



# Kuala Lumpur, Malaysia 25-29 August 2024

# Breast Cancer Surgery under Local Anaesthesia in a select cohort of patients with comorbidities

<u>Spandana Jagannath</u>, Sabaretnam Mayilvaganan, Sarrah, F Khan, G Chand, A Mishra, G Agarwal Sanjay Gandhi Postgraduate Institute of Medical Sciences, Lucknow, India

# Introduction

- Traditionally, the majority of surgeries for breast cancer patients are conducted under general
  anaesthesia to accommodate procedures like frozen section biopsies and to ensure patient
  comfort throughout the procedure
- Recent interest in the tumoricidal effects of local anaesthesia has sparked consideration for performing these surgeries under LA
- Axillary clearance can be challenging especially in terms of manipulating the patient's arm for optimal access and visibility
- Our report aims to contribute insights and outcomes from our use of local anaesthesia in these surgical procedures

## **Materials and Methods**

 We reviewed our prospectively maintained records, of a single surgeon, of patients undergoing surgery for breast cancer under LA, from 2018 to 2023

## **Perioperative management**

- Adequate Pre-operative counselling
- Pre-Anaesthesia check up
- General anaesthesia standby
- Intraoperative monitoring- pulse oximetry, heart rate and blood pressure
- Minimum retraction and manipulation

#### **Local Anaesthesia**



- 1% Xylocaine used as the LA of choice
- LA injected under direct vision to the line of incision and sub dermal layer of skin using 25G needle
- LA infiltrated around the lump under USG guidance

## Results

Age (years)	Comorbidities	Tumour size (cm)	Survival (months)
72	Dermatomyositis+ Hypothyroidism	4.5	3
71	DM + HTN + CKD + Hypothyroidism	1.5	16
71	RHD + AF	1.5	10
69	HOCM + DM	2.0	23
76	COPD + HTN	1.8	5
84	Hypothyroidism + COPD	2.5	26
72	Parkinson Disease + HTN	3.0	27
66	HTN + COPD + Morbid Obesity	10.0	84
81	HTN + DM	1.2	14
70	CAD	8.5	16

Total number of patients: 10

Mean Age:  $73.2 \pm 5.5$  years

Mean tumour size:  $3.6 \pm 2.2$  cm

Mean operating time:  $78 \pm 23$  mins

Mean hospital stay:  $3.1 \pm 1.2$  days

Mean survival time:  $22.4 \pm 23.2$ 

months

# **Discussion**

- As breast cancer treatments continue to evolve, so must the nature in which they can be delivered to an aging population
- Successful completion of surgeries under LA highlights its potential as a valuable option in clinical practice

## **Advantages**

- Early post operative recovery
- Lesser pulmonary complications and venous thromboembolic disease
- Decreased hospital stay and costs

# Conclusion

- Awake, local anaesthetic breast surgery can be performed safely and effectively in patients at risk for general anaesthesia
- Ongoing patient evaluation and refinement of techniques for administering local anaesthesia in breast surgery are crucial for optimizing outcomes and patient satisfaction

### References

- Bell A, et al. Breast-conserving surgery under local anaesthesia is a safe and effective option for local control in an increasingly frail population. European Journal of Cancer. 2020 Oct 1;138:S118
- Karanlik H, et al. Breast-conserving surgery under local anesthesia in elderly patients with severe cardiorespiratory comorbidities: a hospital-based case-control study. Breast Care. 2017 Feb 8;12(1):28-32

