

Introduction

- Various fields of medicine have explored methods to decrease cancer related pain and improve quality of life
- Peripheral nerve and neuraxial blocks may play a role in multimodal cancer pain management
- We explore the efficacy of transversus abdominis plate (TAP) blocks for pelvic cancer pain management

Methods

- Retrospective chart review of 40 patients
- Exclusion criteria: local anesthetic only injections, blocks not for cancer-related pain and patients who expired within 3 months of procedure
- Assessed for opioid usage in morphine milligram equivalents (MME) 3 months prior to, and 3 months following the procedure
- Self-reported Visual analog scale (VAS) before and after the procedure
- Non-parametric Wilcoxon Signed Rank Test to analyze the degree to which opioid use changed from pre-block to post-block.

Results

- There was no statistically significant difference found in pre-block opioid use compared to post-block use (table 1)
- There was a statistically significant improvement in verbal assessment scale (VAS) post-block (table 2), suggesting that TAP blocks have use in the management of pelvic cancer related pain.

Above Median Age	N	Level	Median	IQR	P-Value
No	20	Opioid Pre-Block	150.00	520.00	0.2439
		Opioid Post-Block	217.50	427.50	
Yes	20	Opioid Pre-Block	30.00	55.00	0.2148
		Opioid Post-Block	30.00	3.75	

Table 1: Opioid Use

Above Median Age	N	Level	Median	IQR	P-Value
No	20	VAS Pre-Block	7.00	3.00	< 0.0001
		VAS Post-Block	4.00	6.00	
Yes	20	VAS Pre-Block	8.00	4.00	< 0.0001
		VAS Post-Block	1.00	5.00	

Table 2: VAS

Discussion

- TAP block targets the anterior divisions of spinal nerves T7-L1 at the plane between the internal oblique muscle and the transversus abdominis muscle
- Injection of local anesthetic at this neurovascular plane alters the pain perception pathway from the abdominal skin, muscles and parietal peritoneum

- Possibility of using TAP catheters for continuous infusion for refractory pain
- Various methods exist to prolong the duration of action of the regional block including phenol, alcohol, and liposomal formulations of local anesthetics.

Conclusion

- Limitations: small sample size and low power. Retrospective nature of the study due to its reliance on accurate reporting and diagnosis codes assigned to the patients with pelvic cancer – which may result in underreported data or missed patients.
- This study may contribute to future meta-analyses to yield more powerful studies; and has important implications leading to the advancement of comprehensive cancer pain care.

References

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