

FACULTY OF MEDICINE
MASARYK UNIVERSITY
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DEPARTMENT OF **PAEDIATRIC**
ANAESTHESIOLOGY
AND INTENSIVE CARE MEDICINE

Plan A na dětském anesteziologickém pracovišti

MUDr. Hana Harazim, Ph.D.

Podpořeno grantem SV Lékařské fakulty Masarykovy univerzity: MUNI/A/1781/2025; MUNI/A/1831/2025 a Fakultní nemocnicí Brno, grantem MZ ČR - RVO (FNBr, 65269705)

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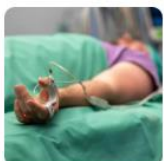
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Conflict of interest: NONE



Learning objectives

- Koncept Plan A
- Plan A blocks
- Kontroverze
- Vzdělávání

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Blokáda vs blok

Blok

- **Obecný význam:** Označuje něco, co má tvar kvádry, nebo se chová jako celek. Může to být fyzický předmět (např. betonový blok), nebo i abstraktní jednotka (např. textový blok, blok přednášek).
- **Použití:**
 - Stavebnictví: betonový blok, cihlový blok, blok domů.
 - Počítače: datový blok, blok kódu.
 - Jiné: poznámkový blok, politický blok.

Blokáda

- **Obecný význam:** Znamená záměrné **zabránění přístupu** nebo **omezování činnosti**.
- **Použití:**
 - Vojenský/politický kontext: např. námořní blokáda – zamezení přístupu k přístavům nepřítele.
 - Doprava/protesty: silniční blokáda – zablokování dopravy.
 - Medicína: nervová blokáda – cílené přerušení nervového signálu (např. anestezie).

Jak napsat článek do časopisu správně nejen odborně, ale i gramaticky

Musil V.¹, Málek J.²

¹Středisko vědeckých informací, 3. lékařská fakulta Univerzity Karlovy, Praha

²Klinika anesteziologie a resuscitace, 3. lékařská fakulta Univerzity Karlovy a Fakultní nemocnice Královské Vinohrady, Praha

Obr. 1 „Píchám blok“



Koncept „Plan A blocks“

Kdy to vzniklo a proč?

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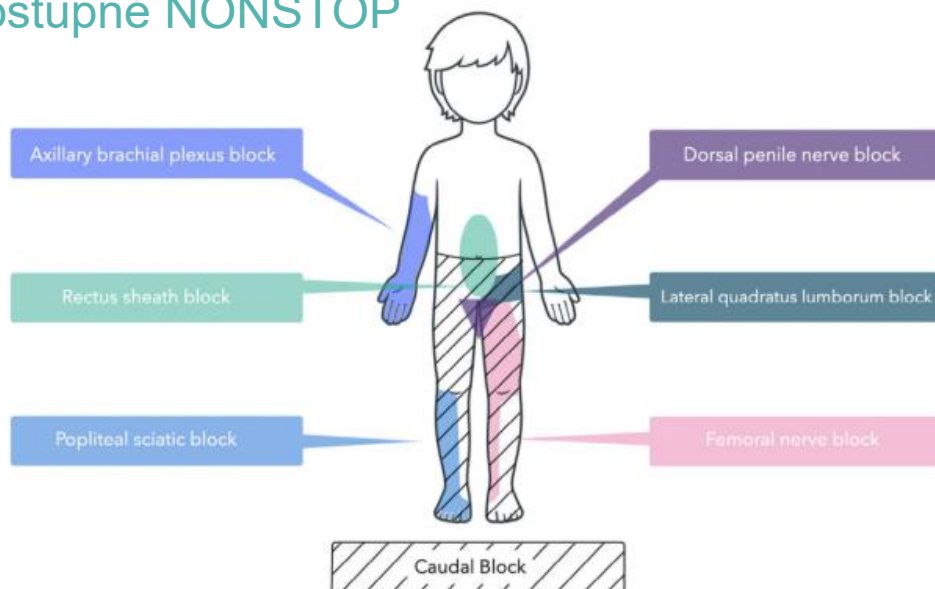


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Koncept „Plan A blocks“

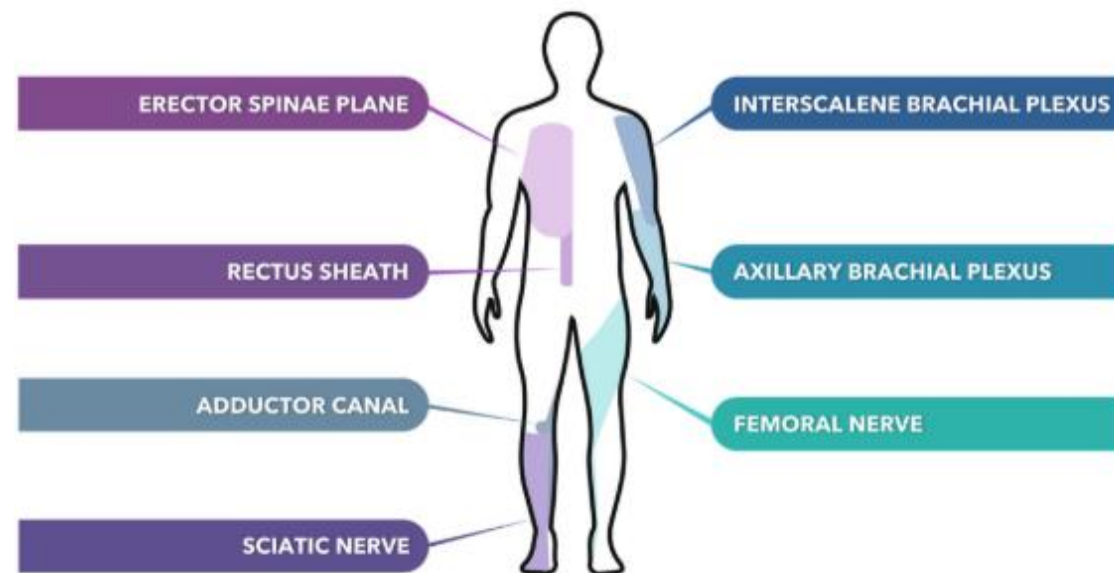
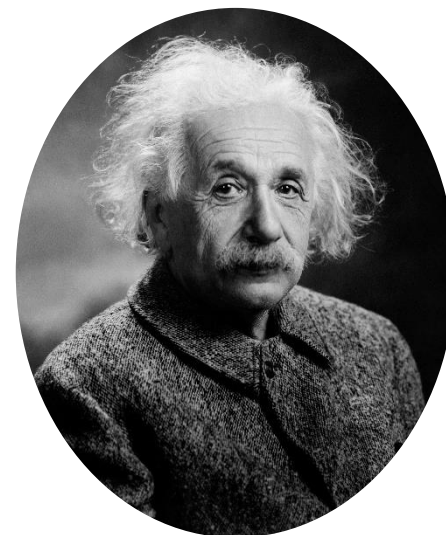
= základní sada dovedností pro začínajícího anesteziologa při učení se regionální anestezii

- ✓ Malý počet bloků
- ✓ Všestranné a vysoce hodnotné
- ✓ Přizpůsobené skupině pacientů
- ✓ Dostupné NONSTOP



„Každý chytrý blázen dokáže věci zvětšit a zkomplikovat... chce to špetku geniality a spoustu odvahy, aby se člověk pohnul opačným směrem.“

- Albert Einstein -



Koncept „Plan A blocks“

2020



- UGRA nejen pro znalce
- **editorial**

Anaesthesia 2020, 75, 293-297

doi:10.1111/anae.14768

Editorial

Future directions in regional anaesthesia: not just for the cognoscenti

L. R. Turbitt,¹ E. R. Mariano² and

Anaesthesia 2023, 78, 3-8

Editorial

New blocks on the kids: core basic paediatric anaesthesia

A. M. E. Pearson,¹ S. Roberts² and L. R. Turbitt³

Education

Baby steps to mastery: building blocks for novices in pediatric regional anaesthesia

Anaesthesia 2026, 81, 985-994

<https://doi.org/10.1111/anae.70182>

Core Topics

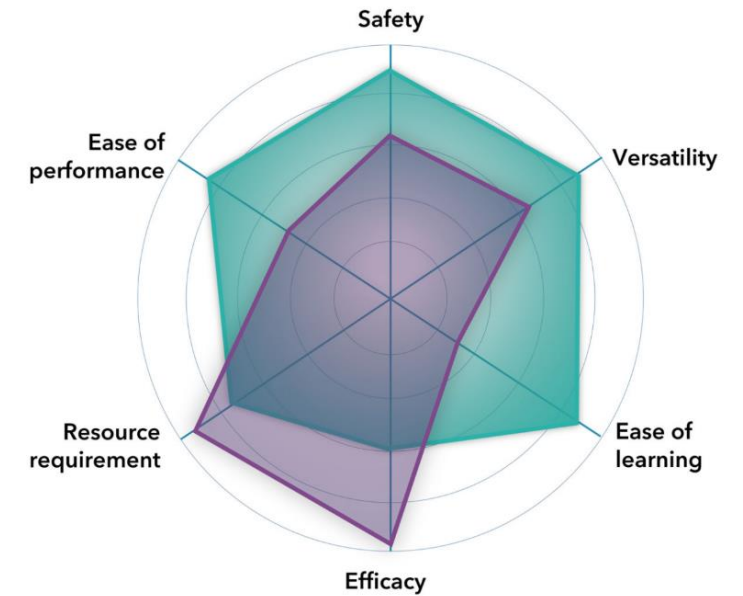
Plan A blocks in regional anaesthesia: a narrative review

Lloyd R. Turbitt,  Edward R. Mariano  and Kariem El-Boghdady 

John G Hagen ¹, Deepa Kattail ², Nat
Cassandra Hoffmann,⁵ Michele Nichols,⁶ An
Claude Ecoffey,⁸ Giorgio Ivani ⁹, Tripali K
Annabel Pearson,¹² Robert Wilder,¹³ Debabr
Cheryl S L Chooi ¹⁶, Nandini Dave ¹⁷,
Kathryn S Handlogten ¹⁹, Stefan Heschl
J Matthew Kynes ²², Gabriela Lopez,²³ Amjad Maniar ²⁴, Maryrose Osazuwa,²⁵
Vrushali Ponde,²⁶ Ban C H Tsui ²⁷, Lloyd R Turbitt,²⁸ Santhanam Suresh²⁹



Konzept „Plan A blocks“



Anaesthesia 2026, 81, 985-994

<https://doi.org/10.1111/anae.70182>

Core Topics

Plan A blocks in regional anaesthesia: a narrative review

Lloyd R. Turbitt, Edward R. Mariano and Kariem El-Boghdadly



Sjednocení nomenklatury blokád trupu

Regional Anesthesia & Pain Medicine

Original research

Standardizing nomenclature in regional anesthesia: an ASRA-ESRA Delphi consensus study of abdominal wall, paraspinal, and chest wall blocks

Kariem El-Boghdadly ^{1,2}, Morné Wolmarans, ³ Angela D Stengel, ⁴ Eric Albrecht ⁵, Ki Jinn Chin ⁶, Hesham Elsharkawy, ^{7,8} Sandra Kopp ⁹, Edward R Mariano ^{10,11}, Jeff I. Xu ^{12,13}, Sanjib Adhikary ¹⁴, Basak Altınarmak ¹⁵

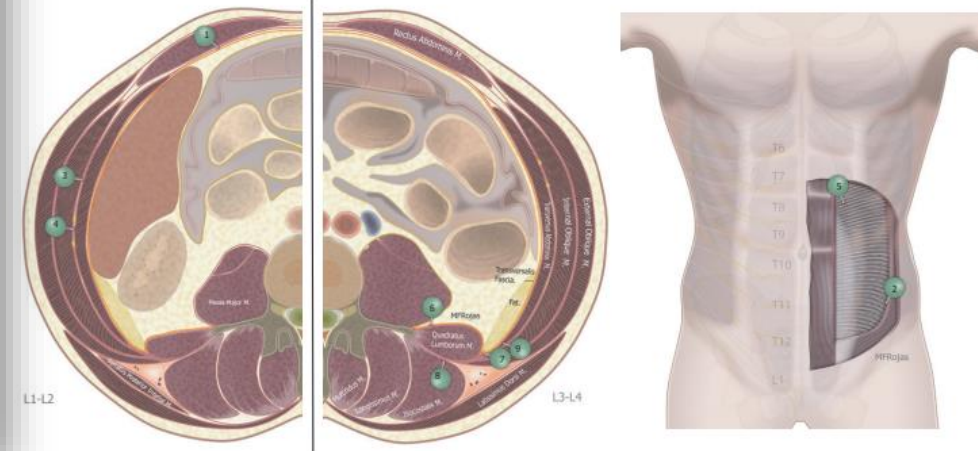
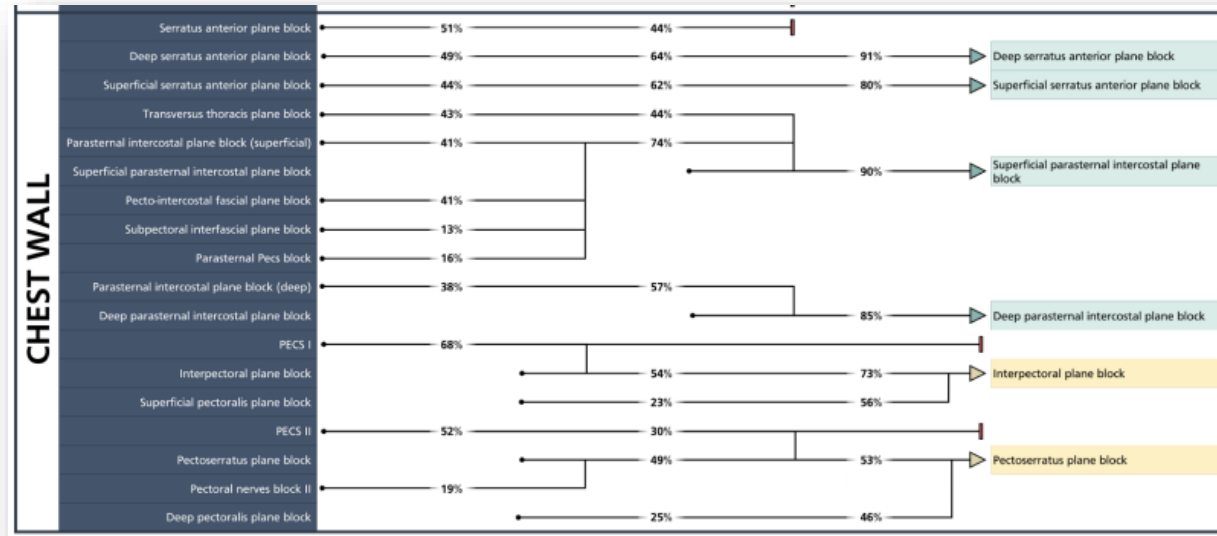


Figure 3 Illustrations of recommended names and anatomical locations of injection for abdominal wall. (1) Rectus sheath block; (2) ilioinguinal iliohypogastric nerves block; (3) transversus abdominis plane (TAP); (4) midaxillary TAP block; (5) subcostal TAP block; (6) anterior quadratus lumborum block (QLB); (7) lateral QLB; (8) posterior QLB; (9) transversalis fascia plane block.



Plan A blocks

... v pediatrické regionální anestezii

- Provedení v CA
- Max. bezpečná dávka LA
- Follow up

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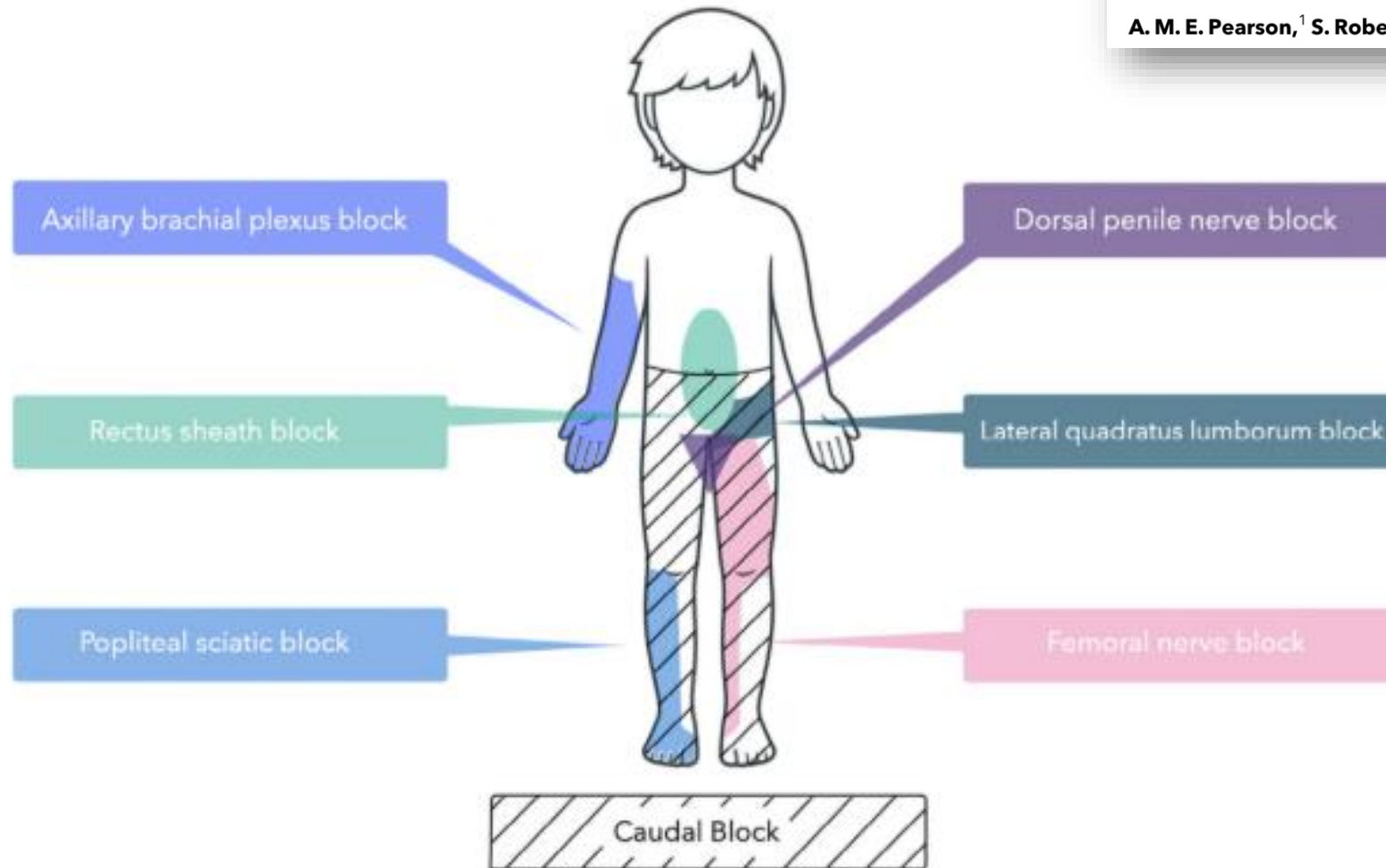
Editorial

New blocks on the kids: core basic nerve blocks in paediatric anaesthesia

A. M. E. Pearson,¹ S. Roberts² and L. R. Turbitt³



2022: narrative review



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Table 1 Proposed basic ultrasound-guided regional anaesthetic techniques for children.

Anatomical region	Plan A: basic blocks	Plan B/C/D: advanced blocks
Upper limb		
- Below shoulder	Axillary brachial plexus	Supraclavicular brachial plexus*; infraclavicular brachial plexus*
- Below elbow		Forearm blocks
Lower limb		
- Hip	Femoral*	Fascia iliaca*
- Knee		Adductor canal*
- Foot and ankle	Popliteal sciatic*	Ankle
Trunk		
- Chest wall		Erector spinae plane*; paravertebral*; serratus anterior plane*
- Abdominal midline, inguinal/groin	Rectus sheath* Lateral quadratus lumborum*; caudal; dorsal penile nerve	Anterior quadratus lumborum* Pudendal nerve block
Head and neck		
- Ear		Superficial cervical plexus

*Appropriate for catheter as an advanced technique.



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Table 2 Examples of indications and dosing recommendations for paediatric Plan A regional blocks.

	Indications	Levobupivacaine 0.25% dose*
Axillary brachial plexus	Elbow open reduction and internal fixation, forearm and hand surgery	0.2–0.5 ml.kg ⁻¹ (up to 15 ml)
Femoral	Femoral fracture, slipped upper femoral epiphysis, femoral osteotomy	0.2–0.5 ml.kg ⁻¹ (up to 15 ml)
Popliteal sciatic	Tendon transfers/lengthening, lower limb trauma, tibial osteotomy, ankle arthroplasty, club foot repair	0.2–0.3 ml.kg ⁻¹ (up to 15 ml)
Rectus sheath	Umbilical herniotomy, pyloromyotomy, open gastrostomy	0.1–0.3 ml.kg ⁻¹ (per side)
Lateral quadratus lumborum	Inguinal herniotomy, open appendicectomy	0.5 ml.kg ⁻¹ (up to 15–20 ml per side)
Caudal	Bilateral inguinal herniotomy, bilateral orchidopexy, hypospadias, posterior sagittal anorectoplasty	Up to 1 ml.kg ⁻¹
Dorsal penile	Circumcision, distal hypospadias repair	0.1 ml.kg ⁻¹ (up to 5 ml both sides)

*Maximum safe dose of levobupivacaine 0.25% is 2.5 mg.kg⁻¹ or 1 ml.kg⁻¹. For blocks that target a specific nerve, aim to surround the nerve with local anaesthetic up to the volume of local anaesthetic suggested. For fascial plane blocks, use suggested volumes as a guide.



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RA-UK UPPER LIMB & TRUNK PAEDIATRIC PLAN A BLOCKS

AXILLARY BRACHIAL PLEXUS BLOCK	PROBE POSITION	ULTRASOUND IMAGE	ULTRASOUND ANATOMY
Indications: Upper limb surgery Contraindications: None Drugs: 0.5% Bupivacaine 10-20 ml Technique: 0.5% Bupivacaine 10-20 ml Adverse effects: None Notes: 0.5% Bupivacaine 10-20 ml			
Indications: Rectus abdominis surgery Contraindications: None Drugs: 0.5% Bupivacaine 10-20 ml Technique: 0.5% Bupivacaine 10-20 ml Adverse effects: None Notes: 0.5% Bupivacaine 10-20 ml			
Indications: Lateral quadratus lumborum surgery Contraindications: None Drugs: 0.5% Bupivacaine 10-20 ml Technique: 0.5% Bupivacaine 10-20 ml Adverse effects: None Notes: 0.5% Bupivacaine 10-20 ml			
Indications: Dorsal penile nerve surgery Contraindications: None Drugs: 0.5% Bupivacaine 10-20 ml Technique: 0.5% Bupivacaine 10-20 ml Adverse effects: None Notes: 0.5% Bupivacaine 10-20 ml			

RA-UK LOWER LIMB PAEDIATRIC PLAN A BLOCKS

FEMORAL NERVE BLOCK	PROBE POSITION	ULTRASOUND IMAGE	ULTRASOUND ANATOMY
Indications: Hip, knee, foot surgery Contraindications: None Drugs: 0.5% Bupivacaine 10-20 ml Technique: 0.5% Bupivacaine 10-20 ml Adverse effects: None Notes: 0.5% Bupivacaine 10-20 ml			
Indications: Popliteal surgery Contraindications: None Drugs: 0.5% Bupivacaine 10-20 ml Technique: 0.5% Bupivacaine 10-20 ml Adverse effects: None Notes: 0.5% Bupivacaine 10-20 ml			
Indications: Caudal surgery Contraindications: None Drugs: 0.5% Bupivacaine 10-20 ml Technique: 0.5% Bupivacaine 10-20 ml Adverse effects: None Notes: 0.5% Bupivacaine 10-20 ml			

LEARN MORE

QR Code 1

QR Code 2

Blocks Overview

Local Anesthetic Dosing:

- Max dose bupivacaine = 2.5 mg/kg (0.5 mg/kg for infants and children)
- Max dose ropivacaine = 2.5 mg/kg (0.5 mg/kg for infants and children)
- Max dose lidocaine = 3 mg/kg (0.5 mg/kg for infants and children)
- Max dose chlorbutol = 0.5 mg/kg (0.5 mg/kg for infants and children)



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AXILLARY BRACHIAL PLEXUS BLOCK

Indications: Elbow, forearm & hand surgery**Positioning:** Supine, abduct arm 90°**Depth:** 0.1–4cm**Needle:** 22G 50mm**Volume:** 0.2–0.5ml/kg 0.25%
L-Bupivacaine to max 20ml

Abbreviations

AA / AV = Axillary Artery / Vein

MN = Median Nerve

UN = Ulnar Nerve

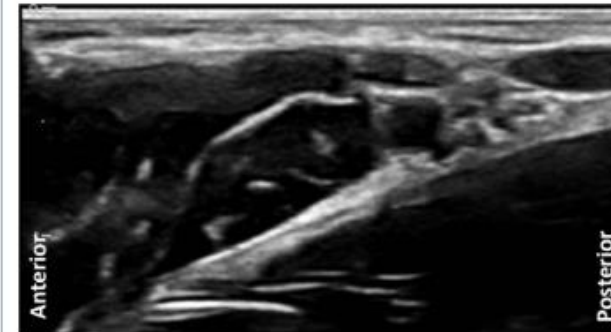
RN = Radial Nerve

McN = Musculocutaneous Nerve

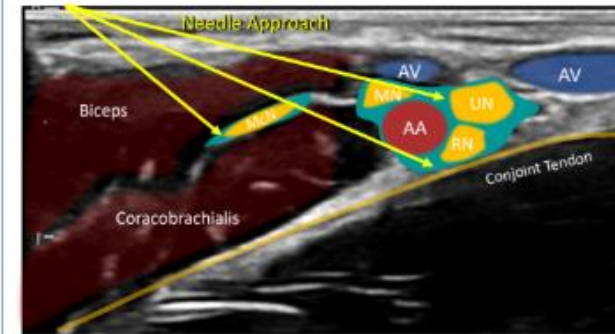
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**Probe position:** Transverse across junction of biceps and pectoralis muscles**Needle approach:** In plane, lateral to medial towards posterior aspect of AA**Best view:** AA lying on conjoint tendon. MN, UN and RN around artery. McN between biceps and coracobrachialis (or within CB)**Technique:** Local below then above AA to surround it, LA will lift AA off conjoint tendon. Separate injection to McN

5-year-old child, consent obtained for photos and images

**Spread of LA:** Around AA, isolating individual nerves**Tips:** Apply and release pressure to visualize blood vessels or use Doppler. The RN can lie behind the artery and can be harder to locate on scan. MN may appear as two separate structures. McN can be bundled with the MN

● = Local Anaesthetic Spread



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RECTUS SHEATH BLOCK

Indications: Midline/paramidline surgery**Positioning:** Supine**Depth:** 0.1–5cm**Needle:** 22G 50mm**Volume:** 0.1–0.3ml/kg 0.25%

L-Bupivacaine each side to max 20ml

**Abbreviations**

EO = External Oblique

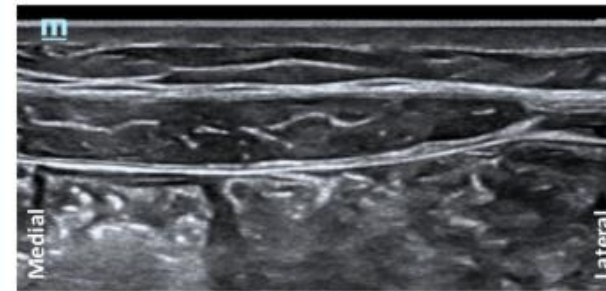
IO = Internal Oblique

TA = Transversus Abdominus

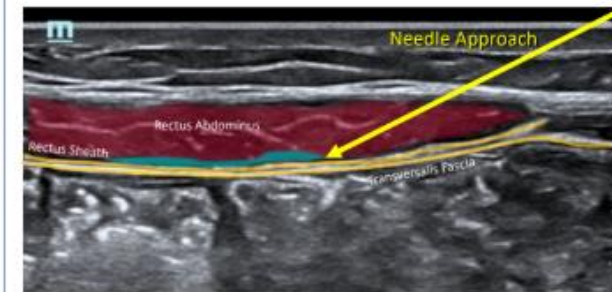
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**Probe position:** Transverse on abdomen above umbilicus**Needle approach:** In plane, lateral to medial (shallow), aim between rectus muscle and posterior rectus sheath**Best view:** Identify linea alba, then move lateral to identify rectus muscle, and EO/IO/TA beyond**Technique:** Insert needle tip posterior to rectus abdominis and above the posterior rectus sheath

5-year-old child, consent obtained for photos and images

**Spread of LA:** Observe muscle peeling off posterior rectus sheath with injection**Tips:** Intramuscular = Too Superficial. Between posterior sheath and peritoneum = Too Deep. LA can be diluted in neonates to increase volume and spread.

Large footprint linear probe can assist sufficiently lateral needle insertion for shallow trajectory.

Use doppler to identify and avoid epigastric vessels. Use longitudinal parasagittal view to assess LA spread

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LATERAL QUADRATUS LUMBORUM BLOCK

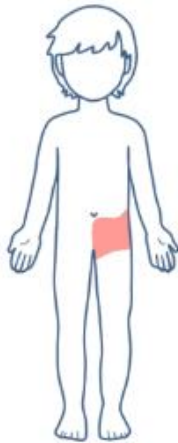
Indications: Inguinal, groin and lower abdominal wall surgery

Positioning: Lateral tilt or lateral decubitus with roll under flank

Depth: 1–5cm

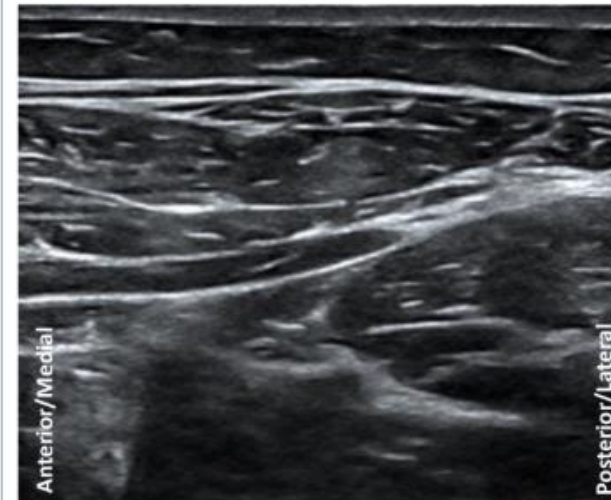
Needle: 22G 50–80mm

Volume: 0.2–0.5ml/kg 0.25% L-Bupivacaine to max 20ml



Abbreviations

EO = External Oblique
IO = Internal Oblique
TA = Transversus Abdominus
TF = Transversalis Fascia
QL = Quadratus Lumborum



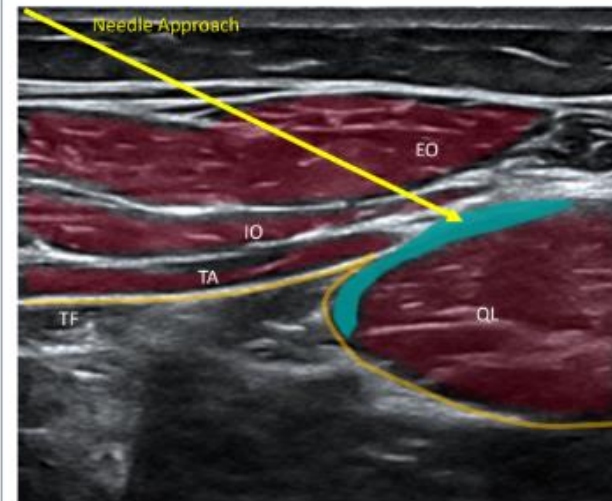
Probe position: On flank above iliac crest in axial plane

Needle approach: In plane, anterior or posterior to probe

Best view: Identify posterior aponeurosis of TA

Technique: Insert needle deep to IO aponeurosis but superficial to TA aponeurosis at the lateral margin of QL

5-year-old child, consent obtained for photos and images



Spread of LA: Needle is advanced until tip penetrates the posterior aponeurosis of IO muscle. LA is injected in the plane between the aponeuroses of IO and TA muscles at the lateral border of the QL muscle

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DORSAL PENILE NERVE BLOCK

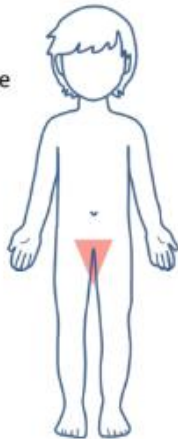
Indications: Penile surgery

Positioning: Supine, retract penis in caudal direction

Depth: 0.1–3 cm

Needle: 22G 50 mm

Volume: 0.1 ml/kg 0.25% L-Bupivacaine per side to max 5 ml each side

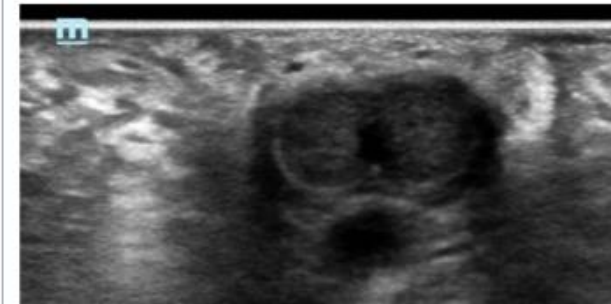
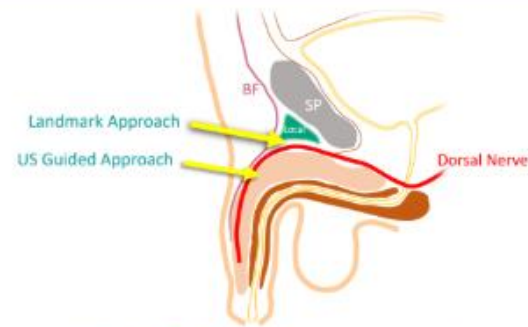


Abbreviations

BF = Buck's Fascia

SP = Symphysis Pubis

PV/PA = Penile Vein/Artery



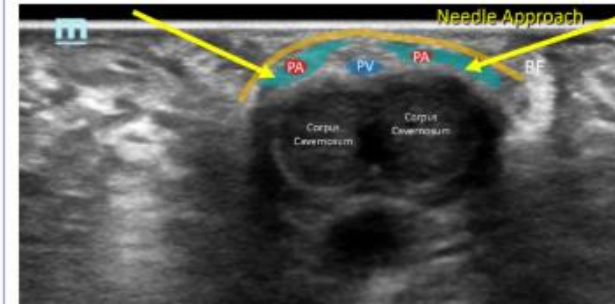
Probe position: Often landmark only or probe transverse at base of dorsal penis

Needle approach: Either side of midline (10 and 2 o'clock) distal to inferior rami pubic bone, advance in medial/caudal direction until seen to pop through fascia

Best view: Visualise Buck's fascia avoiding dorsal paired arteries and vein

Technique: Directly visualise needle passing through fascia lateral to dorsal arteries, as two separate injections in-plane

5-year-old child, consent obtained for photos and images



Spread of LA: Under Buck's fascia on either side of suspensory ligament

Tips: Ensure negative aspiration (vascular structures). Dorsal penile nerves run either side of suspensory ligament in two spaces that rarely communicate. Spread of local anaesthetic can be seen on US but will need two injections to cover both sides. The ilioinguinal and genitofemoral nerves may supply the base of the penis, subcutaneous infiltration around the base of the penis may be required to complete the block for some procedures

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2022: narrative review

FEMORAL NERVE BLOCK

Indications: Hip joint, femur, knee, anterior thigh surgery**Positioning:** Supine, leg straight and externally rotated**Depth:** 0.1–5cm**Needle:** 22G 50mm**Volume:** 0.2–0.5ml/kg 0.25% L-Bupivacaine to max 20ml

Abbreviations

FN = Femoral Nerve

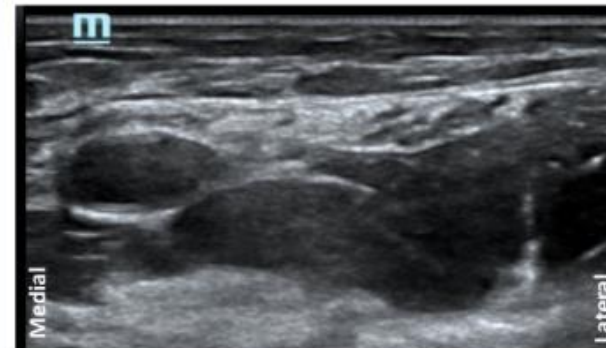
FI = Fascia Iliaca

FA = Femoral Artery

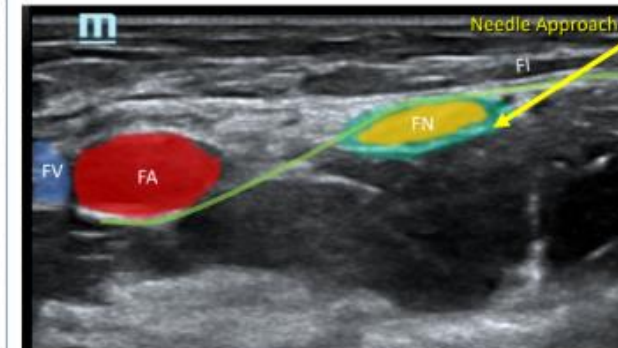


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**Probe position:** Transverse along inguinal crease**Needle approach:** In plane, lateral to medial**Best view:** Femoral artery and vein medially, FN lateral to artery under FI. FN typically triangular/oval in shape. Ensure you are proximal to the origin of the profunda branch of the femoral artery, may need to scan cephalad to inguinal crease**Technique:** Needle insertion lateral to FN, below FI

5-year-old child, consent obtained for photos and images

**Spread of LA:** Below FI, surrounding FN**Tips:** Lymphatic tissue above FI can mimic FN. Tilt probe slightly cranially/caudally to optimise FN. Pressure optimises FN but may collapse veins. If FN remains difficult to visualise, deposit LA under FI

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2022: narrative review

POPLITEAL SCIATIC BLOCK

Indications: Surgery below the knee**Positioning:** Lateral decubitus or supine with raised foot (or prone)**Depth:** 1–5cm**Needle:** 22G 50mm**Volume:** 0.2–0.3ml/kg 0.25% L-Bupivacaine to max 20ml**Abbreviations**

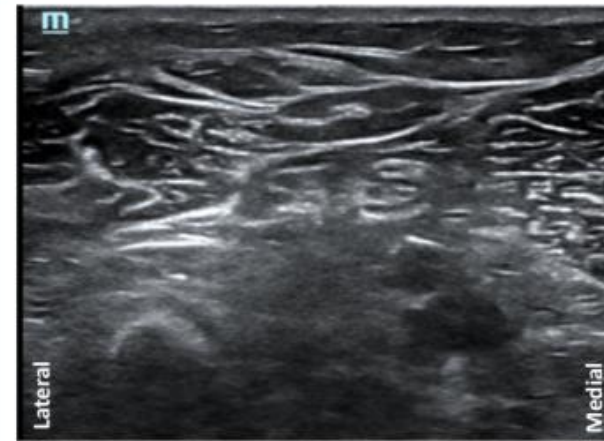
TN = Tibial Nerve

CPN = Common Peroneal Nerve

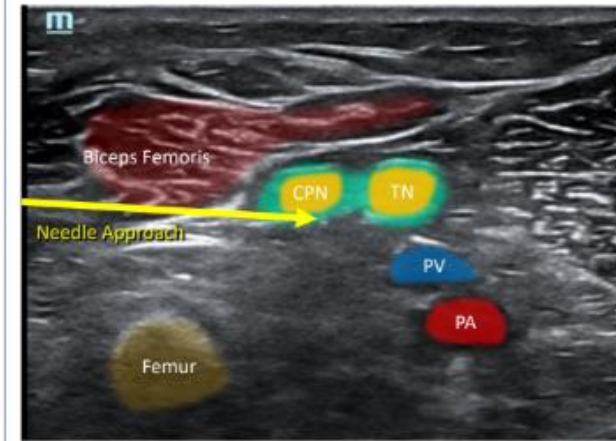
Cephalad



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**Probe position:** Transverse at popliteal fossa**Needle approach:** In plane, lateral approach at measured depth of nerve. Can be out of plane**Best view:** Identify popliteal artery and more superficial TN. Scan proximally until CPN joins TN**Technique:** Block at point where TN/CPN just separate when still within common sheath

5-year-old child, consent obtained for photos and images

**Spread of LA:** Observe separation of TN and CPN and confirm proximal spread of LA on USS**Tips:** Improve image with increased pressure and tilt towards feet. The see-saw sign can be used to visualise the nerves rocking as the foot is dorsiflexed and plantar flexed

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2022: narrative review

CAUDAL BLOCK

Indications: Procedures below the umbilicus including bilateral lower abdominal and limb

Positioning: Lateral decubitus

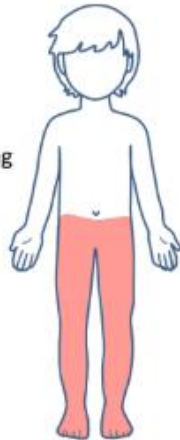
Depth: 1–5cm

Needle: 22G wingless cannula e.g. Abbocath or Caudal needle

Volume: up to 1ml/kg 0.25% L-Bupivacaine to max 15ml.

US can guide max volume by observing dermatomal level of spread of LA

Consider additions e.g. clonidine 1–2mcg/kg for increased duration



Special info:

Spread more predictable <2 years. Ultrasound reduces number of attempts and complications (e.g. vascular or subcutaneous placement)

Cephalad



Probe Position 1

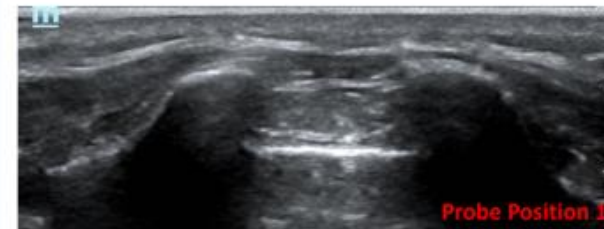
Caudad

Cephalad

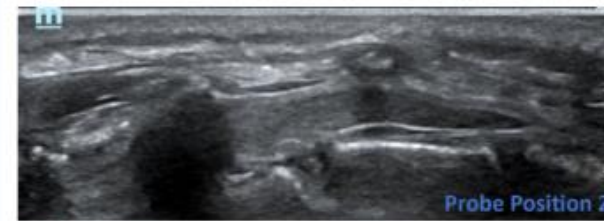


Probe Position 2

Caudad



Probe Position 1



Probe Position 2

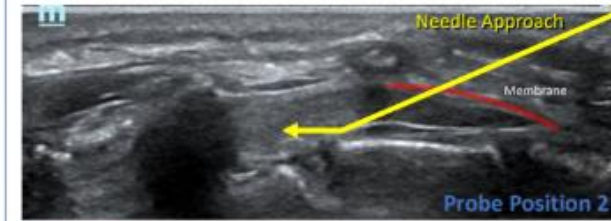
Probe position: Transverse across sacral cornua initially, then turn sagittally

Needle approach: Between cornua at 45 degrees to sacrum in cranial direction. Once through sacrococcygeal membrane, flatten the angle of the needle and advance, taking care not to go too deep

2-year-old child, consent obtained for photos and images



Probe Position 1



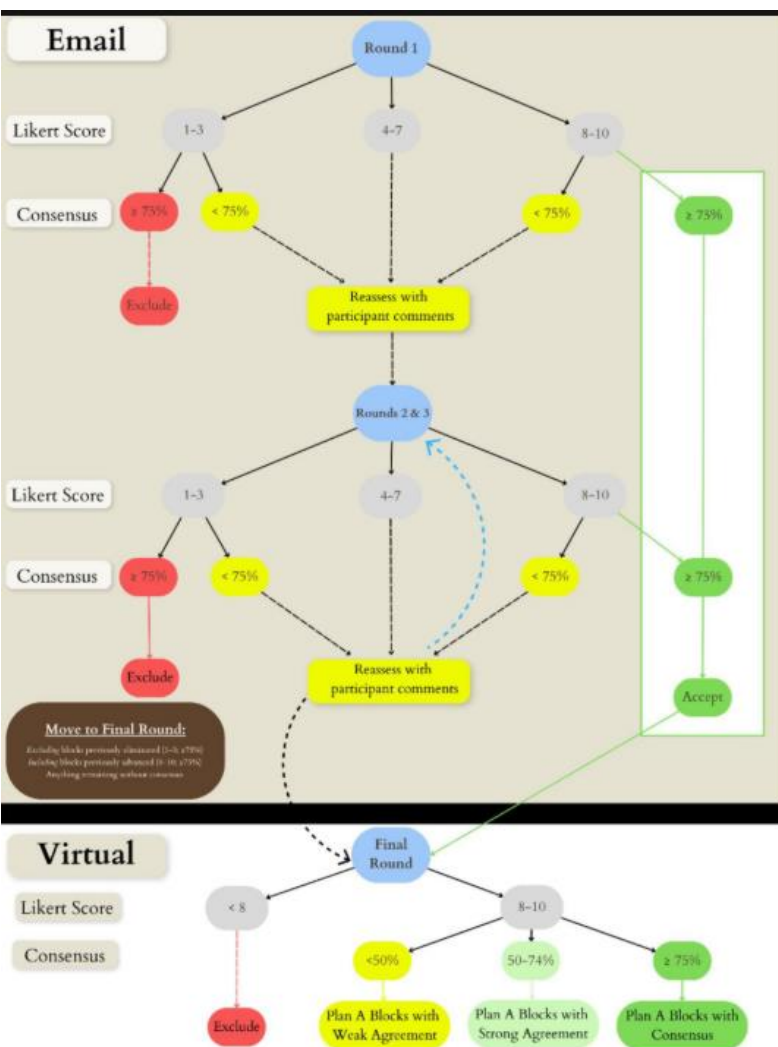
Probe Position 2

Best view: Start with probe transverse to confirm position and then rotate to sagittal for in-plane advancement and observation of injectate.

Technique: Ensure all lubricant is removed from needle insertion point. Characteristic pop through ligament. Observe injectate with 0.5–1ml saline, then once position confirmed, switch to LA and monitor height of LA spread



2025: Delphi consensus



BLOCKS VOTED ON DURING FINAL ROUND

	Importance
Interscalene Brachial Plexus Block	6.4
Infraclavicular Brachial Plexus Block	5.3
Axillary Brachial Plexus Block	7.7
Supraclavicular Brachial Plexus Block	9.2
Erector Spinae Plane Block	5.7
Paravertebral Block	3.4
Lateral Quadratus Lumborum Block	7.2
Posterior Quadratus Lumborum Block	3.3
Anterior Quadratus Lumborum Block	2.3
Penile Nerve Block	2.3
Dorsal Penile Nerve Block	7.1
Transverse Abdominus Plane Block	8.7
Ilioinguinal/Iliohypogastric Nerve Block	5.1
Rectus Sheath Block	8.8
Thoracic Epidural (USG)	2.9
Lumbar Epidural (USG)	2.9
Caudal (USG)	5.2
Spinal (L)	6.8
Lumbar Epidural (L)	7.0
Thoracic Epidural (L)	1.9
Caudal (L)	9.4
Suprainguinal Fascia Iliaca Block	8.0
Adductor Canal Block	8.9
Femoral Nerve Block	9.5
Sciatic Nerve Block (Popliteal)	9.5

Figure 6 Regional anesthetic techniques evaluated in the final virtual voting round. USG, ultrasound.

Baby steps to mastery: building blocks for novices in pediatric regional anesthesia

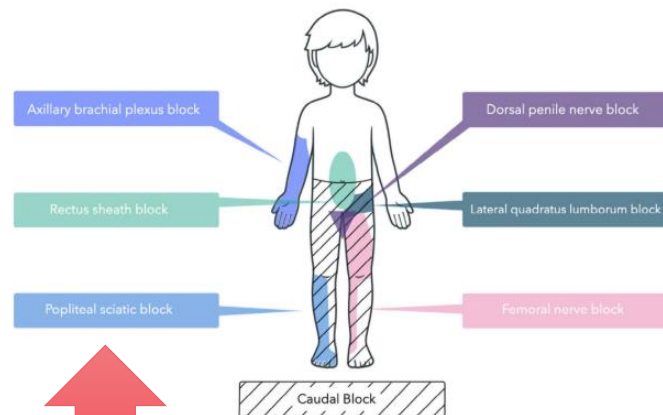
John G Hagen ¹, Deepa Kattail ², Natalie Barnett ³, Cassandra Hoffmann, ⁵ Michele Nichols, ⁶ Angela D Ste ⁷, Claude Ecoffey, ⁸ Giorgio Ivani ⁹, Tripali Kundu, ¹⁰ P ¹¹, Annabel Pearson, ¹² Robert Wilder, ¹³ Debabrata Banik ¹⁴, Cheryl S L Chooi ¹⁵, Nandini Dave ¹⁶, Palanich ¹⁷, Kathryn S Handlogten ¹⁸, Stefan Heschl ¹⁹, James ²⁰, J Matthew Kynes ²¹, Gabriela Lopez, ²³ Amjad Maniar ²⁴, Vrushali Ponde, ²⁶ Ban C H Tsui ²⁷, Lloyd R Turbitt, ²⁸ Santhan



	Society Endorsement		
	Approve	Abstain	Disapprove
Supraclavicular Brachial Plexus Block	83%	9%	9%
Transverse Abdominus Plane Block	92%	0%	9%
Rectus Sheath Block	100%	0%	0%
Caudal (L)	83%	0%	18%
Suprainguinal Fascia Iliaca Block	92%	0%	9%
Femoral Nerve Block	100%	0%	0%
Adductor Canal Block	83%	9%	9%
Sciatic Nerve Block (Popliteal)	100%	0%	0%



2025: Delphi consensus



OUR CORE BLOCKS

	Difficulty	Importance
Supraclavicular Brachial Plexus Block	4.4	9.2
Transverse Abdominus Plane Block	2.9	8.7
Rectus Sheath Block	2.8	8.8
Caudal (L)	2.8	9.4
Suprainguinal Fascia Iliaca Block	4.5	8.0
Femoral Nerve Block	3.0	9.5
Adductor Canal Block	3.5	8.9
Sciatic Nerve Block (Popliteal)	3.8	9.5

Baby steps to mastery: building blocks for novices in pediatric regional anesthesia

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The landmark-based caudal block was extensively debated, with panelists weighing its historical role, reliability, and accessibility—particularly in resource-limited settings—against concerns over safety and the increasing use of ultrasound. Ultimately, it was included for its widespread use, adaptability, and ease of teaching, with panelists emphasizing its continued relevance in pediatric regional anesthesia. However, society feedback showed the highest disapproval rate (18%) (figure 8), highlighting a divide between those advocating for its continued use and those favoring a transition to ultrasound guidance (figure 9).



Kontroverze

Kde nedošlo ke shodě a proč?

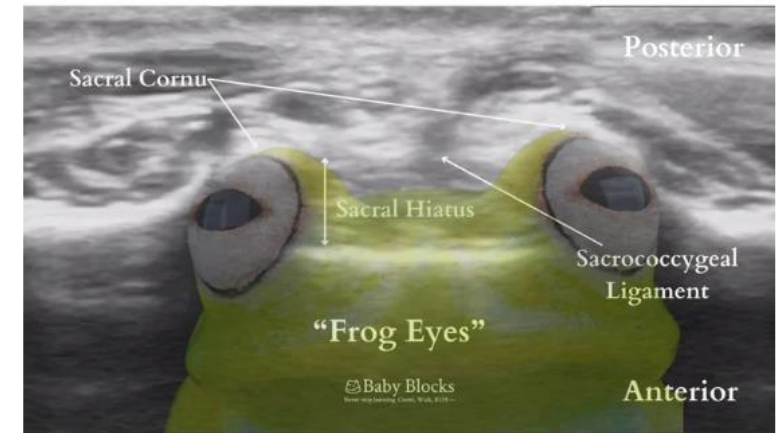
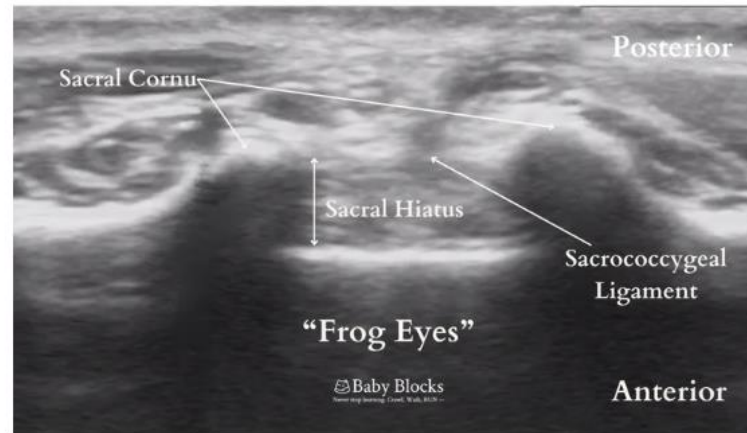
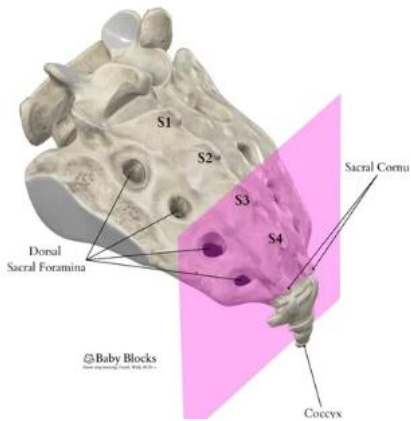
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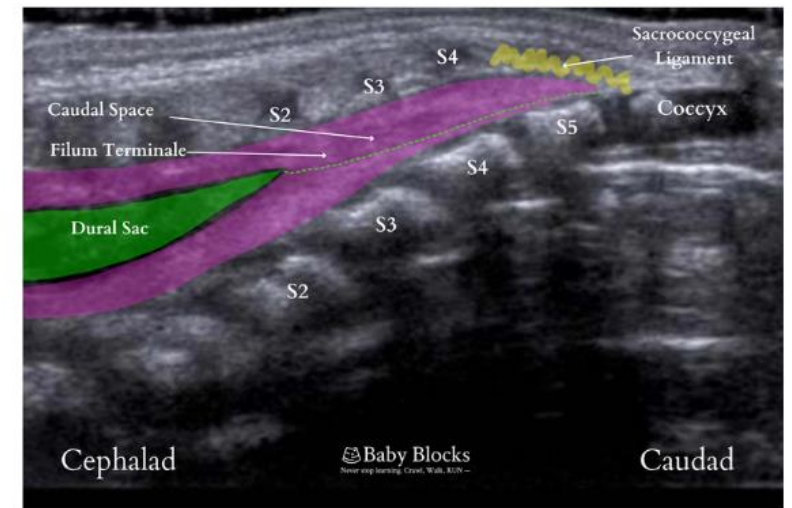
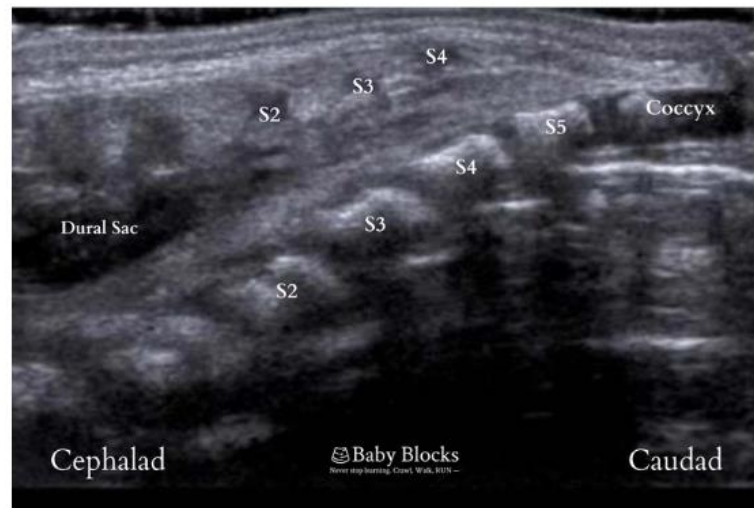
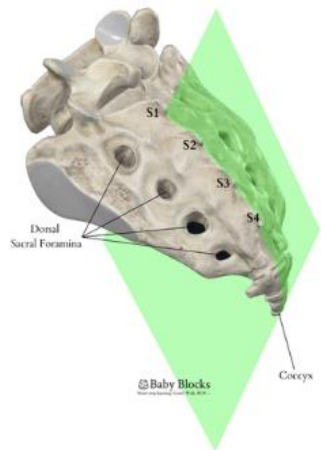
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ANAESTHESIOLOGY
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Kaudální blokáda

Transverse (Short Axis)



Sagittal (Long Axis)



Blokáda plexus brachialis

Table 1 Proposed basic ultrasound-guided regional anaesthetic technique

Anatomical region	Plan A: basic blocks
Upper limb	
- Below shoulder	Axillary brachial plexus
- Below elbow	
Lower limb	
- Hip	Femoral*

OUR CORE BLOCKS

	Difficulty	Importance
Supraclavicular Brachial Plexus Block	4.4	9.2
Transverse Abdominus Plane Block	2.9	8.7
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Adductor Canal Block	3.5	8.9
Sciatic Nerve Block (Popliteal)	3.8	9.5

COMPARING RISKS IN BRACHIAL PLEXUS BLOCKS

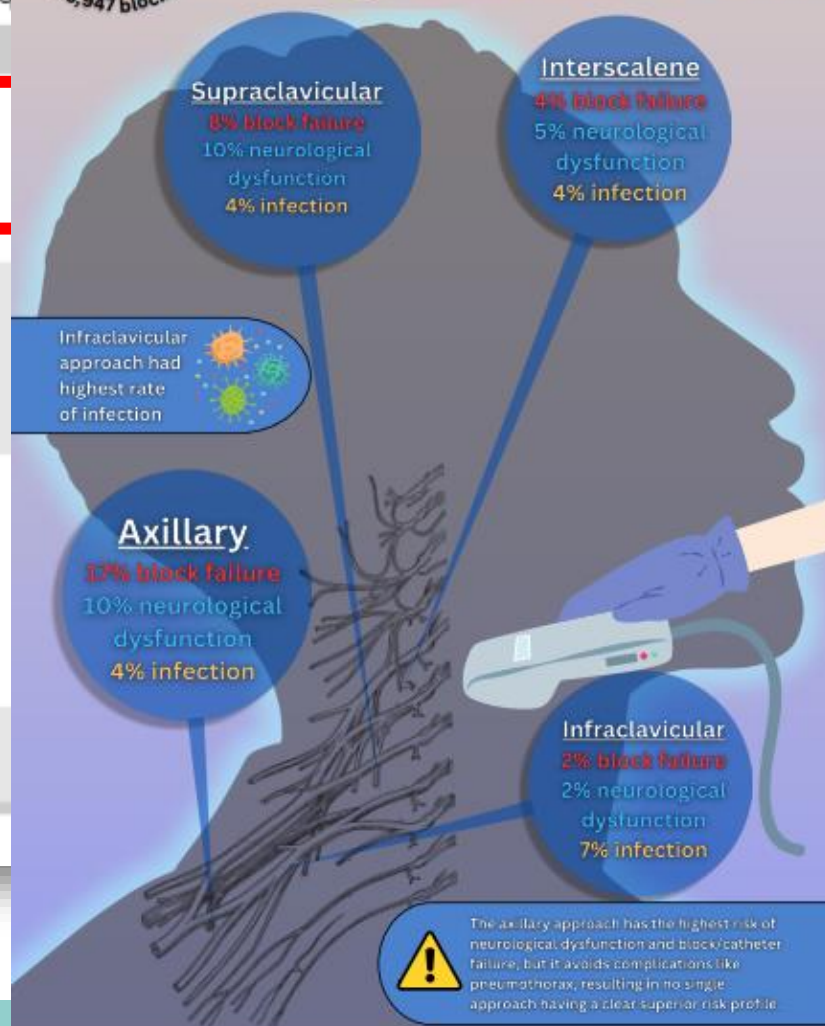
WHAT YOU NEED TO KNOW



Axillary approach had highest risk of:

Block Failure + Catheter Failure

Neurological Dysfunction



Blokáda lumbálního plexu

Anatomical region	Plan A: basic blocks	Plan B/C/D: advanced blocks
Upper limb		
- Below shoulder	Axillary brachial plexus	Supraclavicular brachial plexus*; infraclavicular brachial plexus*
- Below elbow		Forearm blocks
Lower limb		
- Hip	Femoral*	Fascia iliaca*
- Knee		Adductor canal*
- Foot and ankle	Popliteal sciatic*	Ankle

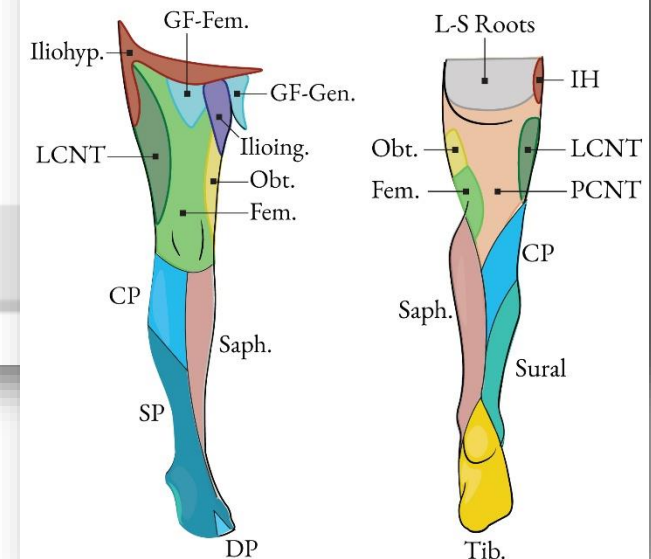
OUR CORE BLOCKS

	Difficulty	Importance
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Transverse Abdominus Plane Block	2.9	8.7
Rectus Sheath Block	2.8	8.8
Caudal (L)	2.8	9.4
Suprainguinal Fascia Iliaca Block	4.5	8.0
Femoral Nerve Block	3.0	9.5
Adductor Canal Block	3.5	8.9
Sciatic Nerve Block (Popliteal)	3.8	9.5

Rectus sheath*
Lateral quadratus lumborum*;
caudal; dorsal penile nerve

technique.

Lower Extremity Sensory Map



Blokáda břišní stěny

Anatomical region

Upper limb

- Below shoulder
- Below elbow

Lower limb

- Hip
- Knee
- Foot and ankle

Trunk

- Chest wall
- Abdominal midline, inguinal/groin

Head and neck

- Ear

Plan A: basic

Axillary brach

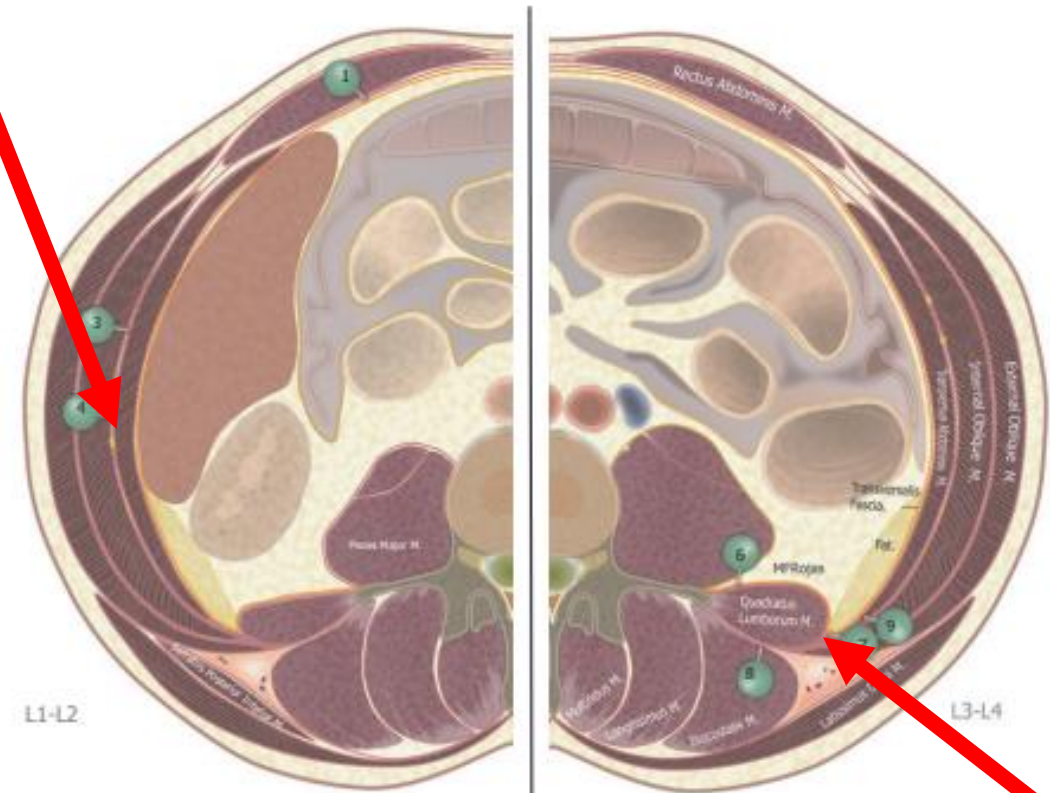
Femoral*

Popliteal scia

Rectus sheath*

Lateral quadratus lumborum*; caudal; dorsal penile nerve

*Appropriate for catheter as an advanced technique.



OUR CORE E

Supraclavicular Brachial Plexus Block

Transverse Abdominus Plane Block

Rectus Sheath Block

Caudal (L)

Suprainguinal Fascia Iliaca Block

Femoral Nerve Block

Adductor Canal Block

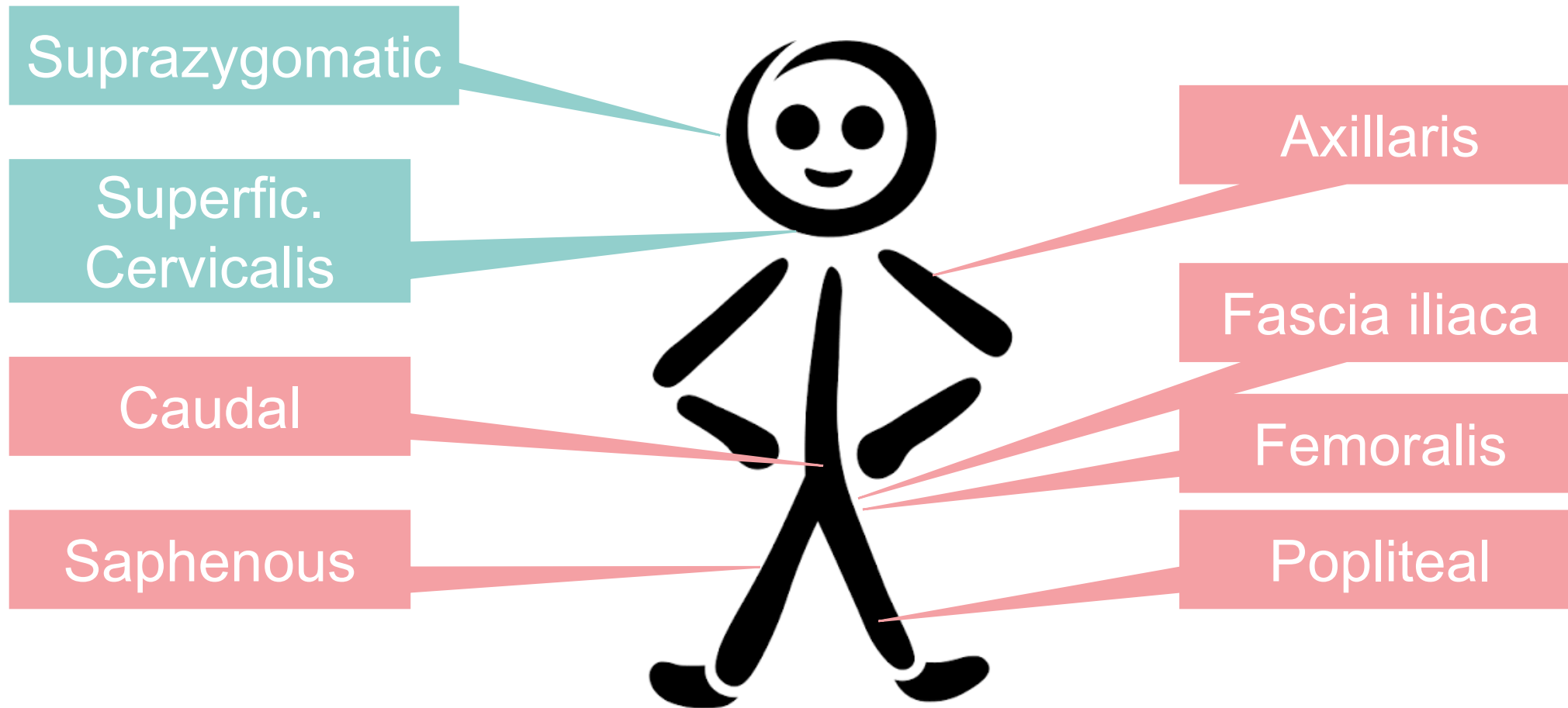
Sciatic Nerve Block (Popliteal)

Anterior quadratus lumborum*
Pudendal nerve block

Superficial cervical plexus



Přizpůsobení Plan A pro konkrétní pracoviště



Vzdělávání

*„Mistrovství přichází opakováním,
zvědavostí a praxí v reálném světě.“*

US abcd.org

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E-learning



The INPLANE app PAEDIATRIC REGIONAL ANAESTHESIA

A comprehensive guide to essential blocks



iOS



Android



Workshopy UZ regionální anestezie



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Základní škola ultrazvuku u dětí

📅 3. května 2027 | 8:00 – 17:00

[Přidat do kalendáře](#) ▼

📍 Simulační centrum LF MU

[Zobrazit mapu](#)

📝 Nutná registrace do 26. dubna 2027 23:59
Kapacita naplněna

Přihlásit se





XVIII. KONFERENCE AKUTNĚ.CZ

21. 11. 2026

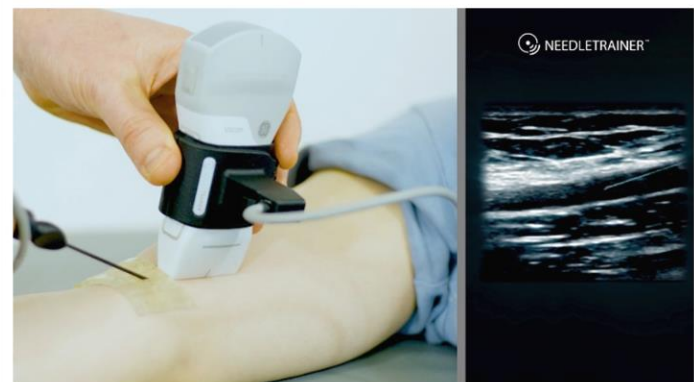
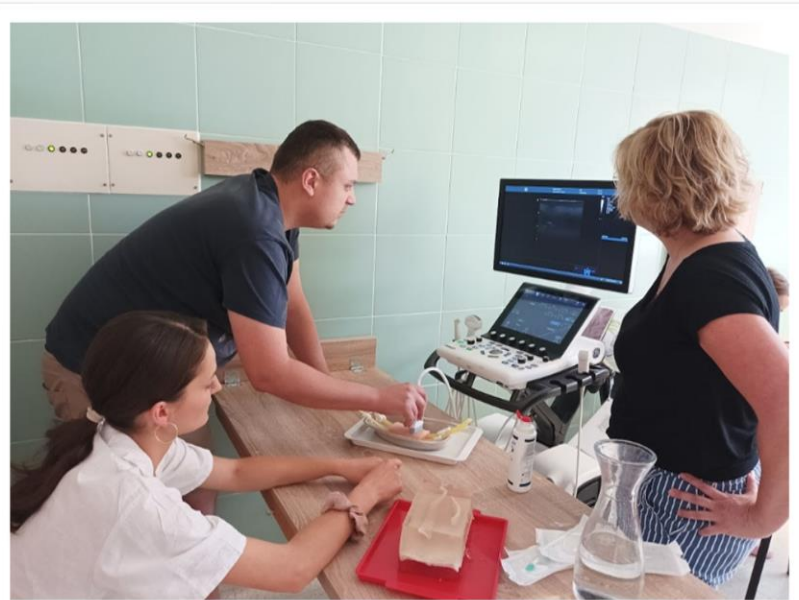
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BRNO
UNIVERZITNÍ KAMPUS BOHUNICE



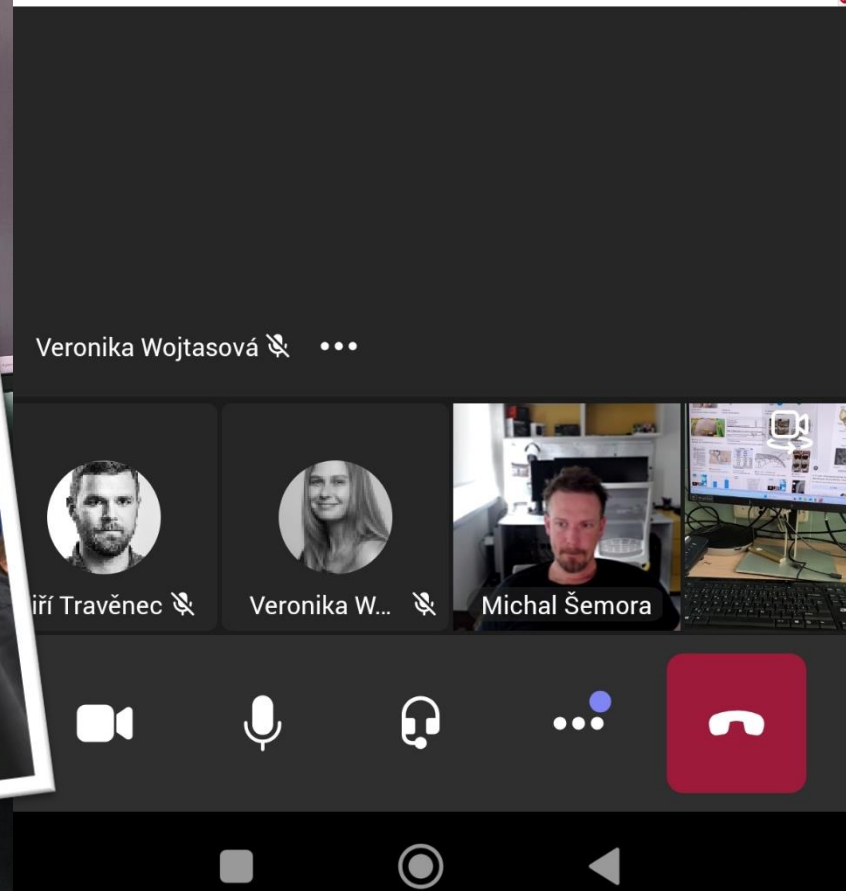
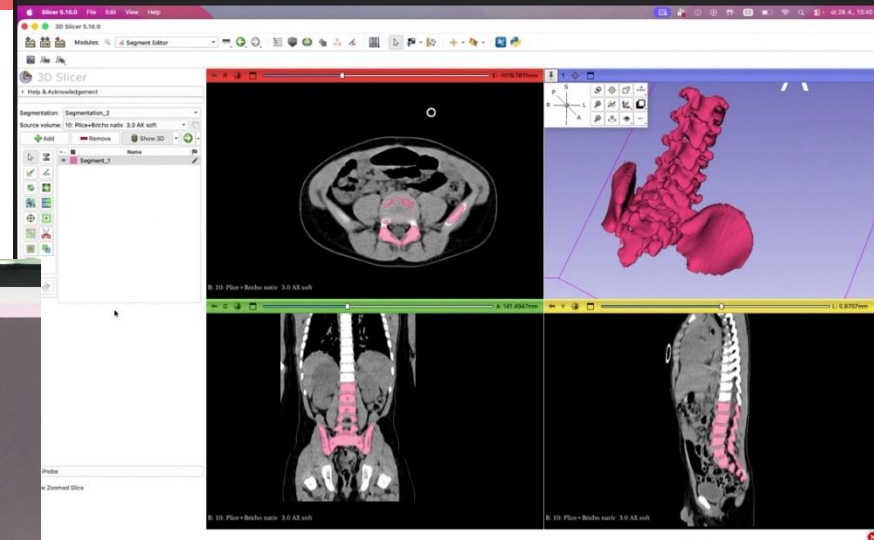
an



Kolegiální výpomoc



3D model pro kaudální punkci



(Dětské) Plan A blokády pro všechny (anesteziology)!

Děkuji za pozornost!

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