

## AIM

To explore the utilization of ESP block as a part of multimodal analgesia in patients with sepsis.

## WHY ESP BLOCK IN SEPSIS?

- Complex interplay of underlying infection, systemic inflammation, CVS instability, organ dysfunctions, and coagulopathy limits the use of other systemic or regional analgesic techniques.<sup>1,2</sup>
- As per the RA-UK guidelines for ESP block.**<sup>3</sup>
  - Suitable if INR  $\leq 3$  / on anticoagulants
  - Correct INR  $> 3$  before block placement
  - Contraindication pertains to local injection site infection rather than systemic infection
- It is a safe, simple technique with relatively less complications, less opioid requirement and more hemodynamic stability.<sup>1</sup>

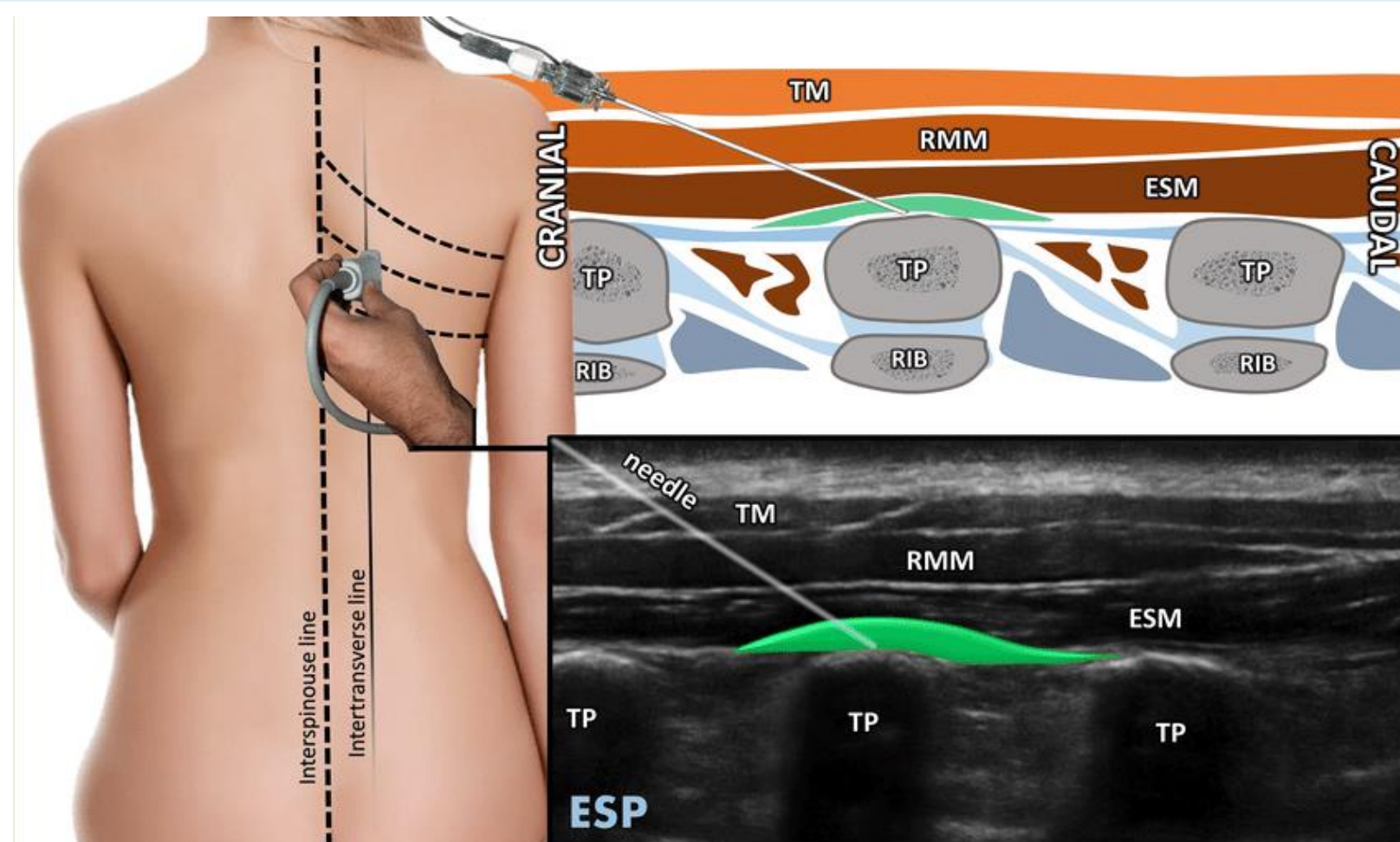


Fig 1: Anatomical location of ESP block and distribution of local anesthetic seen on ultrasound.

## METHODS

- Bilateral or unilateral ESP block given in 10 adult septic patients for primary pain control with 0.2% Ropivacaine and Dexamethasone.
- 8 patients- Single shot ESP block (20-30ml on one side) during emergency laparotomy
- 2 patients- B/L ESP block with catheter for continuous infusion (6-8ml/hr) in ITU for acute pancreatitis.

## CASE SPECIFIC CONCERNS

- All the cases were septic with relatively high INR. In addition to that ;
- ✓ Case 1- Has a h/o anaphylactoid reaction to opioid
- ✓ Case 2- Patient was very drowsy due to high use of opioid for pain relief
- ✓ Case 3 - INR 4.2, therefore octaplex given before the block.

## DATA AND RESULTS

Table 1: Demographic parameters, medical diagnosis or surgery of 10 cases

Age (Yr) (Mean $\pm$ SD)	52 $\pm$ 15
Sex (F/M)	6 F / 4M
Medical diagnosis / Surgery	Pancreatitis(2), Acute intestinal obstruction (3), Para-umbilical hernia (1), Appendicular perforation (2), Cholecystectomy (1), Ovarian cyst (1)

Table 2: Infection, and coagulation parameters

CRP (Mean $\pm$ SD)	167 $\pm$ 92
WCC (Mean $\pm$ SD)	17.7 $\pm$ 6.1
PLATELETS (Mean $\pm$ SD)	198 $\pm$ 52
INR (Mean $\pm$ SD)	1.52 $\pm$ 0.71

Table 3: Mean Pain score, opioid requirement on POD1 and ITU stay

Pain score	0 or 1
Opioid Use (mg) (Mean $\pm$ SD)	9.3 $\pm$ 6.3
ITU stay (days) (Mean $\pm$ SD)	26 $\pm$ 8.8
Inotropic requirement or Complications if any	Nil

## CONCLUSION

This case series underscores novel indication of ESP block in the septic patients. However, further research is needed in a larger septic patient cohort.

## REFERENCES

- Galacho J, Veiga M, Ormonde L. ESP block and altered hemostasis: is it a safe option?-a case series. Korean J Anesthesiol 2020;73:445
- Allos, Matthew T. BS; Zukowski, *et al.* Erector Spinae Plane Continuous Catheters for Refractory Abdominal Pain Related to Necrotizing Pancreatitis: A Case Report. A & A Practice 2021;15(11): e 01543
- Merjavy Peter..Erector Spinae Plane Block Guideline. RA-UK CG0603.March 2019 (Review March 2022)