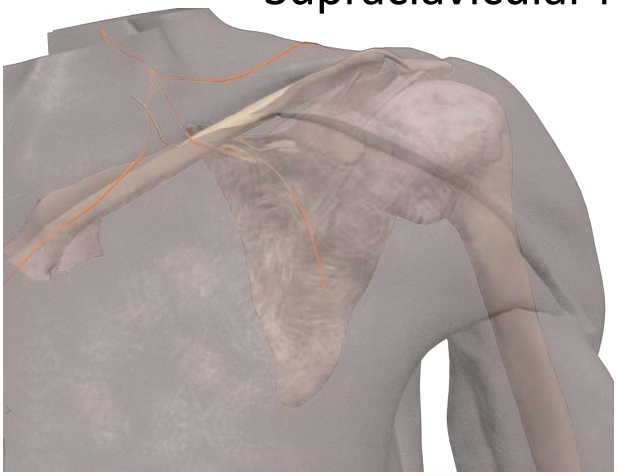
@samba_hq

22

Rescue Blocks Shoulder Sx

SOCIETY FOR AMBULATORY ANESTHESIA
Outpatient • Office Based • Non-Operating Room
www.SAMBAhq.org

Supraclavicular nerves



SAMBA 2024 Annual Meeting • May 2-4, 2024 @samba_hq

23

Rescue Blocks

SOCIETY FOR AMBULATORY ANESTHESIA
Outpatient • Office Based • Non-Operating Room
www.SAMBAhq.org

Pre-op block

Superior Trunk

Intra-op Anesthesia

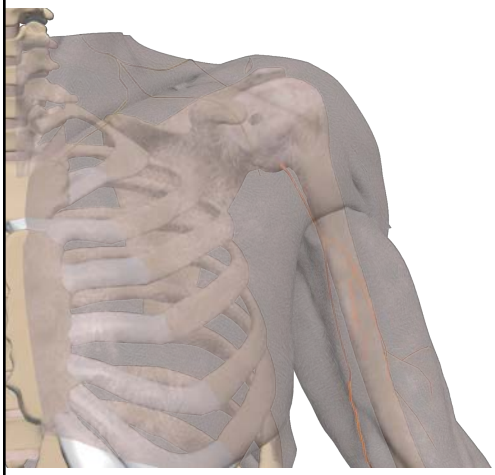
Propofol 50mcg/kg/min + 20-40mg bolus PRN
Fentanyl 50mcg
Dexamethasone 8mg, TXA 1000mg
Ondansetron 4mg, Ketorolac 15mg

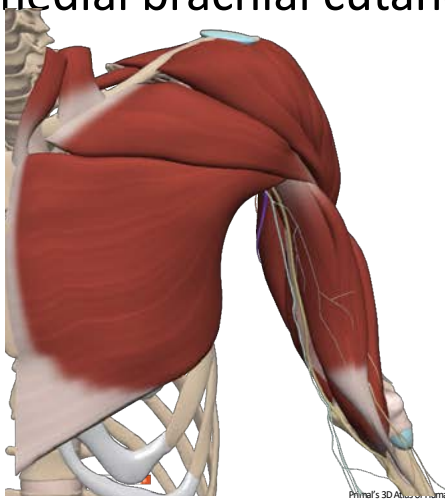
SAMBA 2024 Annual Meeting • May 2-4, 2024 @samba_hq

24

Rescue Blocks

Intercostalbrachial / medial brachial cutaneous n.





Primal's 3D Atlas of Human Anatomy of the Shoulder Anatomy.tv. Accessed April 14, 2024.

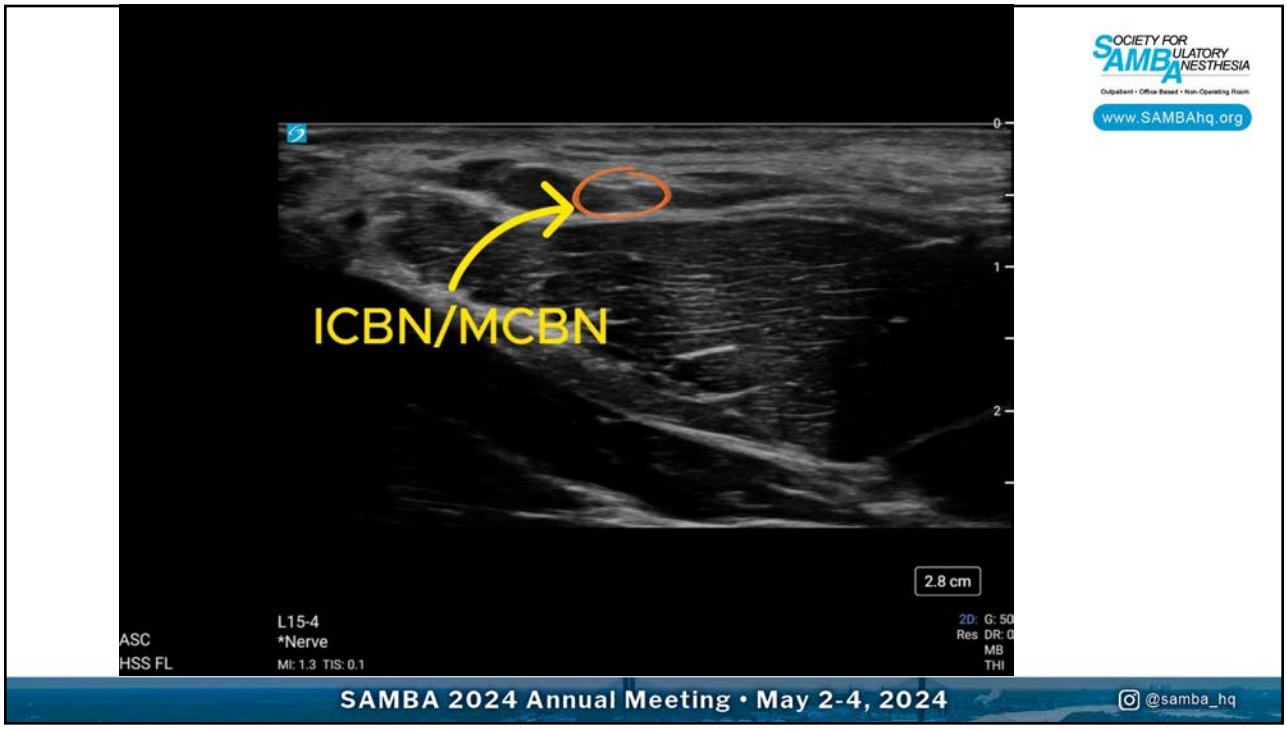
SAMBA 2024 Annual Meeting • May 2-4, 2024 @samba_hq

25

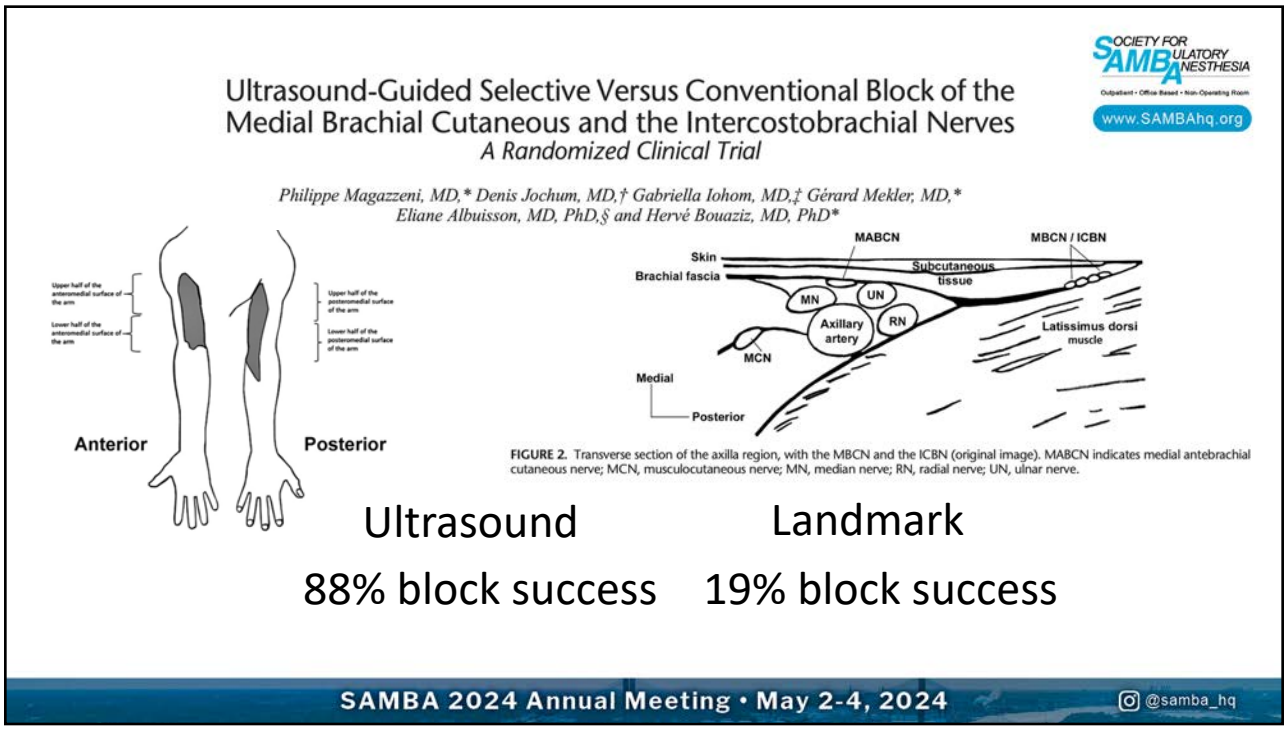
Rescue Blocks

SAMBA 2024 Annual Meeting • May 2-4, 2024 @samba_hq

26


SOCIETY FOR AMBULATORY ANESTHESIA
Outpatient • Office Based • Non-Operating Room
www.SAMBAhq.org
ICBN/MCBN
2.8 cm
ASC
HSS FL
L15-4
*Nerve
MI: 1.3 TIS: 0.1
SAMBA 2024 Annual Meeting • May 2-4, 2024
@samba_hq

27


SOCIETY FOR AMBULATORY ANESTHESIA
Outpatient • Office Based • Non-Operating Room
www.SAMBAhq.org
Ultrasound-Guided Selective Versus Conventional Block of the Medial Brachial Cutaneous and the Intercostobrachial Nerves
A Randomized Clinical Trial
Philippe Magazzeni, MD,* Denis Jochum, MD,† Gabriella Iohom, MD,‡ Gérard Mekler, MD,*
Eliane Albuisson, MD, PhD,§ and Hervé Bouaziz, MD, PhD*
Anterior
Posterior
MABCN
MBCN / ICBN
Skin
Brachial fascia
Subcutaneous tissue
MN
UN
RN
Axillary artery
MCN
Latissimus dorsi muscle
Medial
Posterior
FIGURE 2. Transverse section of the axilla region, with the MBCN and the ICBN (original image). MABCN indicates medial antebrachial cutaneous nerve; MCN, musculocutaneous nerve; MN, median nerve; RN, radial nerve; UN, ulnar nerve.
Ultrasound
88% block success
Landmark
19% block success
SAMBA 2024 Annual Meeting • May 2-4, 2024
@samba_hq

28

Rescue Blocks

SOCIETY FOR AMBULATORY ANESTHESIA
Outpatient • Office Based • Non-Operating Room
www.SAMBAhq.org

Case 3

TSA

Pre-op block

Interscalene

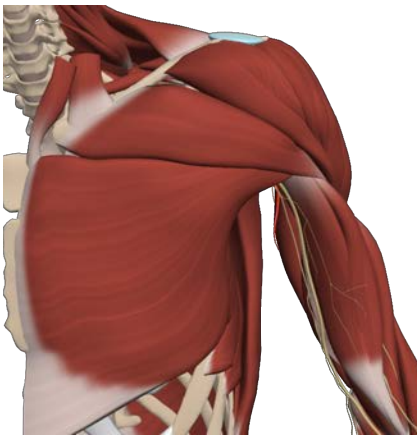
Intra-op Anesthesia

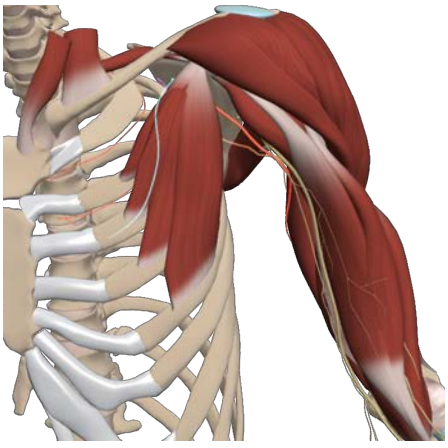
General LMA
Sevo / Propofol
Fentanyl 100mcg
Dexamethasone 8mg, TXA 1000mg
Rocuronium, Sugammadex
Ondansetron 4mg, Ketorolac 15mg

29

Rescue Blocks

SOCIETY FOR AMBULATORY ANESTHESIA
Outpatient • Office Based • Non-Operating Room
www.SAMBAhq.org

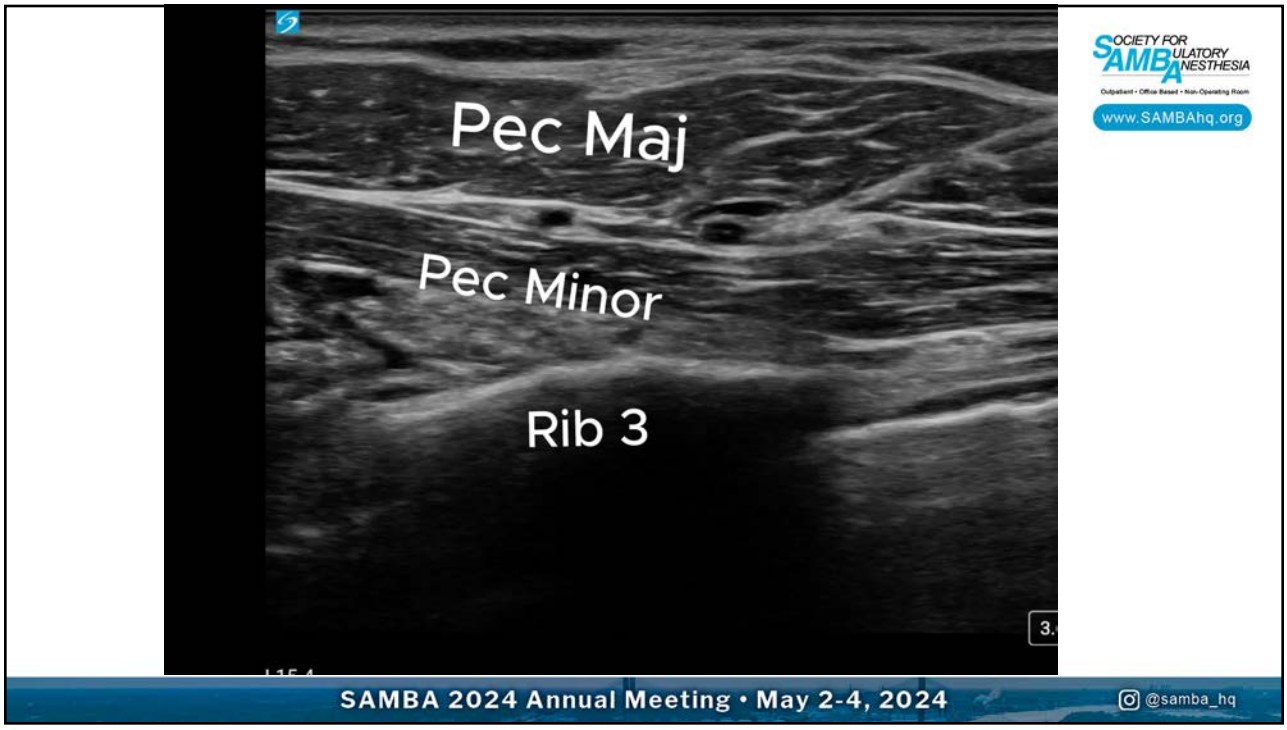




Primal's 3D Atlas of Human Anatomy of the Shoulder Anatomy.tv. Accessed April 14, 2024.

SAMBA 2024 Annual Meeting • May 2-4, 2024 @samba_hq

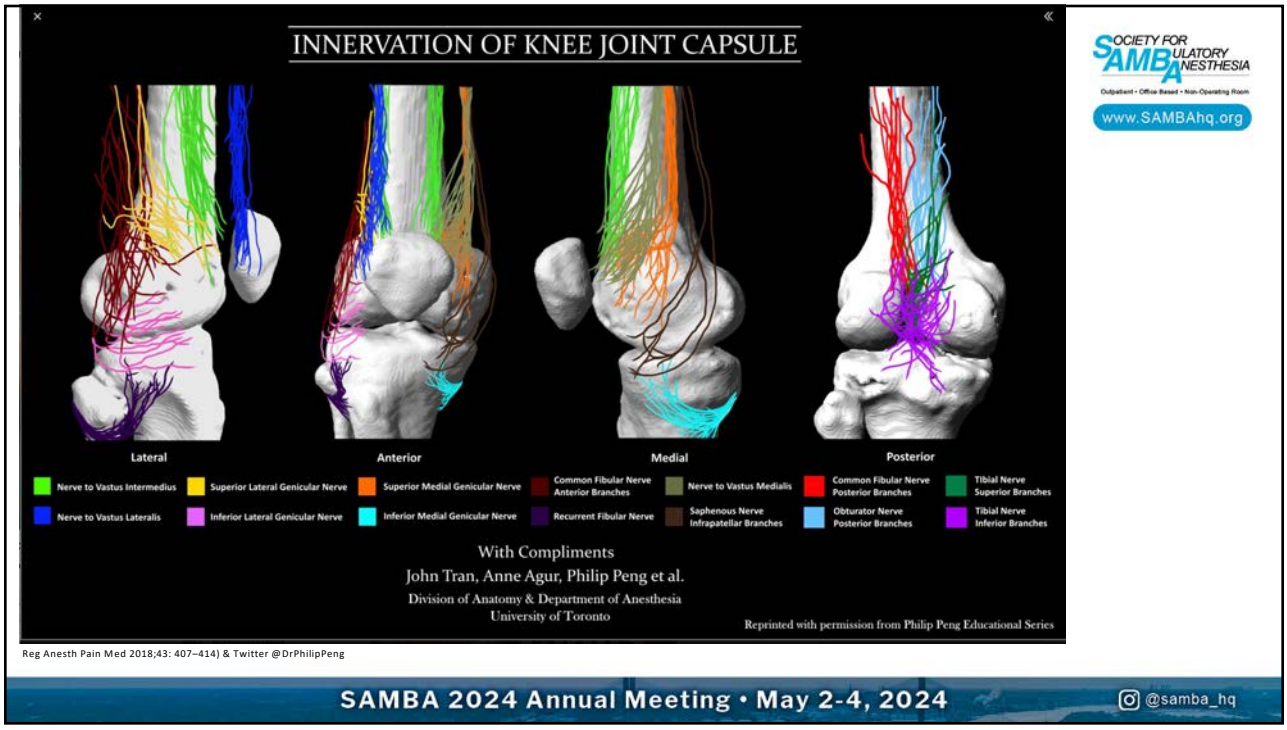
30


Pec Maj
Pec Minor
Rib 3
SOCIETY FOR AMBULATORY ANESTHESIA
www.SAMBAhq.org
SAMBA 2024 Annual Meeting • May 2-4, 2024
@samba_hq

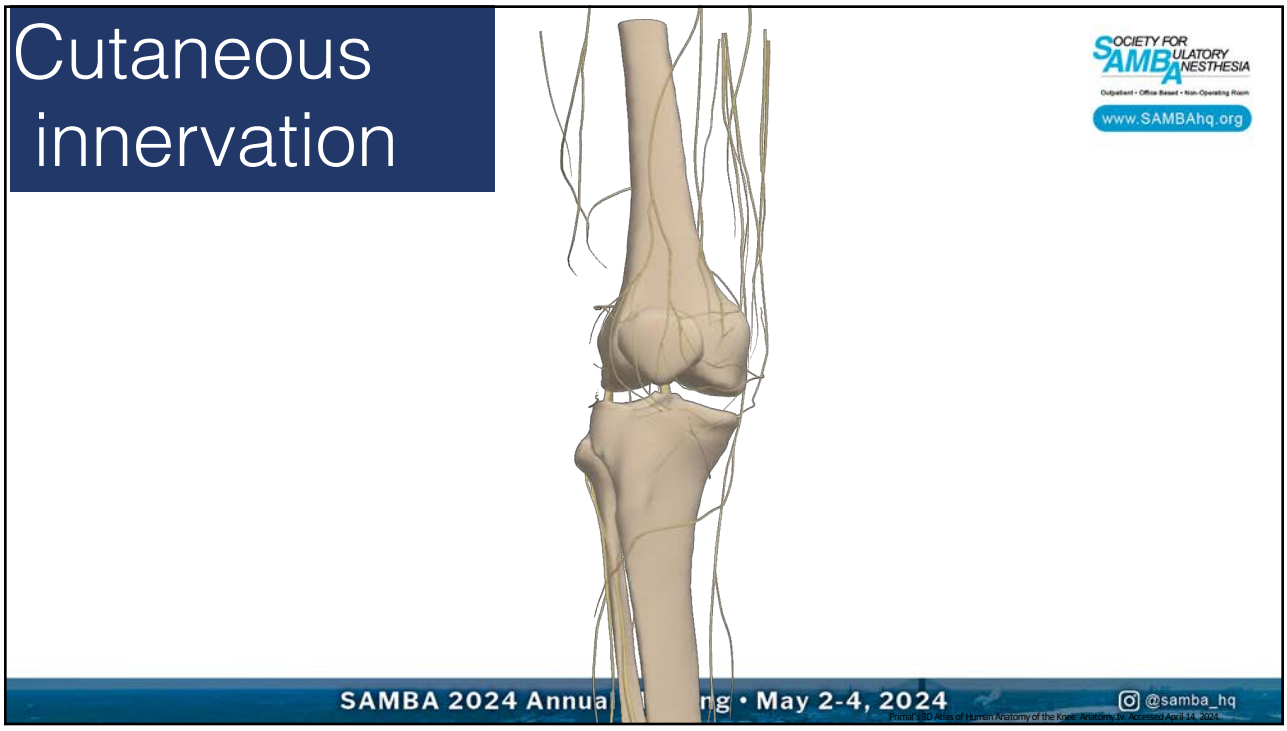
31


Rescue Blocks
Case 4
TKA
Image generated by DALL·E (OpenAI), based on the author's input 'Patient holding knee in pain after surgery, depicted in a hospital room setting' created on April 5, 2024
SOCIETY FOR AMBULATORY ANESTHESIA
www.SAMBAhq.org
SAMBA 2024 Annual Meeting • May 2-4, 2024
@samba_hq

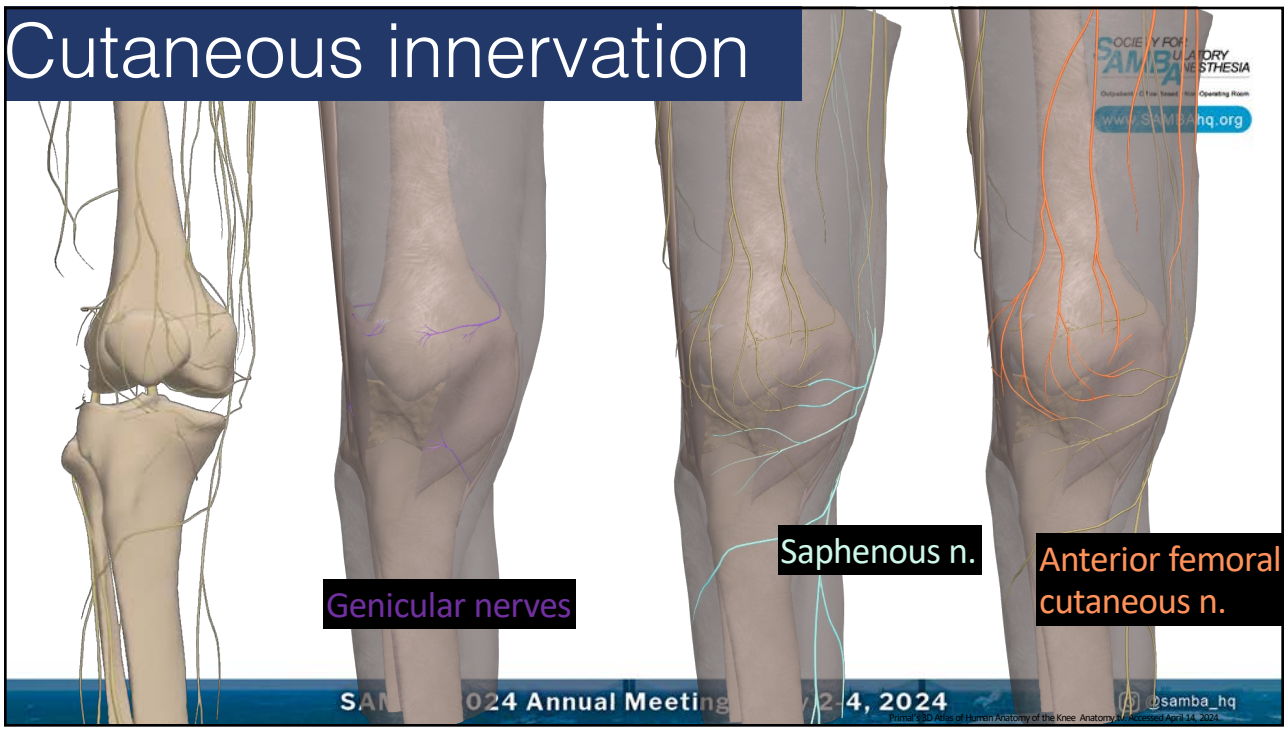
32


INNERVATION OF KNEE JOINT CAPSULE
Lateral
Anterior
Medial
Posterior
Nerve to Vastus Intermedius
Superior Lateral Genicular Nerve
Superior Medial Genicular Nerve
Common Fibular Nerve Anterior Branches
Nerve to Vastus Medialis
Common Fibular Nerve Posterior Branches
Tibial Nerve Superior Branches
Nerve to Vastus Lateralis
Inferior Lateral Genicular Nerve
Inferior Medial Genicular Nerve
Recurrent Fibular Nerve
Saphenous Nerve Infrapatellar Branches
Obturator Nerve Posterior Branches
Tibial Nerve Inferior Branches
With Compliments
John Tran, Anne Agur, Philip Peng et al.
Division of Anatomy & Department of Anesthesia
University of Toronto
Reprinted with permission from Philip Peng Educational Series
SOCIETY FOR AMBULATORY ANESTHESIA
www.SAMBAhq.org
Reg Anesth Pain Med 2018;43: 407–414) & Twitter @DrPhilipPeng
SAMBA 2024 Annual Meeting • May 2-4, 2024
@samba_hq

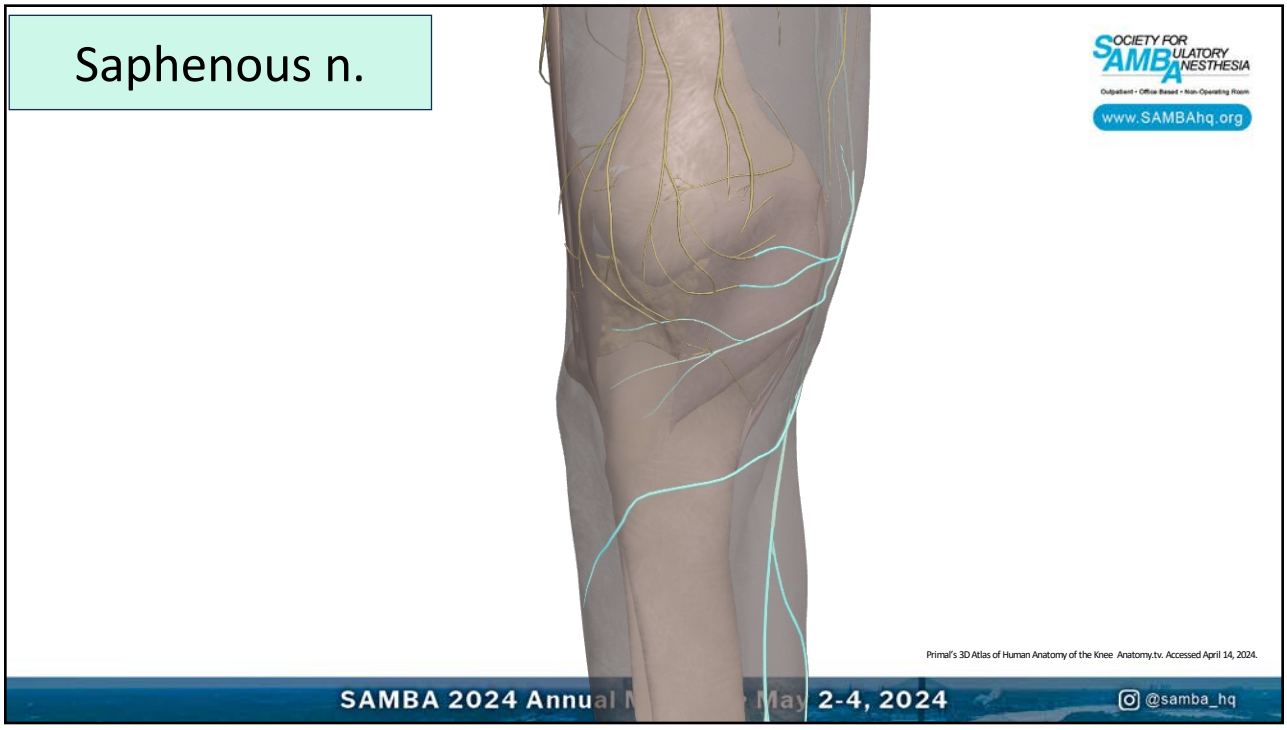
33


Cutaneous innervation
SOCIETY FOR AMBULATORY ANESTHESIA
www.SAMBAhq.org
SAMBA 2024 Annua ng • May 2-4, 2024
@samba_hq
Primal's 3D Atlas of Human Anatomy.tv. Accessed April 14, 2024.

34


Cutaneous innervation
Genicular nerves
Saphenous n.
Anterior femoral cutaneous n.
www.SAMBAhq.org
@samba_hq

35


Saphenous n.
www.SAMBAhq.org
Primal's 3D Atlas of Human Anatomy of the Knee Anatomy.tv. Accessed April 14, 2024.
@samba_hq

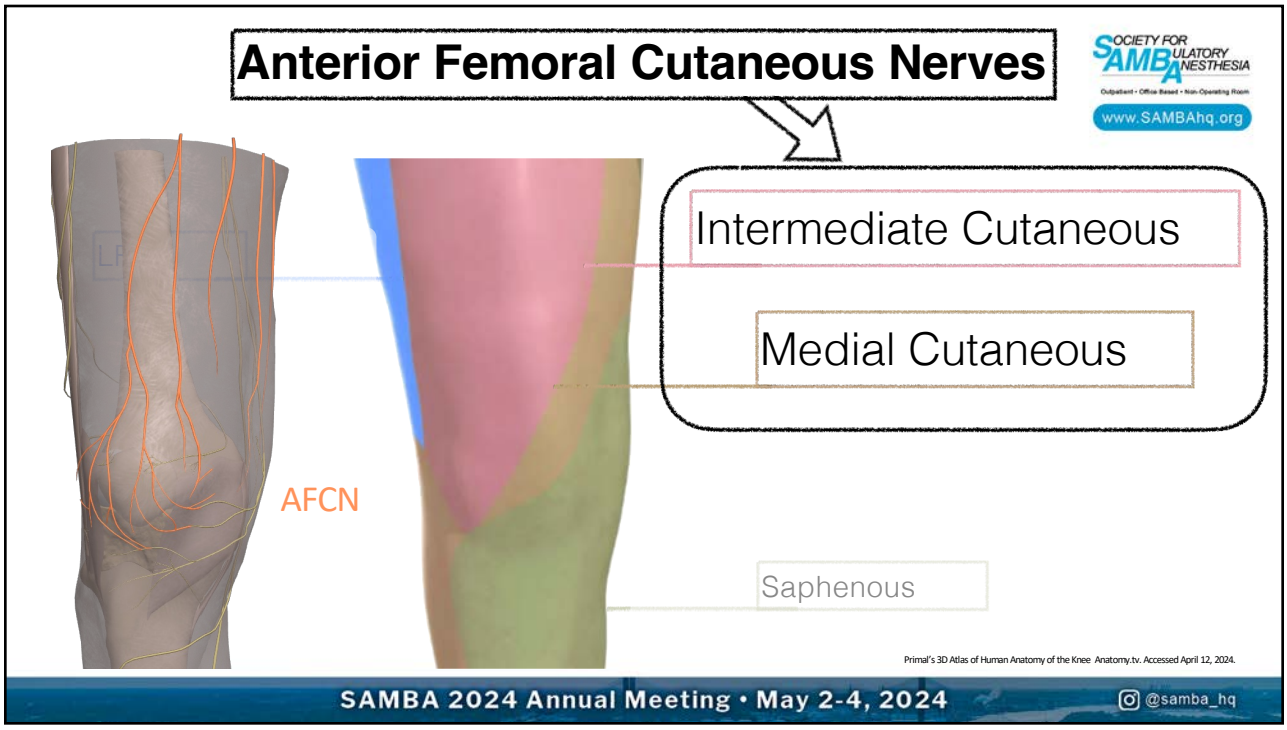
36


Genicular nerves
SOCIETY FOR AMBULATORY ANESTHESIA
Outpatient • Office Based • Non-Operating Room
www.SAMBAhq.org
Primal's 3D Atlas of Human Anatomy of the Knee Anatomy.tv. Accessed April 14, 2024.
SAMBA 2024
May 2-4, 2024
@samba_hq

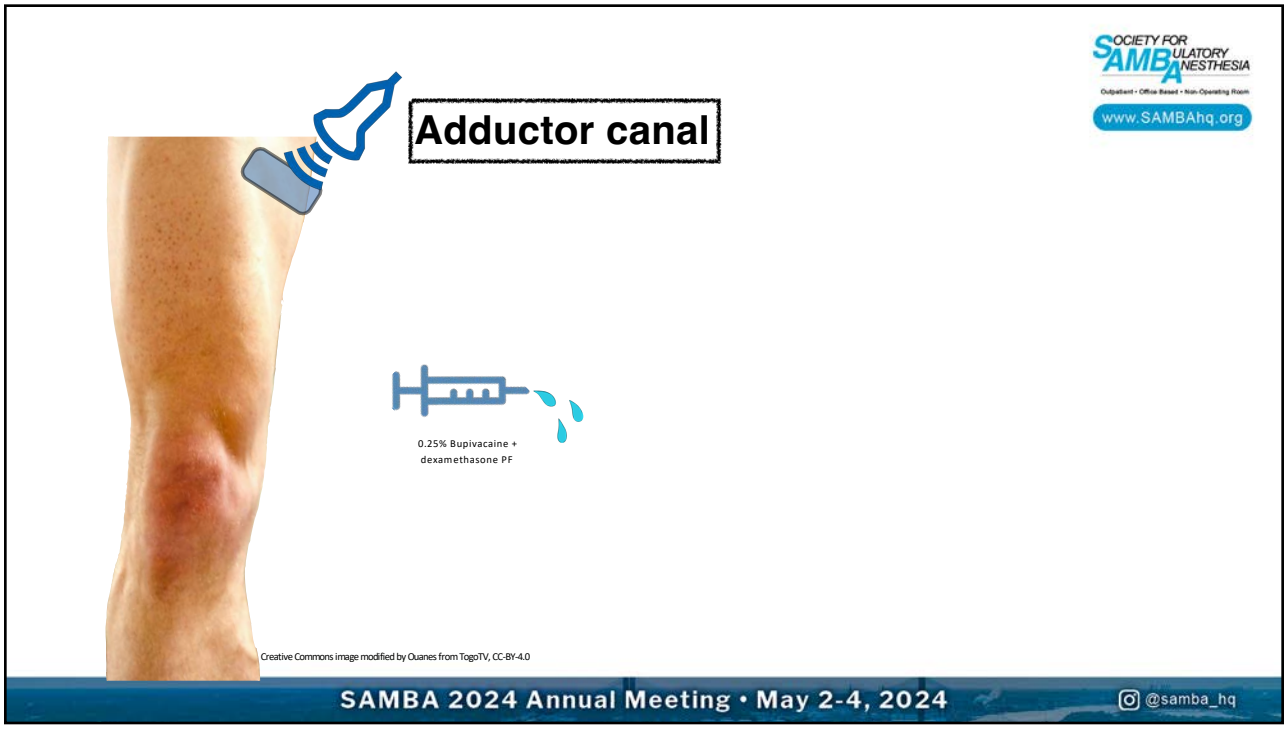
37


Anterior Femoral Cutaneous nerves
SOCIETY FOR AMBULATORY ANESTHESIA
Outpatient • Office Based • Non-Operating Room
www.SAMBAhq.org
Primal's 3D Atlas of Human Anatomy of the Knee Anatomy.tv. Accessed April 14, 2024.
SAMBA 2024
May 2-4, 2024
@samba_hq

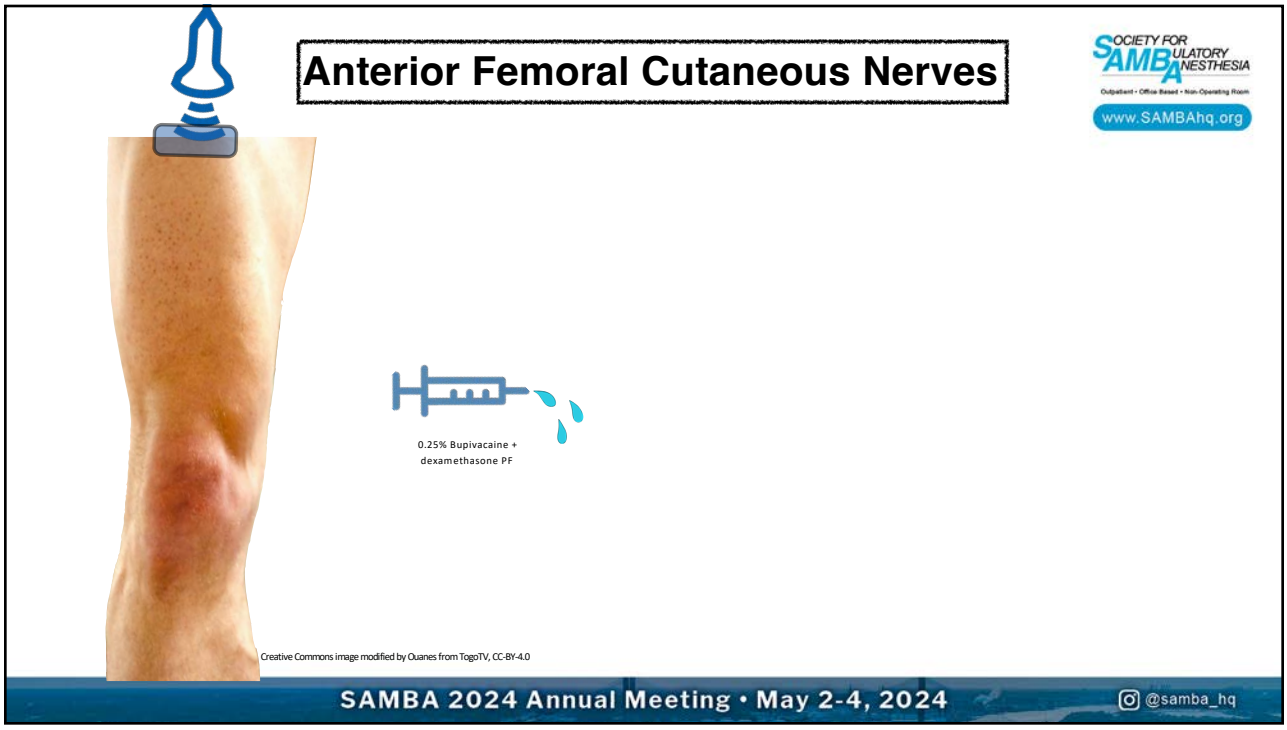
38


Anterior Femoral Cutaneous Nerves
SOCIETY FOR AMBULATORY ANESTHESIA
www.SAMBAhq.org
Intermediate Cutaneous
Medial Cutaneous
AFCN
Saphenous
Primal's 3D Atlas of Human Anatomy of the Knee Anatomy.tv. Accessed April 12, 2024.
SAMBA 2024 Annual Meeting • May 2-4, 2024
@samba_hq

39


SOCIETY FOR AMBULATORY ANESTHESIA
www.SAMBAhq.org
Adductor canal
0.25% Bupivacaine +
dexamethasone PF
Creative Commons image modified by Ouanes from TogoTV, CC-BY-4.0
SAMBA 2024 Annual Meeting • May 2-4, 2024
@samba_hq

40


Anterior Femoral Cutaneous Nerves
SOCIETY FOR AMBULATORY ANESTHESIA
Outpatient • Office Based • Non-Operating Room
www.SAMBAhq.org
0.25% Bupivacaine +
dexamethasone PF
Creative Commons image modified by Ouanes from TogoTV, CC-BY-4.0
SAMBA 2024 Annual Meeting • May 2-4, 2024
@samba_hq

41


SAMBA 2024 Annual Meeting • May 2-4, 2024
@samba_hq

42

Take-Home Nerve Block Catheter: Improving Pain Relief After Surgery

SOCIETY FOR AMBULATORY ANESTHESIA
www.SAMBAhq.org

By the Department of Anesthesiology, Critical Care & Pain Management

HSS

https://www.hss.edu/conditions_take-home-nerve-block-catheter.asp#who

SAMBA 2024 Annual Meeting • May 2-4, 2024 @samba_hq

43

Continuous Peripheral Nerve Blocks: A Review of the Published Evidence

SOCIETY FOR AMBULATORY ANESTHESIA
www.SAMBAhq.org

Brian M. Ilfeld, MD, MS Anesth Analg 2017;124:308–35

Regional Anesthesia and Acute Pain Medicine

Section Editor: **Richard Brull**

NARRATIVE REVIEW ARTICLE

Continuous Peripheral Nerve Blocks: An Update of the Published Evidence and Comparison With Novel, Alternative Analgesic Modalities

Brian M. Ilfeld, MD, MS Anesth Analg 2011;113:904–25

SAMBA 2024 Annual Meeting • May 2-4, 2024 @samba_hq

44

Home Nerve Catheters

Complications

-Epidural placement
-Catastrophic intrathecal

-Horner's
-Hoarseness
-Dyspnea
-Respiratory Distress

Infusion
Dislodgement
Leakage
Pump malfunction

Removal
Catheter retention
Infection [<1%]

45

Home Nerve Catheters

General considerations

Patient Selection
Patient and Caregiver Education
Securing the Perineurial Catheter & setting up the equipment
Follow up care [phone calls, availability emergency services]
Catheter removal
Cost

46

Home Nerve Catheters

SOCIETY FOR AMBULATORY ANESTHESIA
Outpatient • Office Based • Non-Operating Room
www.SAMBAhq.org

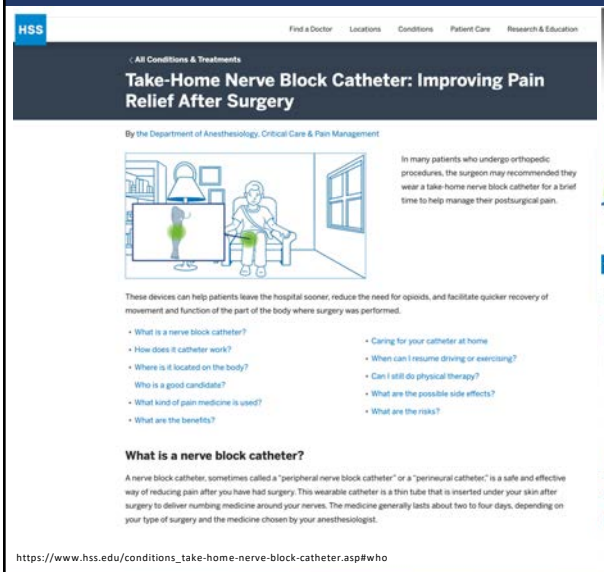
Exclusion Criteria for Continuous Peripheral Nerve Block at Home.

Criteria	Rationale	Examples
Cognitive dysfunction	Difficulty in pain assessment and diagnosis of complication	Multi-infarct dementia, Alzheimer disease, psychiatric disorder
Unreliability	May not or will not follow instructions, unable to follow instructions	Psychiatric disorder, language barrier and no translator available, patient without phone
Lack of home support system	Potential lack of care in case of emergency, perhaps more likely to have complications	Patients living alone, patients caring for a dependent spouse, pediatric patients with unreliable parents
Baseline ambulation difficulty	Increased possibility of trauma from falling	Patient with severe rheumatoid arthritis, history of hemiparesis from stroke, history of weakness from preexisting neuropathies or myopathies
Significant organ dysfunction	Changes in pathophysiology that increased the likelihood of neurologic or cardiac toxicity	History of heart failure with resultant increased perfusion to vital organs, decrease drug or active metabolite clearance during continuous infusion

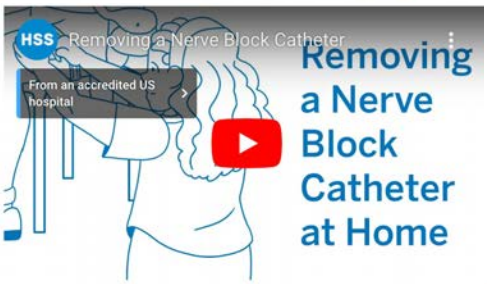
Greengrass RA, Nielsen KC. Management of peripheral nerve block catheters at home. Int Anesthesiol Clin 2005;43:79–87.

47

Education



https://www.hss.edu/conditions_take-home-nerve-block-catheter.asp#who



SOCIETY FOR AMBULATORY ANESTHESIA
Outpatient • Office Based • Non-Operating Room
www.SAMBAhq.org

48

Education

SOCIETY FOR AMBULATORY ANESTHESIA
Outpatient • Office Based • Non-Operating Room
www.SAMBAhq.org

For videos and additional information, visit **hss.edu/NerveBlockCatheter** or scan the QR code below:

hss.edu/NerveBlockCatheter

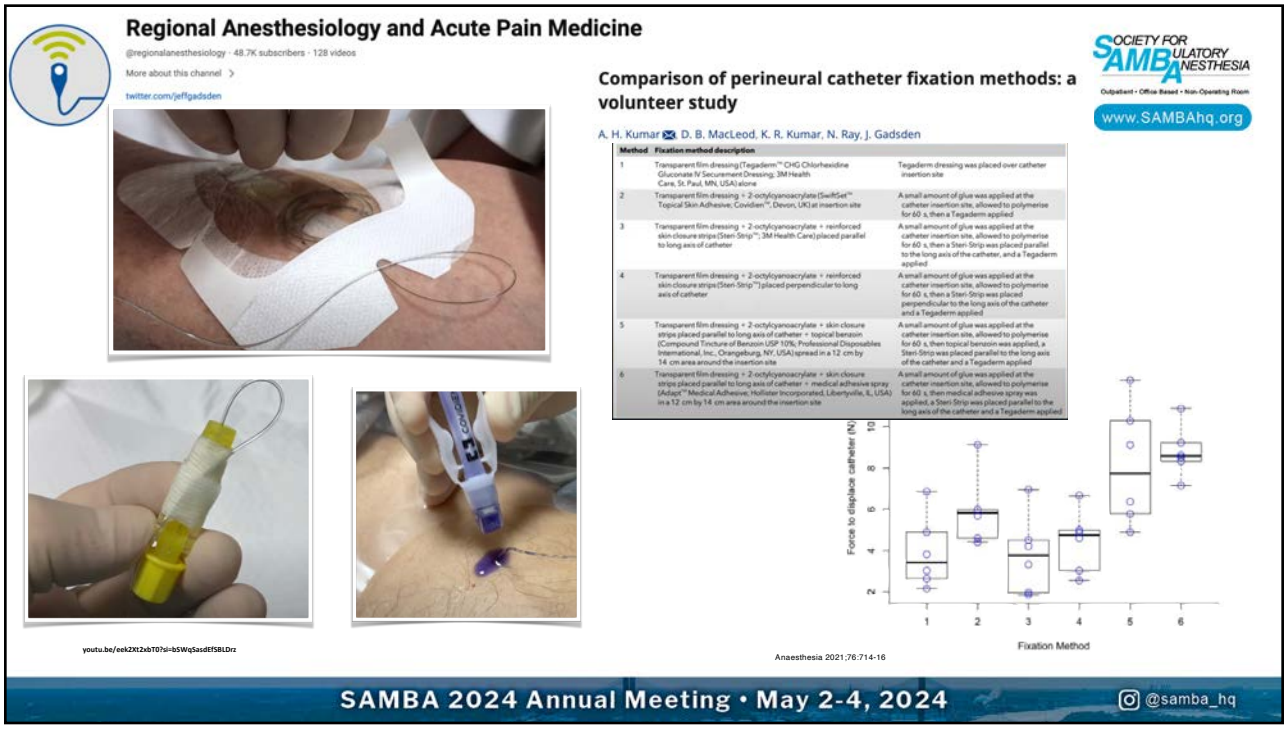
SAMBA 2024 Annual Meeting • May 2-4, 2024 @samba_hq

49

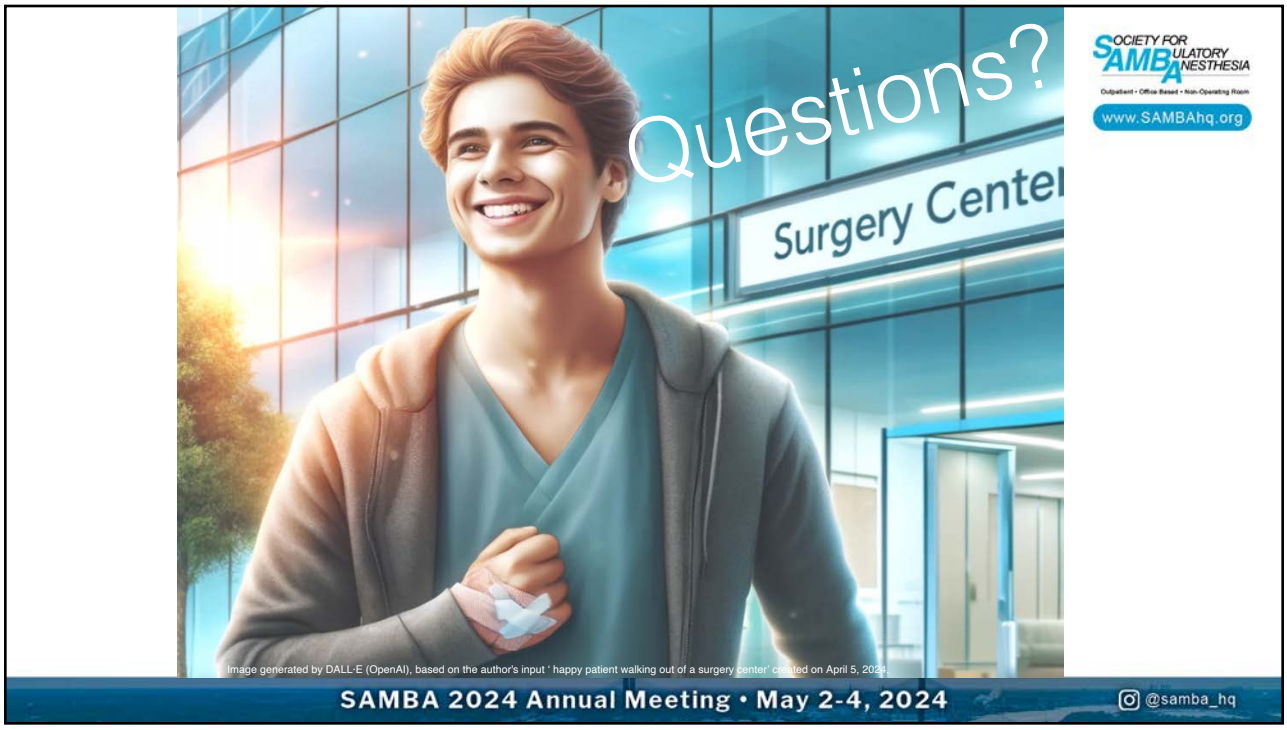
50


Perineural Catheter Tips & Tricks
Regional Anesthesia and Acute Pain Medicine
CAUTION: NERVE BLOCK CATHETER
SOCIETY FOR AMBULATORY ANESTHESIA
Outpatient • Office Based • Non-Operating Room
www.SAMBAhq.org
Regional Anesthesiology and Acute Pain Medicine
@regionalanesthesiology · 48.7K subscribers · 128 videos
More about this channel
twitter.com/jeffgadsden
Subscribed
youtu.be/eek2Xt2xbT0?si=bSWqSasdEfSBLDrz
got block?
SAMBA 2024 Annual Meeting • May 2-4, 2024
@samba_hq

51


Regional Anesthesiology and Acute Pain Medicine
@regionalanesthesiology · 48.7K subscribers · 128 videos
More about this channel
twitter.com/jeffgadsden
Comparison of perineural catheter fixation methods: a volunteer study
A. H. Kumar ✉ D. B. MacLeod, K. R. Kumar, N. Ray, J. Gadsden
Method
Fixation method description
1
Transparent film dressing (Tegaderm™ CHG Chlorhexidine Gluconate IV Securement Dressing; 3M Health Care, St. Paul, MN, USA) alone
Tegaderm dressing was placed over catheter insertion site
2
Transparent film dressing + 2-octylcyanoacrylate (SwiftSet™ Topical Skin Adhesive; Covidien™, Devon, UK) at insertion site
A small amount of glue was applied at the catheter insertion site, allowed to polymerise for 60 s, then a Tegaderm applied
3
Transparent film dressing + 2-octylcyanoacrylate + reinforced skin closure strips (Steri-Strip™; 3M Health Care) placed parallel to long axis of catheter
A small amount of glue was applied at the catheter insertion site, allowed to polymerise for 60 s, then a Steri-Strip was placed parallel to the long axis of the catheter, and a Tegaderm applied
4
Transparent film dressing + 2-octylcyanoacrylate + reinforced skin closure strips (Steri-Strip™) placed perpendicular to long axis of catheter
A small amount of glue was applied at the catheter insertion site, allowed to polymerise for 60 s, then a Steri-Strip was placed perpendicular to the long axis of the catheter and a Tegaderm applied
5
Transparent film dressing + 2-octylcyanoacrylate + skin closure strips placed parallel to long axis of catheter + topical benzoin (Compound Tincture of Benzoin USP 10%; Professional Disposables International, Inc., Orangeburg, NY, USA) spread in a 12 cm by 14 cm area around the insertion site
A small amount of glue was applied at the catheter insertion site, allowed to polymerise for 60 s, then topical benzoin was applied, a Steri-Strip was placed parallel to the long axis of the catheter and a Tegaderm applied
6
Transparent film dressing + 2-octylcyanoacrylate + skin closure strips placed parallel to long axis of catheter + medical adhesive spray (Adapt™ Medical Adhesive; Hollister Incorporated, Libertyville, IL, USA) in a 12 cm by 14 cm area around the insertion site
A small amount of glue was applied at the catheter insertion site, allowed to polymerise for 60 s, then medical adhesive spray was applied, a Steri-Strip was placed parallel to the long axis of the catheter and a Tegaderm applied
Force to displace catheter (N)
Fixation Method
Anaesthesia 2021;76:714-16
youtu.be/eek2Xt2xbT0?si=bSWqSasdEfSBLDrz
SOCIETY FOR AMBULATORY ANESTHESIA
Outpatient • Office Based • Non-Operating Room
www.SAMBAhq.org
SAMBA 2024 Annual Meeting • May 2-4, 2024
@samba_hq

52


Questions?
Surgery Center
SOCIETY FOR AMBULATORY ANESTHESIA
Outpatient • Office Based • Non-Operating Room
www.SAMBAhq.org
Image generated by DALL·E (OpenAI), based on the author's input ' happy patient walking out of a surgery center' created on April 5, 2024.
SAMBA 2024 Annual Meeting • May 2-4, 2024
@samba_hq

53