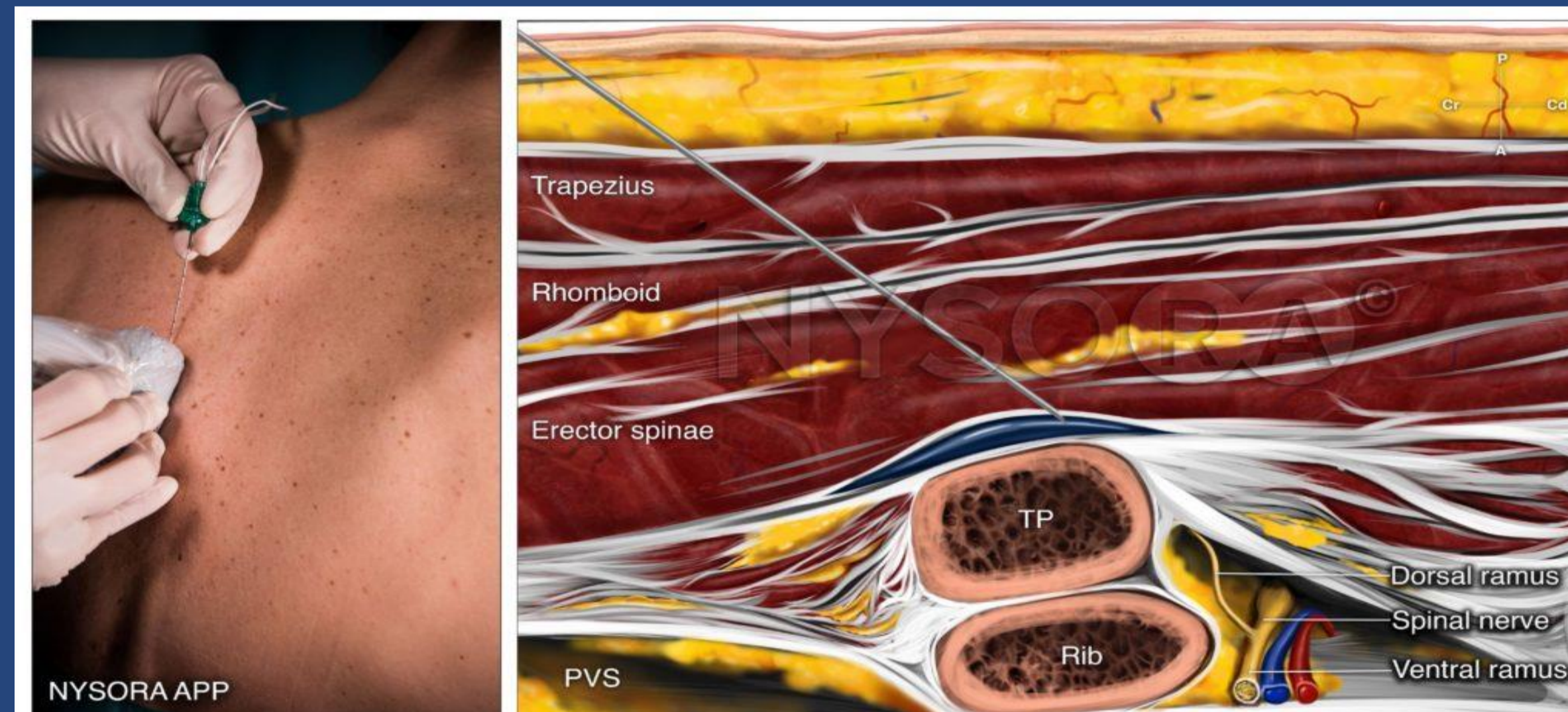


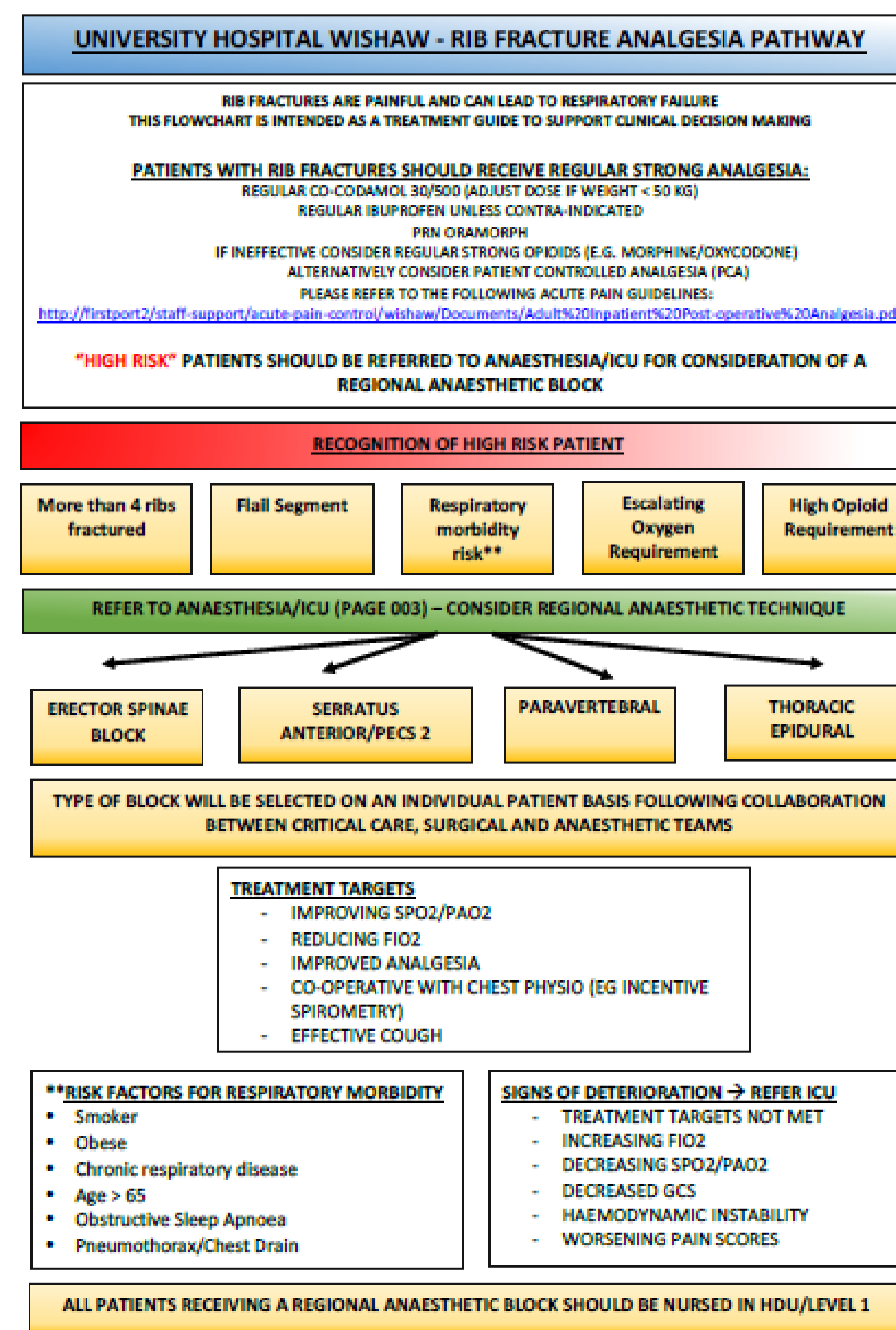
Improving rib fracture analgesia management in University Hospital Wishaw

Rib fractures are a common complication of blunt thoracic trauma and are associated with significant morbidity and mortality¹. In University Hospital Wishaw (UHW) these patients have traditionally received multimodal analgesia including oral or intravenous opioids, with or without thoracic epidural analgesia in a critical care setting. Epidurals may however be contraindicated, and Critical care beds are currently a limited resource.

We therefore designed and implemented a hospital-wide rib fracture analgesia pathway³, used to ensure adequate pain relief and provide a means of early identification of high-risk patients, which if suitable are offered a regional analgesic technique. We adopted the Erector Spinae Plane (ESP) block as our primary technique. These patients can then be managed in a level 1 environment and do not routinely require critical care admission. We delivered teaching on both the protocol and ESP blocks to the anaesthetists and nurses looking after these patients.



A Keir¹ (ST5), E Kerr¹ (), R Hart² (Cons), D Strachan (Cons)
¹Anaesthetics, University Hospital Wishaw
²Queen Elizabeth University Hospital Glasgow



The pathway is now well used within our hospital with regular referrals from both ED and the surgical staff for consideration of regional block in patients with rib fractures.

- 17 ESP catheter have been placed over the last 12 months
- 16/17 (94%) have proved effective
- Patient characteristics were varied and multiple patients had contraindications to epidural anaesthesia.
- No significant complications were noted and no patient required escalation of care following successful ESP block.

Based on these results we feel the ESP block is a suitable alternative to epidural analgesia and has several potential benefits.

References

- 1) Williams A et al. Anaesthetic and surgical management of rib fractures. BJA Education 2020; 20(10): 332-340
- 2) Bulger E et al. Rib fracture in the elderly. J Trauma 2000; 48: 1040
- 3) Available via [http://firstport2/staff-support/anaesthesia-intensive-care-medicine/anaesthesia-intensive-care-medicine-wishaw-general-hospital/criticalcare/Documents/Clinical%20Guidelines%20\(ACCU\)/Chest%20wall%20trauma%20analgesia%202020.pdf](http://firstport2/staff-support/anaesthesia-intensive-care-medicine/anaesthesia-intensive-care-medicine-wishaw-general-hospital/criticalcare/Documents/Clinical%20Guidelines%20(ACCU)/Chest%20wall%20trauma%20analgesia%202020.pdf)
- 4) NYSORA e-Learning System. 2021. Erector Spinae Plane Block - NYSORA e-Learning System. [online] Available at: <<https://nysoralms.com/courses/erector-spinae-plane-block/>> [Accessed 30 March 2021].