



Introduction

Open umbilical hernia repair is a common procedure conventionally performed under general anaesthesia (GA).

- Anaesthetists may be reluctant to use regional techniques for such operations
- Concerns about block height and duration may be one reason
- Our patient successfully underwent the procedure under spinal anaesthesia + transversus abdominal plane (TAP) block
- This was done as a day case

Case Description

This 58 year old man had a complex medical background:

- Pulmonary sarcoidosis
- Obesity with sleep apnoea on home CPAP
- Ischaemic heart disease
- Poor exercise tolerance
- Functional disorder causing stroke-like symptoms; brain imaging after previous general anaesthetics

A regional technique was therefore chosen to minimise the risk of potential complications:

- Spinal anaesthesia: 3mls of 0.5% hyperbaric bupivacaine
- Bilateral ultrasound-guided TAP blocks: 20mls of 0.375% levobupivacaine
- Conscious sedation by propofol TCI
- Opiates were purposefully avoided

The operation was uneventful. Post operatively:

- He required paracetamol only
- He reported no nausea and vomiting
- He mobilised early with no difficulty passing urine
- He did not require CPAP
- He had no functional stroke symptoms

He was discharged home later that day



Spinal anaesthesia. Image from Wikipedia.com

Discussion

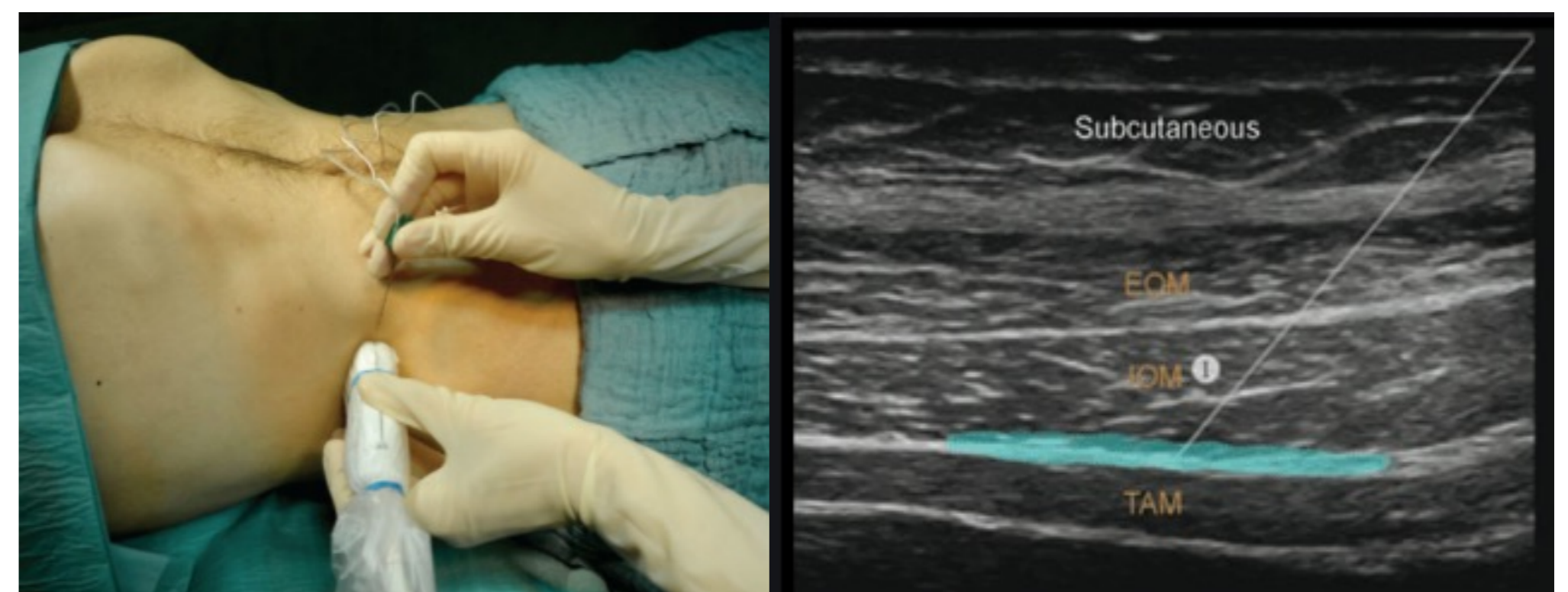
There is very little evidence surrounding use of regional anaesthesia for open umbilical hernia repair.

Anecdotally most anaesthetists would opt for GA for open mid-abdominal surgery.

Umbilical hernia repair under spinal anaesthesia may be associated with better post-op pain control and less nausea and vomiting.

- Only two small studies have shown this [1,2]

There are no known cases describing spinal anaesthetic + TAP block for umbilical hernia repair.



TAP Block. Images from NYSORA.com

Conclusions

- Spinal anaesthetic + TAP block is a safe alternative to GA for open umbilical hernia repair
- Advantages include the avoidance of opiates and the ability to perform surgery as a day case
- This may be of benefit for patients in whom GA is undesirable

Acknowledgments

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References

1. Krobot R, Premuzic J. Comparison of general and spinal anaesthesia in patients undergoing open ventral hernia repair. *Periodicum biologorum*. 2013; 115(2): 225-9
2. Sultan S, Rana SS, Hafeez A, Tariq U. Comparison of general and spinal anesthesia in patients undergoing open abdominal hernia repair in terms of post operative pain. *Annals of Punjab Medical College*. 2018;12(1):70-3