

# Simulation-based teaching in Regional Anaesthesia training

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## Introduction

Regional anaesthesia is a rapidly evolving subspecialty. The anaesthetic curriculum recognises this<sup>1</sup>, and now requires residents to be proficient in Plan A blocks by the end of the training programme.

Scenario based simulation training is recognised to be a highly effective way in which to deliver teaching<sup>2</sup>. The writers sought to create and deliver a full-day teaching session encompassing 'Simulation-based regional anaesthesia training' as part of the Queen's Medical Centre resident anaesthetists local teaching programme.

## Aims

To improve technical skills in plan A blocks, situational awareness and crisis management within regional anaesthesia, and to foster teamwork and decision making across all stages of training.



Fig 1. Ultrasonography - Resident demonstrating Interscalene block

## Methods



Fig 2. Residents discussing local anaesthetic toxicity management

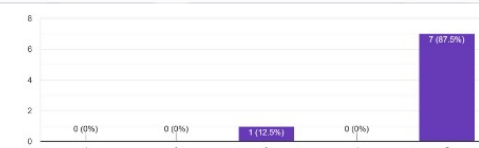
## Conclusion

This teaching session managed to effectively combine simulation with regional anaesthesia training in a group with diverse experience and skill mix. Feedback collected showed individuals had an overwhelmingly positive experience of the day, with responses including, "the session was fantastic, a really good way to get you to think about the practicalities of regional anaesthesia".

Future sessions will continue at 6-monthly interval teaching for resident doctors rotating through the Queen's Medical Centre in Nottingham. Each session has changing topical scenarios and will continue to incorporate feedback from residents, including greater scanning opportunities from all participants, and planned expansion of the session across the region.

## Results

Graph reflecting the impact of regional simulation teaching on improving crisis management amongst resident doctors (8 responses)



Graph reflecting the impact of regional simulation teaching on teamwork amongst participants at various stages of training (8 responses)

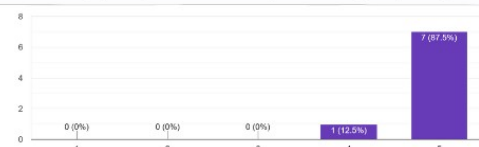


Fig 3. Results from post session survey: 'Improving crisis management during regional anaesthesia procedures' - on a scale of 1 (Not Met) to 5 (Fully Met)

## References

1. Royal College of Anaesthesia. 2021 Curriculum learning syllabus: stage 3, published 24/02/2021. Available from <https://www.rcoa.ac.uk/documents/2021-curriculum-learning-syllabus-stage-3/regional-anaesthesia> (accessed 27/03/2025)
2. Green M, Tariq R, Parmis G, Improving Patient Safety through Simulation Training in Anesthesiology: Where Are We?, Anesthesiology Research and Practice, 2016, 4237523, 12 pages, 2016. <https://doi.org/10.1155/2016/4237523>