

# Guided Imagery and Sentinel Lymph Node Biopsy Pain

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## Significance of Problem:

- Current attempts to alleviate pain during SLN injections have been ineffective, despite subcutaneous anesthetization.
- Breast cancer patients at this facility are deeming this procedure to be most uncomfortable.
- Breast cancer is the 2nd most common type of cancer diagnosed in U.S. females and the 2<sup>nd</sup> most prominent cause of cancer related death after lung cancer (Centers for Disease Control and Prevention [CDC], 2020).

## PICOT:

Do women diagnosed with breast cancer undergoing SLN injections report less procedural pain during SLN injections than women who do not use GI over 6 months?

## Analysis of Literature via JHNEBP research evidence appraisal tools

(Dang & Darnholt, 2017)

Evidence	Database/Source	LOE/Quality
(Álvarez-García & Yaban, 2020)	CINAHL	Level I A
(Charalambous et al., 2019)	CINAHL	Level I A
(Chen et al., 2015)	Cochrane Library	Level II A
(Giacobbi et al., 2015)	CINAHL	Level I B
(Gonzalez et al., 2010)	CINAHL	Level I A
(Noergaard et al., 2019)	Joanna Briggs Institute EBP database	Level II A
(Peerdeman et al., 2016)	CINAHL	Level II A
(Serra et al., 2012)	CINAHL	Level II A
(Stoerkel et al., 2018)	Cochrane Library	Level I B
(Zech et al., 2016)	CINAHL	Level I A

## Best Practices:

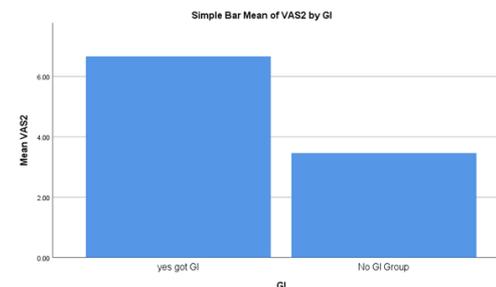
- Moderate level evidence within each of the studies supports GI as being beneficial for managing pain.
- GI effective in the mitigation of pain, not its elimination.
- GI cost-effective, timely and feasible to implement.
- GI was found to be a viable CAM for pain mitigation within this procedural setting.

## Implementation:

- Model followed: Johns Hopkins Nursing Evidence-Based Practice (JHNEBP).
- All available SLN patients presenting to the NAPBC surgeon's office were contacted and consented to participate.
- Educational pamphlet on GI provided.
- Participants were provided with a 5-minute session of GI immediately prior to SLN injection.
- Procedural pain scores were recorded via VAS and statistically compared to non-interventional group.

## Evaluation: Primary Outcome

- Students *t-test* analysis was employed to compare post procedural pain ratings of the GI intervention group (n=6) to the scores of the non-GI comparison group (n=13).
- The statistical outcome between the intervention and comparison group was not significant in determining that the GI group reported less perceived pain ( $t = 2.864, p = 0.012$ ).



## Conclusion & Recommendations:

- Mean pain scores were not lower within the GI group. However, the sample size of the intervention group was less than half of the comparison group.
- The mean pain score for the GI group was 6.67 (SD = 1.86) with a mean score of 3.46 (SD = 2.96) for the comparison (non-GI) group.
- This intervention was feasible, cost effective, and posed no delay in daily operations. Patients receptive to GI.
- Further research would be useful in exploring how GI could be used within other procedural settings using larger sample sizes.

Acknowledgements: Faculty Advisor Jeffrey Coto, DNP, MS-CNS, RN, CCRN, NABPC Facility Surgeon, Breast Navigator and participants