

# What's new in Regional Anaesthesia?

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Dr Harry Murgatroyd  
Consultant Anaesthetist  
York Hospital

5<sup>th</sup> February 2020



Association  
of Anaesthetists

## What's new in RA?

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- Plan A blocks  
    'a few blocks for the many'
- Erector Spinae Plane blocks
- Blocks for the hip
- P-POCUS

you've got an ultrasound machine,  
you may as well use it



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# Plan A



- Interscalene
- Axillary brachial plexus
- Femoral
- Adductor canal
- Popliteal Sciatic
- Erector spinae plane
- Rectus sheath



# Plan A



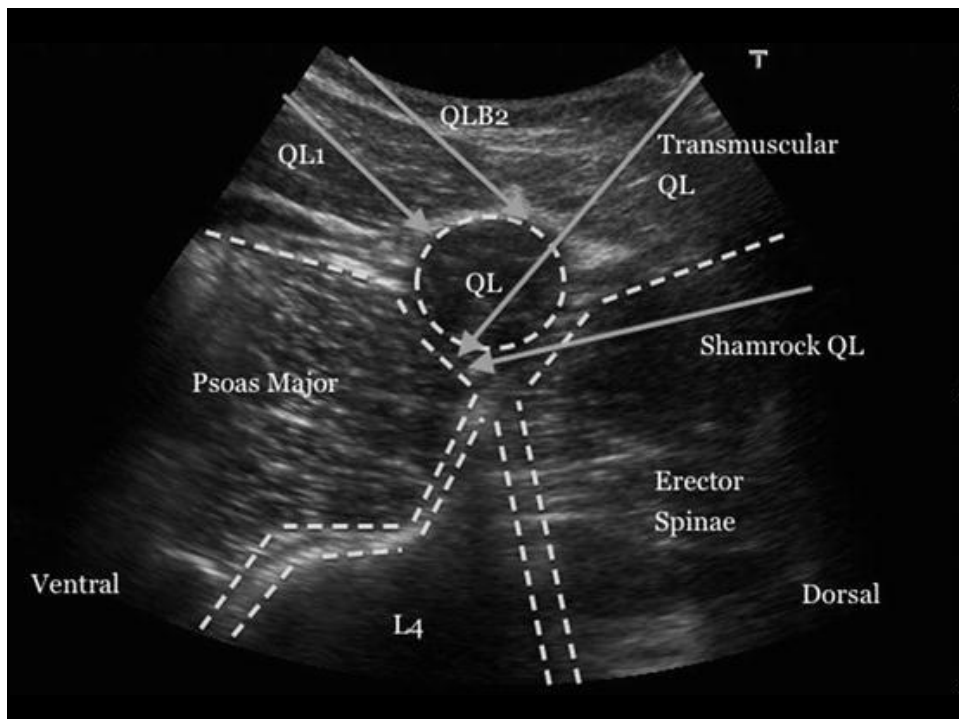
- A move away from complexity
- Complexity bias
  - complicated = better
- Novelty bias
  - initial publication
  - rush of case reports / small studies



# Plan A



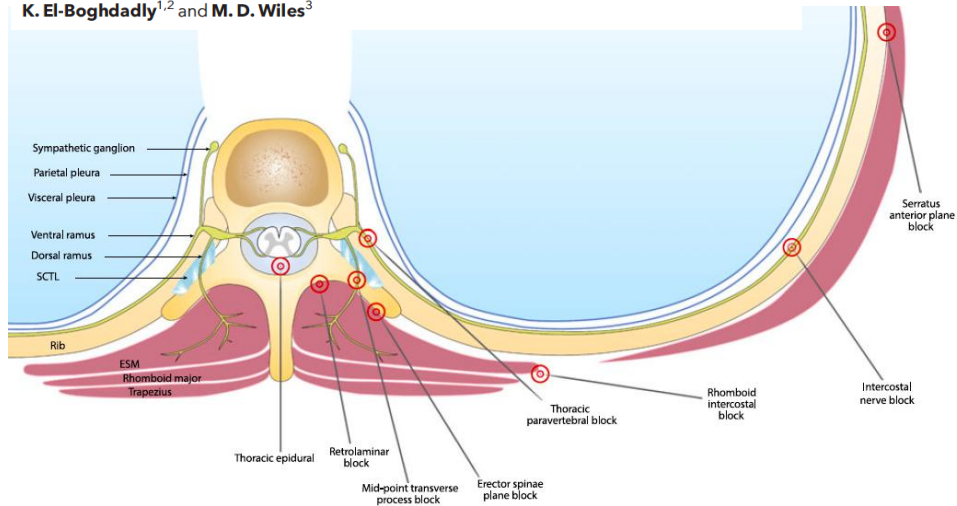
- Research is great...  
... but are we putting people off using RA by making it intimidating and complicated?



## Editorial

## Regional anaesthesia for rib fractures: too many choices, too little evidence

K. El-Boghdady<sup>1,2</sup> and M. D. Wiles<sup>3</sup>



# Plan A

RA-UK  
Regional Anaesthesia United Kingdom  
Approved

- Is 'complicated' better?
  - Little research
    - 'Enthusiasm based medicine'
    - 'placing disproportionately high value onto new, unproven, under-researched and under-validated techniques'

# Plan A



- We already have blocks that are proven to be effective
- Should we try to get the most out of those first?



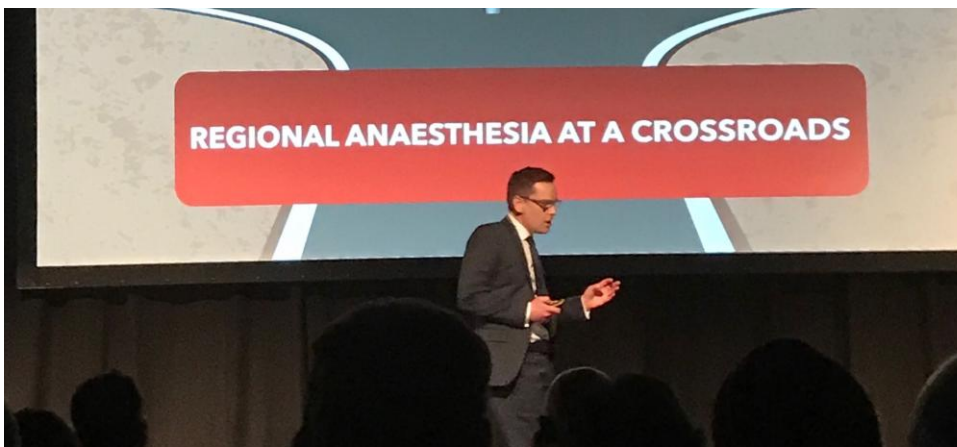
Anaesthesia 2019

doi:10.1111/anae.14768

## Editorial

### Future directions in regional anaesthesia: not just for the cognoscenti

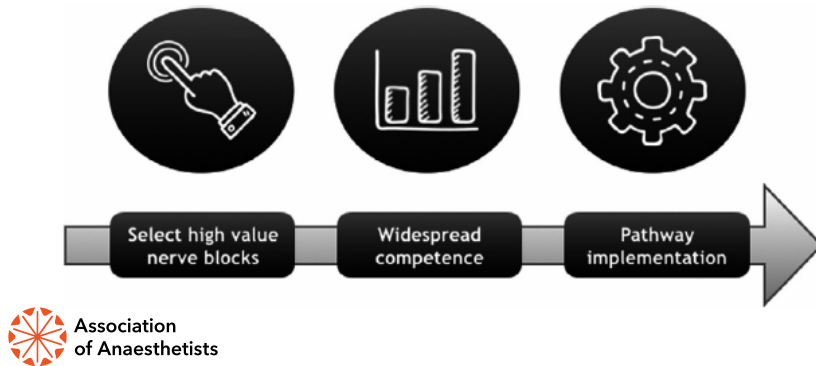
L. R. Turbitt,<sup>1</sup> E. R. Mariano<sup>2</sup> and K. El-Boghdady<sup>3</sup>



## Editorial

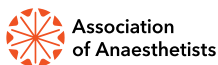
## Future directions in regional anaesthesia: not just for the cognoscenti

L. R. Turbitt,<sup>1</sup> E. R. Mariano<sup>2</sup> and K. El-Boghdady<sup>3</sup>



## 'High value blocks'

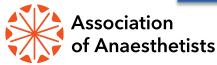
- Small number
- Wide variety of surgical procedures
- Balance
  - ease of successful placement
  - potential complications
  - effectiveness



Ki Jinn Chin:  
Regional anaesthesia for the people;  
simple, safe and good *enough*

## 'High value blocks'

Anatomical location	Plan A (basic blocks)	Plan B/C/D (advanced blocks)
Upper limb		
Shoulder	Interscalene brachial plexus block [14]	Superior trunk block, combined axillary and suprascapular nerve blocks
Below shoulder	Axillary brachial plexus block [15]	Infraclavicular block, supraclavicular block
Lower limb		
Hip	Femoral nerve block [16]	Fascia iliaca block, lumbar plexus block
Knee	Adductor canal block <sup>a</sup> [17]	Femoral nerve block ± IPACK block
Foot and ankle	Popliteal sciatic block [18]	Ankle blocks, proximal sciatic nerve block
Trunk		
Chest wall	Erector spinae plane block [19]	Paravertebral block, serratus plane block, PECS blocks
Abdominal midline	Rectus sheath block [20]	Quadratus lumborum blocks



## Widespread competence

### Resources

Courses

Books

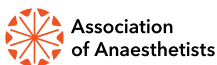
Websites

RAUK

Simulators

### Maintenance of competence

Smaller number techniques



# Widespread competence

RCOA 2010 curriculum - 'core clinical learning outcomes'

	Basic	<b>spinal + lumbar epidural</b> demonstrates simple nerve blocks
	Intermediate	<b>thoracic epidural and/or CSE</b> major nerve block; upper (1), lower (1) minor nerve block (unspec number)
	Higher	<b>upper and lower limb blocks with distant</b>
<b>supervision</b>		General Duties
		9 out of 14 units
epidural		'Regional' not essential



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# Promote implementation

Remove barriers

Promote value

post-op patient outcome measures  
acute  
long term

turnaround time / efficiency

length of stay

Develop specific pathways

adductor canal blocks and ERPs for TKRs



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Editorial

# Future directions in regional anaesthesia: not just for the cognoscenti

L. R. Turbitt,<sup>1</sup> E. R. Mariano<sup>2</sup> and K. El-Boghdadly<sup>3</sup>

~~‘Many blocks for the few’~~

‘A few blocks for the many’

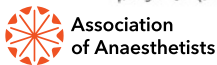
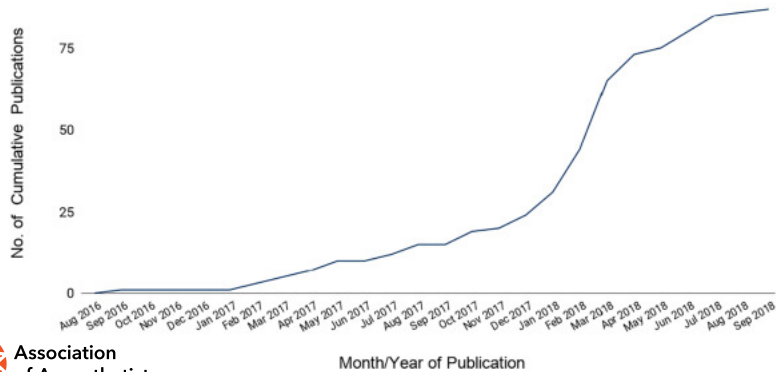


## CHRONIC AND INTERVENTIONAL PAIN

### BRIEF TECHNICAL REPORT

# The Erector Spinae Plane Block *A Novel Analgesic Technique in Thoracic Neuropathic Pain*

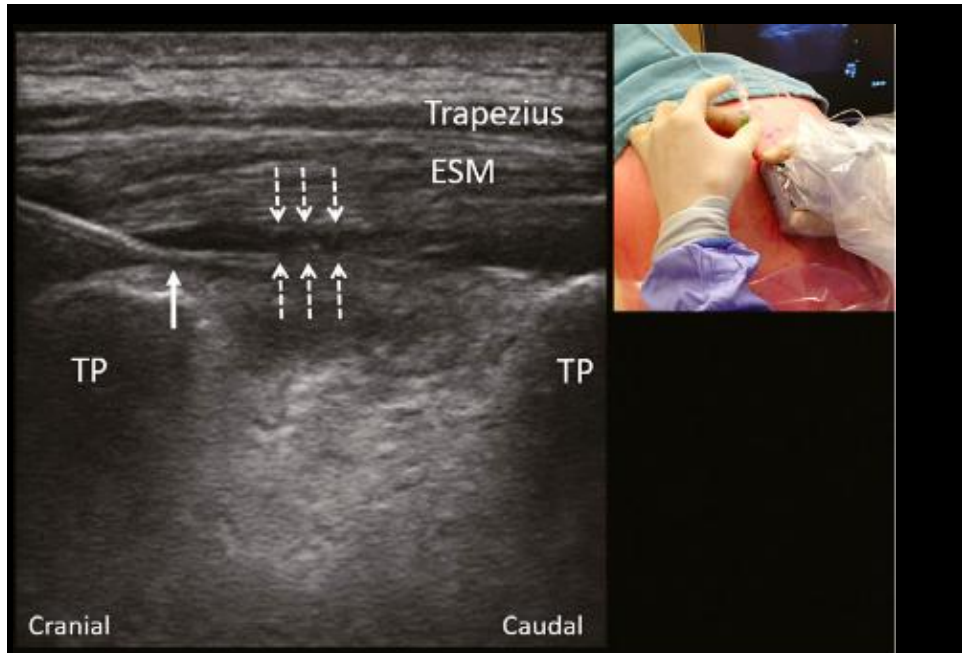
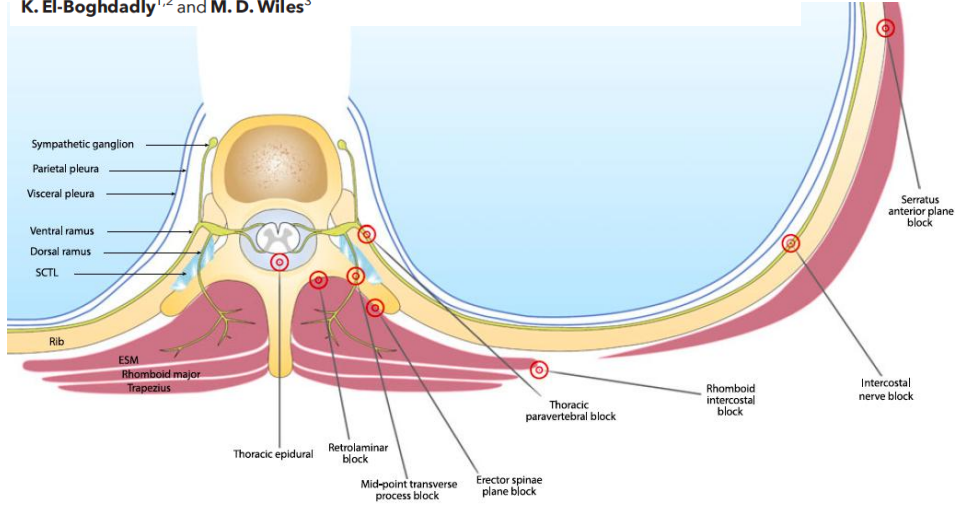
*Mauricio Forero, MD, FIPP\* Sanjib D. Adhikary, MD,† Hector Lopez, MD,‡  
Calvin Tsui, BMSc,§ and Ki Jinn Chin, MBBS (Hons), MMed, FRCPC||*



Editorial

### Regional anaesthesia for rib fractures: too many choices, too little evidence

K. El-Boghdady<sup>1,2</sup> and M. D. Wiles<sup>3</sup>

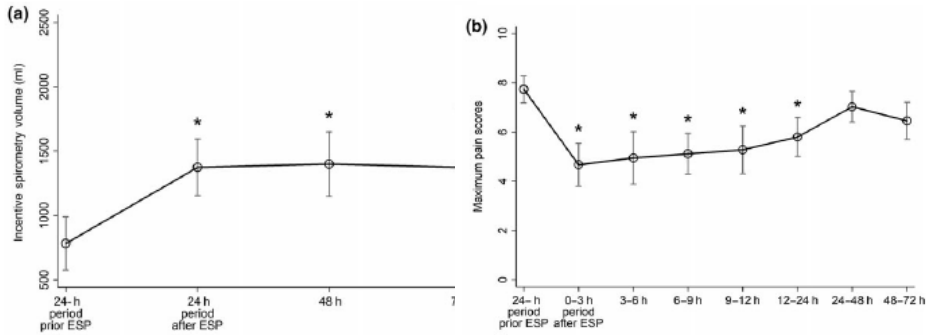


Chin et al. | Erector spinae plane block for ventral hernia repair

Original Article

**The effect of erector spinae plane block on respiratory and analgesic outcomes in multiple rib fractures: a retrospective cohort study\***

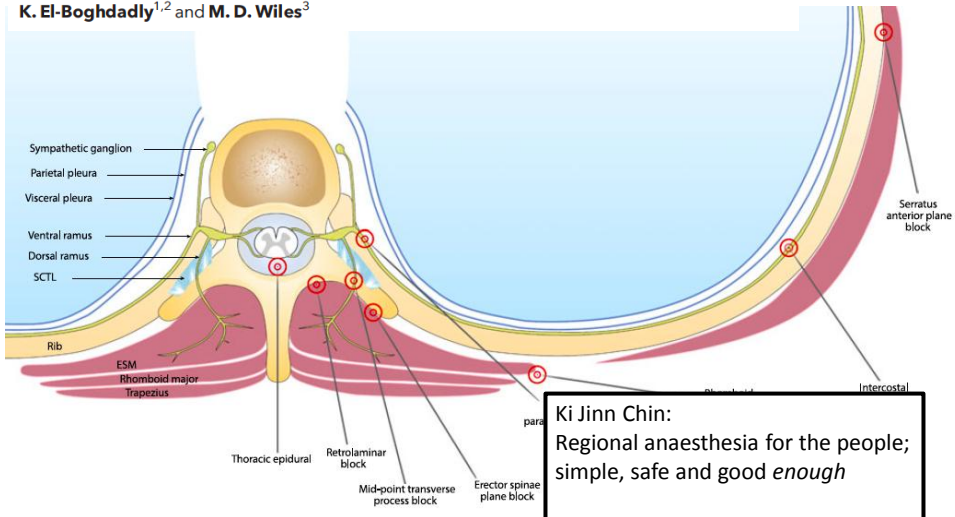
S. D. Adhikary,<sup>1</sup> W. M. Liu,<sup>2</sup> E. Fuller,<sup>3</sup> H. Cruz-Eng<sup>4</sup> and K. J. Chin<sup>5</sup>



Editorial

**Regional anaesthesia for rib fractures: too many choices, too little evidence**

K. El-Boghdady<sup>1,2</sup> and M. D. Wiles<sup>3</sup>



# Other uses for the ESP block

Original Contribution

Erector spinae plane block and thoracic paravertebral block for breast surgery compared to IV-morphine: A randomized controlled trial

Yavuz Gürkan, Can Aksu<sup>1</sup>, Alparslan Kuş, Ufuk H. Yörükoğlu




Department of Anesthesiology and Reanimation, Kocaeli University Hospital, 41380 Kocaeli, Turkey

*Journal of Clinical Anesthesia* 59 (2020) 84–88

**Mastectomy breast surgery**  
PVB = ESP > no block

Original research

Erector spinae plane versus paravertebral nerve blocks for postoperative analgesia after breast surgery: a randomized clinical trial

Matthew W Swisher <sup>1</sup>, Anne M Wallace,<sup>2</sup> Jacklynn F Sztain,<sup>1</sup> Engy T Said,<sup>1</sup> Bahareh Khatibi,<sup>1</sup> Maryann Abanobi,<sup>1</sup> John J Finneran IV,<sup>1</sup> Rodney A Gabriel <sup>1,3</sup>, Wendy Abramson,<sup>1</sup> Sarah L Blair,<sup>2</sup> Ava Hosseini,<sup>2</sup> Marek K Dobke,<sup>2</sup> Michael C Donohue,<sup>4</sup> Brian M Ilfeld <sup>1</sup>

Swisher MW, et al. *Reg Anesth Pain Med* 2020;0:1–7. doi:10.1136/rapm-2019-101013

**Non-mastectomy breast surgery**  
PVB > ESP  
No control

# Blocks for the Hip

- Fractured NOF
  - Hipfractureanaesthesia.com
  - FIB
    - Positioning for spinal
    - Postop analgesia / opiate sparing
    - POCD
- The problem with FIBs...
  - Only a 3.4/10 drop in pain score
  - Innervation of anterior hip capsule
    - Femoral n
    - Obturator n
    - Anterior obturator n

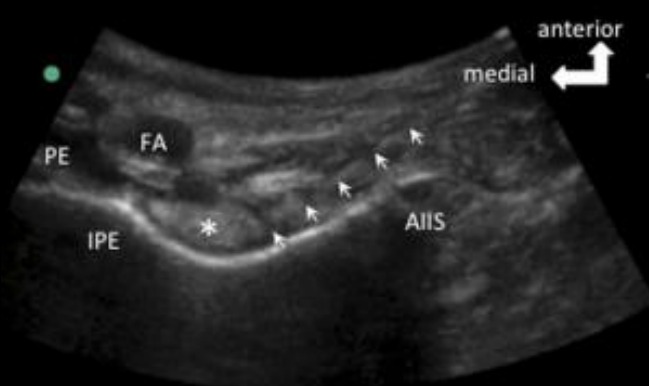


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REGIONAL ANESTHESIA AND ACUTE PAIN  
BRIEF TECHNICAL REPORT

## Pericapsular Nerve Group (PENG) Block for Hip Fracture

*Laura Girón-Arango, MD,\*† Philip W.H. Peng, MBBS, FRCPC, Founder (Pain Med),\*†  
Ki Jinn Chin, MBBS, MMed, FANZCA, FAMS, FRCPC,\*†  
Richard Brull, MD, FRCPC,\* and Anahi Perlas, MD, FRCPC\*†*



*Regional Anesthesia and Pain Medicine • Volume 43, Number 8, November 2018*

## If it works for fractures... ...what about THRs?

- Different patients
- Different goals
- LAI standard
- LAI vs FIB
  - Comparable analgesia
  - Quadriceps weakness
- LAI vs PENG / LCNT?
  - Less quadriceps weakness?

Original article

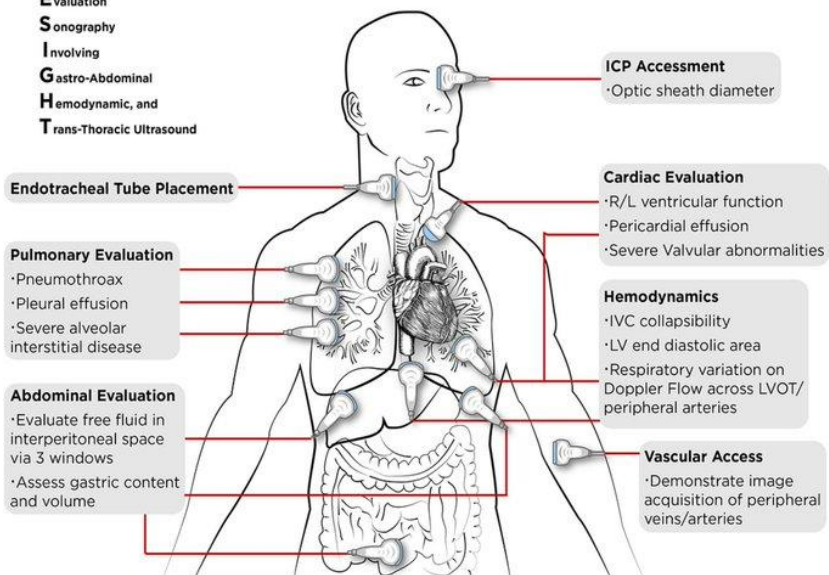
Ultrasound-guided suprainguinal fascia iliaca compartment block versus periarticular infiltration for pain management after total hip arthroplasty: a randomized controlled trial

Irina Gasanova,<sup>1</sup> John C Alexander,<sup>1</sup> Kenneth Estrera,<sup>2</sup> Joel Wells,<sup>2</sup> Mary Sunna,<sup>3</sup> Abu Minhajuddin,<sup>4</sup> Girish P Joshi<sup>1</sup>



## F.O.R.E.S.I.G.H.T. Comprehensive Perioperative Ultrasound Examination

**F**ocused  
**P**er**O**perative  
**R**isk  
**E**valuation  
**S**onography  
**I**nvolving  
**G**astro-Abdominal  
**H**emodynamic, and  
**T**rans-Thoracic Ultrasound



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REGIONAL ANESTHESIA AND ACUTE PAIN

REVIEW ARTICLE

**Focused Cardiac Ultrasound for the Regional Anesthesiologist  
and Pain Specialist**

*Stephen C. Haskins, MD,\* Christopher Y. Tanaka, MD,† Jan Boublik, MD, PhD,‡  
Christopher L. Wu, MD,§ and Erik Sloth, MD, PhD||\*\**

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REGIONAL ANESTHESIA AND ACUTE PAIN

REVIEW ARTICLE

**Lung Ultrasound for the Regional Anesthesiologist  
and Acute Pain Specialist**

*Stephen C. Haskins, MD,\* Ban C. Tsui, MSc, MD,† Jemiel A. Nejim, MD,\*  
Christopher L. Wu, MD,‡ and Jan Boublik, MD, PhD†*

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REGIONAL ANESTHESIA AND ACUTE PAIN

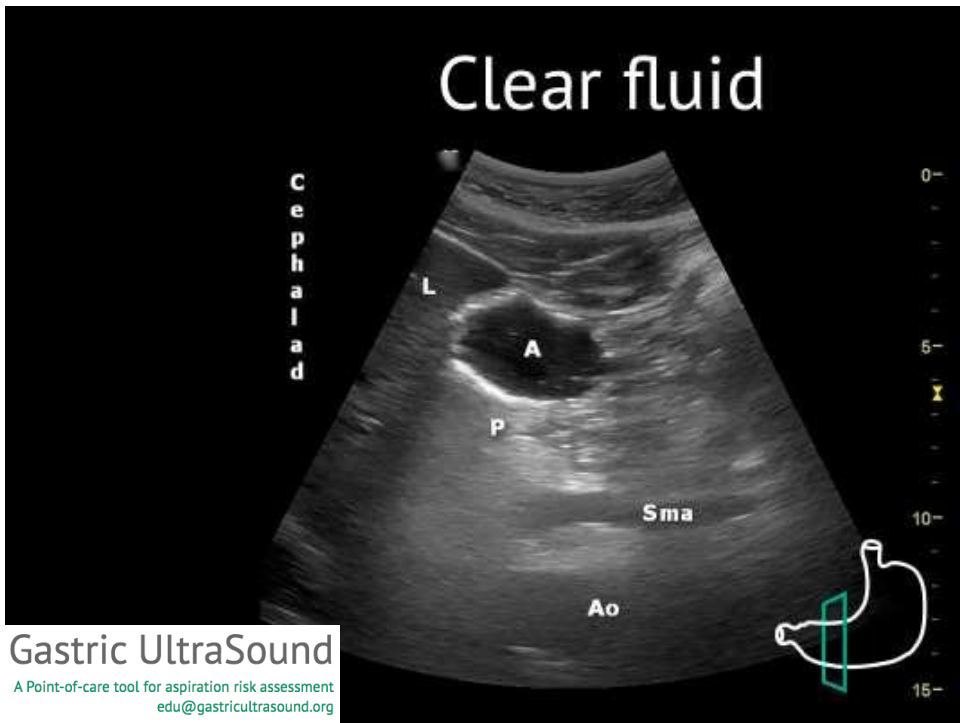
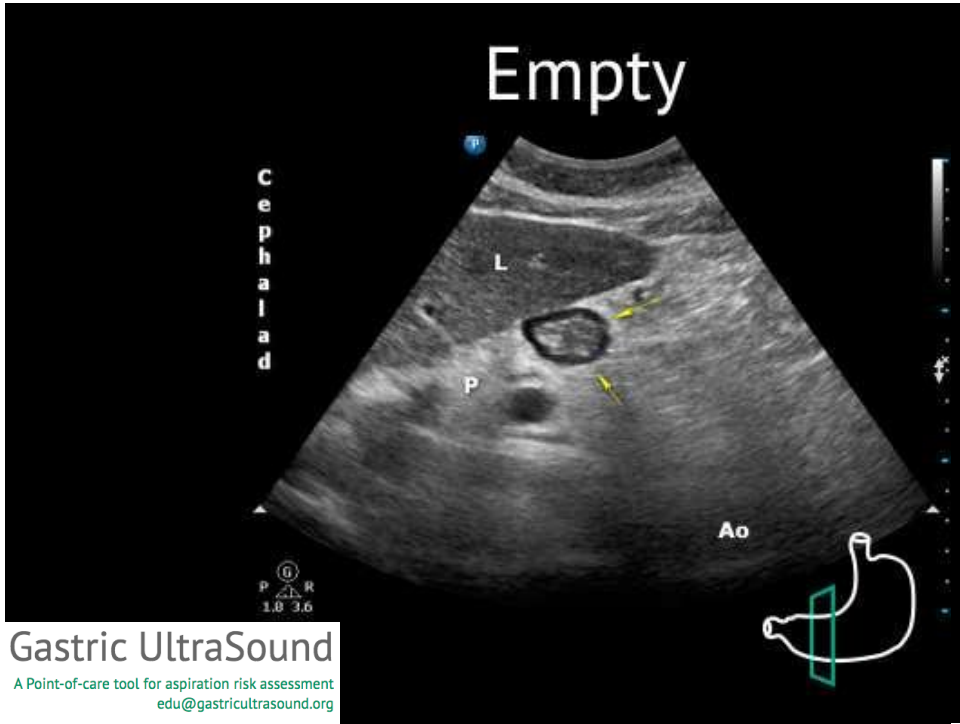
REVIEW ARTICLE

**Gastric Ultrasound for the Regional Anesthesiologist  
and Pain Specialist**

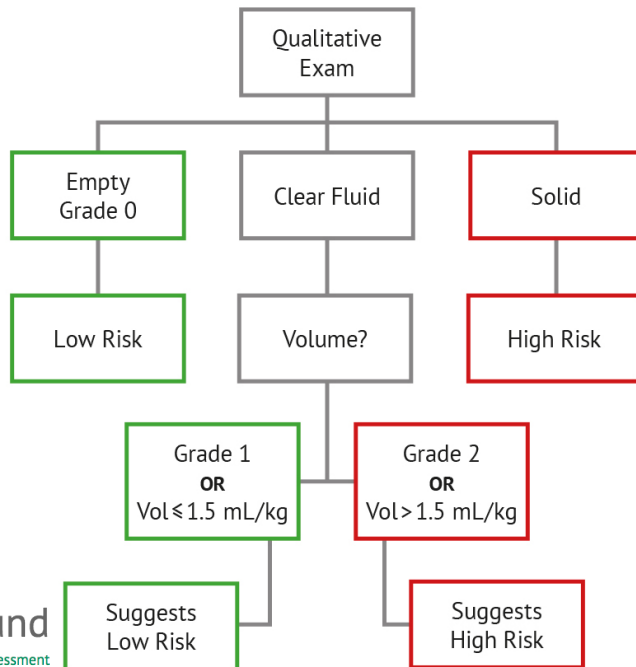
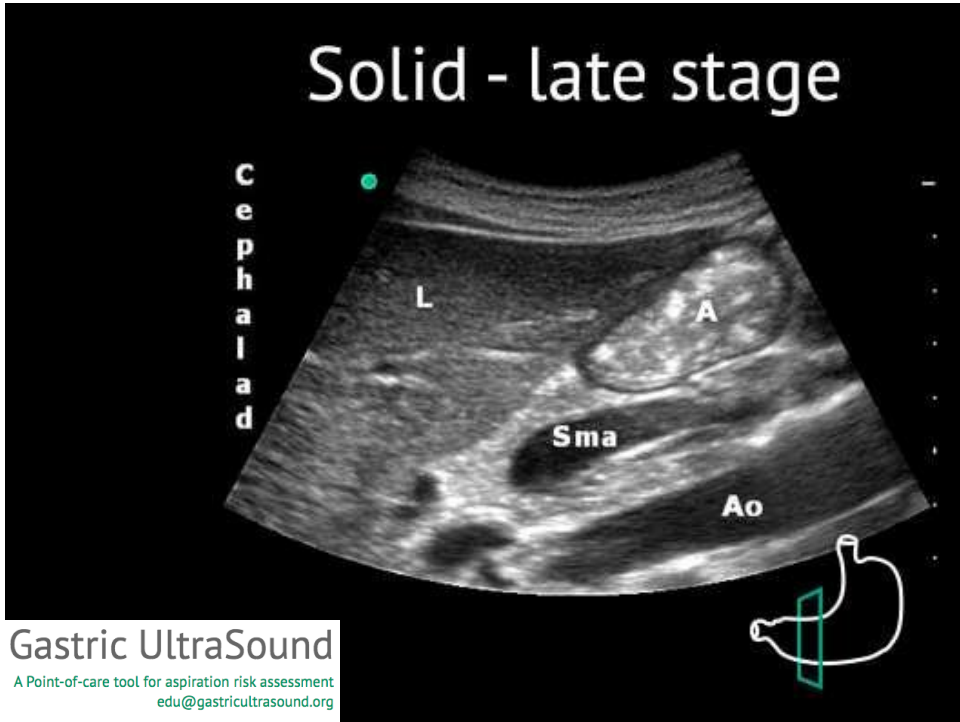
*Stephen C. Haskins, MD,\* Richelle Kruisselbrink, MD,† Jan Boublik, MD, PhD,‡  
Christopher L. Wu, MD,\* and Anahi Perlas, MD†*

<https://youtu.be/ebCbewLBNGM>

Pneumothorax 2.27





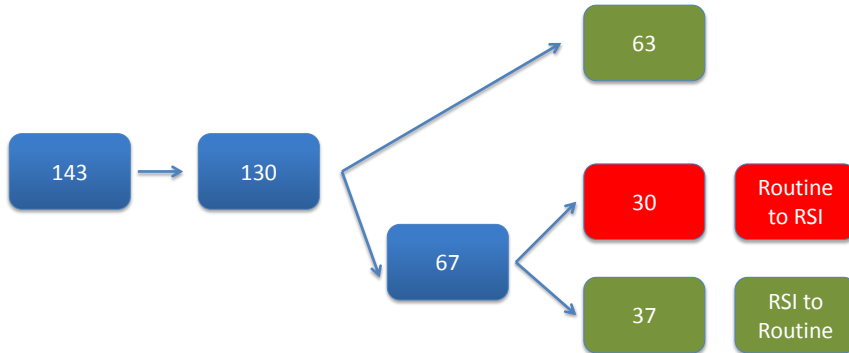


**Gastric UltraSound**  
 A Point-of-care tool for aspiration risk assessment  
[edu@gastricultrasound.org](mailto:edu@gastricultrasound.org)

# Original Article

The effect of pre-operative gastric ultrasound examination on the choice of general anaesthetic induction technique for non-elective paediatric surgery. A prospective cohort study\*

A.-C. Gagey,<sup>1</sup> M. de Queiroz Siqueira,<sup>2</sup> C. Monard,<sup>1</sup> S. Combet,<sup>2</sup> B. Cogniat,<sup>1</sup> F.-P. Desgranges,<sup>2,5</sup> P. Robinson,<sup>4</sup> D. Chassard<sup>3,6</sup> and L. Bouvet<sup>2,7</sup>



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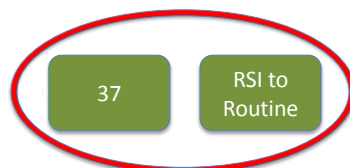
A.-C. Gagey,<sup>1</sup> M. de Queiroz Siqueira,<sup>2</sup> C. Monard,<sup>1</sup> S. Combet,<sup>2</sup> B. Cogniat,<sup>1</sup> F.-P. Desgranges,<sup>2,5</sup> P. Robinson,<sup>4</sup> D. Chassard<sup>3,6</sup> and L. Bouvet<sup>2,7</sup>

## Validation : Aspirate gastric contents

Clinical decision      49% appropriate

Gastric US assisted      85% appropriate

95% appropriate



## What's new in RA?

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- Regionalists like to describe new blocks
    - Often very similar to previous blocks
  - Plan A blocks
    - consolidate on those we know are OK, easy and effective
- Interscalene
  - Axillary brachial plexus
  - Femoral
  - Adductor canal
  - Popliteal Sciatic
  - Erector spinae plane
  - Rectus sheath



## What's new in RA?

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- Erector Spinae Plane blocks
  - Rib fractures, breast surgery
- Hip 'Pericapsular' block
  - NOF, THR
- P-POCUS
  - You have an ultrasound machine, you may as well use it



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Your interactive  
online congress

# 3<sup>RD</sup> e-ESRA

Saturday, 14 March 2020

Round tables & live demos  
Live chat & quizzes  
Free for members



Date: Saturday, 14 March 2020

A banner for the Annual Scientific Meeting Sheffield 2020. The background is a landscape of green hills. On the left, a blue box contains the text: **ANNUAL SCIENTIFIC MEETING**, **SHEFFIELD 2020**, Monday 18th & Tuesday 19th May, and EARLY BIRD OFFER ENDS ON 31ST JANUARY. On the right, the RA-UK logo (Regional Anaesthesia United Kingdom) is shown, along with the hashtag #RAUK20 and a Twitter icon.