Ribs Rescued? - A review of a major trauma centre rib fracture service 4 years on...

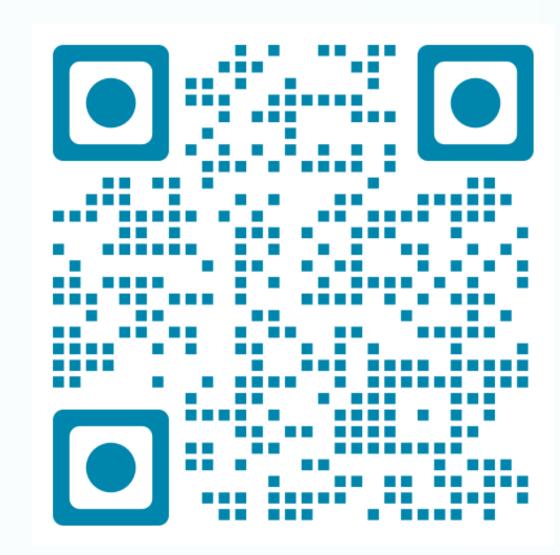
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Rib Fractures at ARI 2018 to 2022

Rib fractures remain a difficult to manage complication following thoracic wall trauma, associated with increased mortality and morbidity, especially in the elderly¹ Initial 2018 evaluation at Aberdeen Royal Infirmary (ARI) found variability in analgesic management, and clinical need to identify at-risk group early in admission (see QR code)



Service then remodelled with focus on:

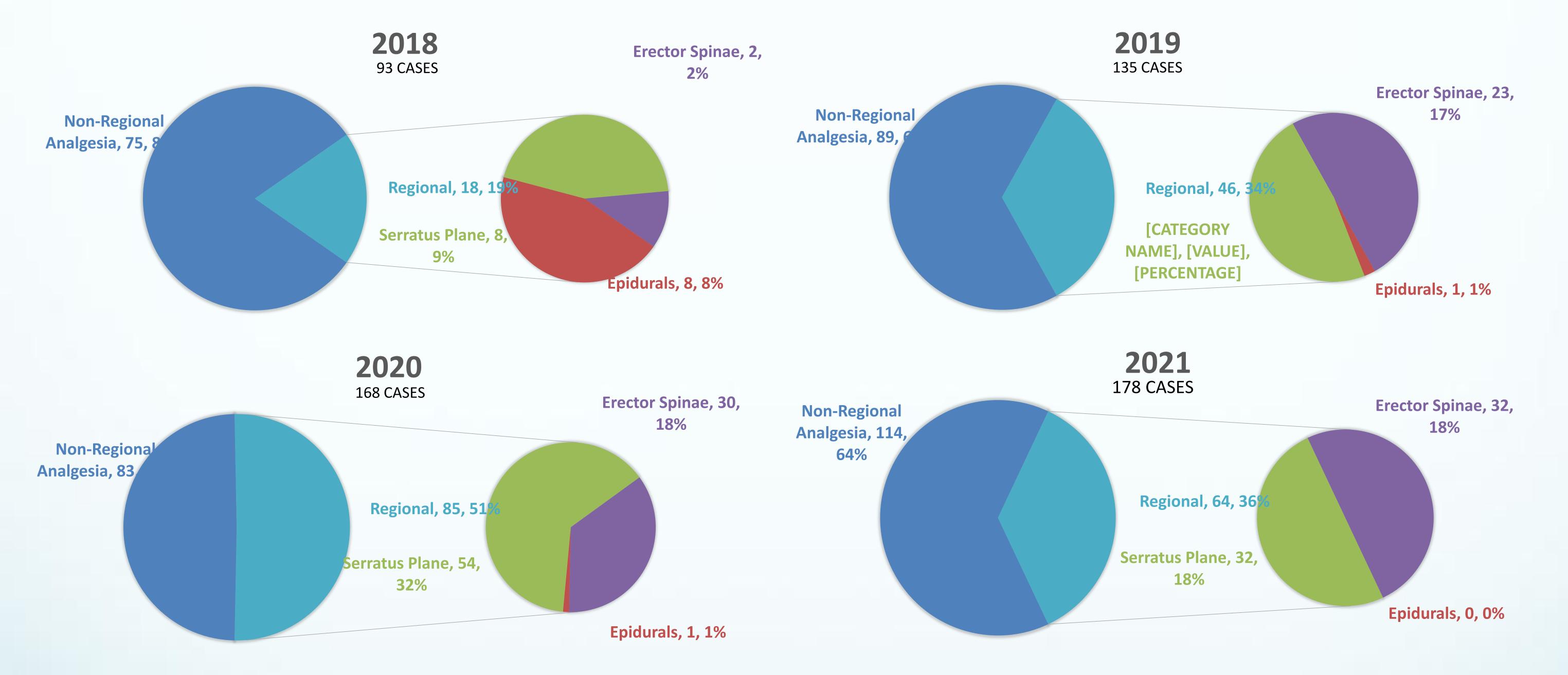
- > Early identification of patients presenting with rib fractures (email and online referral system)
- → Optimisation of analgesia (including early use of erector spinae² and serratus anterior catheters)

Aims of the poster are to evaluate the changes to the ARI rib fracture service in the past 4 years, with focus on our use of regional anaesthetic catheter techniques.

Data Collection and Results

All patients presenting with rib fractures between 2018 to 2021 highlighted to the acute pain team on admission were included, with evaluation of demographic data, rib fracture score on admission, prescribed analgesia, and regional analgesic technique they received (if applicable).

Simple statistical analysis was performed to illustrate any changes in our practice over the past 4 years.



Conclusions

Through service changes made in 2018, patients presenting with rib fractures to ARI now receive earlier review and analgesic intervention compared to before; specifically regional analgesia techniques.

Erector spinae and serratus plane blocks have replaced epidurals as the regional anaesthesia 'block of choice' for rib fractures, illustrating greater availability of the equipment and skill-set.

Running in parallel to this has been the Aberdeen "Rib Rescue" Course, which aims to up-skill our existing consultant and trainee body in safety placing ESP and SAP catheters.

Our aim to provide a 24/7 rib fracture analgesic service in the future.

References

1Battle CE, Hutchings H, Evans PA. Risk factors that predict mortality in patients with blunt chest wall trauma: a systematic review and meta-analysis. Injury. 2012 Jan;43(1):8-17

2 Adhikary SD, et al. The effect of erector spinae plane block on respiratory and analgesic outcomes in multiple rib fractures: a retrospective cohort study. Anaesthesia. 2019

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