

# Evaluation of Posture and Quality of Life in Females Undergone Modified Radical Mastectomy: A Research Protocol

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## Abstract

Modified radical mastectomy performed for CA breast is a life modifying surgery for most women. It creates a profound impact on the quality of life enjoyed by the women. Body image in patients with breast cancer differs from all other cancers. The assessment of quality of life after modified radical mastectomy for early breast cancer patients using the World Health Organization Quality of Life-Brief Questionnaire (WHOQOL-BREF) .

Women suffers from day to day activities. Postures become impaired. Postural changes, such as increase in thoracic kyphosis , scoliosis leads to poor postural habits. There is also decrease in shoulder range of motion , scapular muscles weakness . Contractures may develop in axilla after surgery. Breast cancer survivors have muscle weakness of upper limb are Pectoralis major, serratus anterior, upper trapezius, rhomboid muscles, latissimus dorsi .

Spine alignment also may effect due to poor posture. Women with Modified Radical mastectomy may have some social phobia . Anxiety, stress level may increase. Women may have fear of recurrence. Because of this factors , there is impaired Quality of Life in Women.

Conclusion: Breast cancer is a serious disease that reduces the quality of life, particularly in physical domain and in the emotional area. Oncological disease is becoming a disease for a lifetime. It connected with the constant fear of cancer recurrence and the consequences of treatment.

**Key Words** - Posture , Quality of Life , Modified Radical Mastectomy.

## Introduction

<sup>1</sup>In India breast cancer is most commonly diagnosed as cancer. <sup>2</sup>Among women it is most common neoplasm. <sup>3</sup>Modified Radical Mastectomy is very common operation in women which causes different changes in the body. <sup>4</sup>It's stres ful event in women's lives . <sup>5</sup>The life expectancy of breast cancer is longest in categories cancer , the Quality Of Life in patients is most relevant factor to be considered for women undergone MRM.

problems following surgery. – which may affect female's working capacity, also her family life and her social involvement. <sup>2</sup>After MRM there are various factors like tightness in pectoral region, post surgery contractures in axilla, weakness of scapular muscles

and restricted ROM of shoulder will affect body posture. Muscle contractures in the cervical and easy fatiguability scapular region are evident observed. Women suffer difficulty in performing daily activities because of impaired the upper extremity function and some bposture disorders. Postural defects like scoliosis , kyphosis due to trunk asymmetry can lead to poor postural habits.

<sup>6</sup>Improper body posture may cause somatic abnormalities. In Mastectomy , patient's both physical and psychological aspects should be considered. Complications associated with post mastectomy are changes in body posture caused by disorders in static and dynamic postural changes affecting the appearance thus affecting the ability to function in an ideal way

restricting women from participating in various activities and thus affecting her QOL. <sup>7</sup>After treatment, women experience some changes like limitation in movement and postural asymmetry. <sup>8</sup>This is associated with a lot of changes in musculoskeletal functions. Because they are abnormal in the development of the anteroposterior curve, their position may be incorrect due to functional changes.

<sup>9</sup>Recent articles suggested that breast cancer surgery can affect posture, spine alignment and increase thoracic kyphosis and decrease shoulder range of motion. Women with modified radical mastectomy constantly fear recurrence of disease. <sup>4</sup>This anxiety in breast cancer patients affects their way of living and further postural changes and difficulty in functioning according to desired patterns may contribute towards reduced quality of life. <sup>10</sup>Quality of Life in women is highly impaired after diagnosis because of the effects of physical, social and psychological factors.

### Materials and Methods

Study Setting: Physiotherapy OPD and AVBRH

Study design: Observational Study

Selection criteria:

#### Inclusion criteria:

1. Females upto 6 months post modified radical mastectomy surgery.
2. Age between 40-70 years.
3. Subjects willing to participate voluntarily.

#### Exclusion criteria:

1. Females upto 6 months post modified radical mastectomy surgery.
2. Age between 40-70 years.
3. Subjects willing to participate voluntarily.

Data Source :

For Quality of life – self reported questionnaire score will be measured and analysed.

For Posture – Deviation in posture will be measured

using Kinect Azure.

Bias : Subjects that does not match the selection criteria will be excluded to prevent bias

Study size: 35 sample size

Quantitative Variables: Score of Quality Of Life .

Statistical Methods: This will be done by using descriptive and inferencive statistics using chi square test students unpaired t test. Software used in the analysis will be SPSS 24.0 version , praphpad prism 7.0 version and  $p < 0.005$  is considered as level of significance ( $p > 0.005m$ )

### Findings

After successful completion of the study it will provide evidence on Posture and Quality of life in Females undergone Modified Radical Mastectomy.

### Discussion

<sup>6,9</sup>The current study is carried out to find out association of postural with Quality of life in females undergone Modified Radical Mastectomy various studies conducted have shown postural deviation in females with breast cancer also that their Quality of life is altered resulting in various difficulties. <sup>4</sup>Current study will be carried to find out whether there is any correlation between posture and Quality of life because changes in posture and spine may affect the working of women whether it may be at work or in household activities because of muscle tightness or other musculoskeletal changes causing restriction at joint decreasing ROM and pain preventing the female to carry out various activities efficiently which may ultimately affect Quality of life. Thus current study aims to find out association between posture and Quality of life.

Limitation : Only Evaluation of posture is done and its effect on Quality Of Life is assessed but not on the treatment outcomes of Modified Radical Mastectomy.

### Conclusion

Conclusion will be discussed once study is completed.

**Conflict of Interest:** There is no conflict of interest.

**Source of Funding** –No funding needed.

**Ethical Clearance:** Being a observational study institutional ethical committee permission was taken.

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