

Oncoplastic Surgery for Breast Cancer : Median 36-Month Follow Up Results

Disclaimer



- **Dr. A K M Minhaj Uddin Bhuiyan**

FCPS (Surgery), MRCSEd, MS (Surgical Oncology)

Associate Professor (Surgical Oncology)

Breast Unit, Dept. of Surgical Oncology, NICRH.

&

- **Dr. Hasan Shahriar Md. Nuruzzaman**

FCPS (Surgery), MS (Surgical Oncology)

Assistant Professor (Surgery)

Breast Unit, Dept. of Surgical Oncology, NICRH.

Talk Outline

- The big picture of OPS/OPBS
- Glimpses of our work
- 36-month F/U results
- Conclusion

Oncoplastic Surgery for BC

Oncoplastic surgery (OPS) is an integration of scientific principles of oncologic surgery with aesthetic techniques of plastic surgery to give better outcome to breast cancer patients.

Goal of OPS

- Better cosmetic outcome
- Avoid mastectomy &
- Overall satisfaction and QoL.

Safety of OPS

Margin

**Local
Recurrence**

**Oncological
outcome**

**Delayed of
Adj. Rx**

**Missing
recurrence**

Oncoplastic Vs Conventional BCS

Margin positive in OPS is 15-20% whereas in Conventional BCS it is 19-40%.

In Local recurrence Oncoplastic group has slightly higher recurrence rate than that of Conventional group (3.2% Vs 1.8% in 5-year & 6.7% Vs 4.4% in 10-year, that is statistically NS)

Overall survival in 10 year is similar (91.4% for Oncoplastic Vs 91.3% for Conventional BCS).

Regional & distant metastasis are similar in both groups.

Level of Oncoplasty

Level 1 OPS

<20% vol.excised.

No formal plastic surgery training needed.

Duel plane undermining.

Minor NAC repositioning.

No major dermo-glandular mobilization.

Level 2 OPS

20-50% breast vol. excised.

Nipple/skin sparing mastectomy

Based on Mammoplasty/ reduction techniques.

Specific technique quadrant-wise.

Require some special training.

Safer option for fatty breast-less risk of fat necrosis since only post. undermining done.

Level of Oncoplasty

Level 3 OPS

Nipple/skin sparing mastectomy with reconstruction.

Reconstruction with implants/expander

Augmentation mammoplasty

Mastopexy with implant

Nipple reconstruction

Formal plastic surgery training needed.

Level 4 OPS

Complex procedures.

Free flaps.

Usually done by plastic/microvascular surgeons

Some may done by breast surgeons

Require special plastic surgery training.

OPS Classification

Volume Displacement

(Local tissue rearrangement)

- Doughnut mastopexy
- Crescent mastopexy
- Reduction techniques like Inverted –T reduction mastopexy etc.

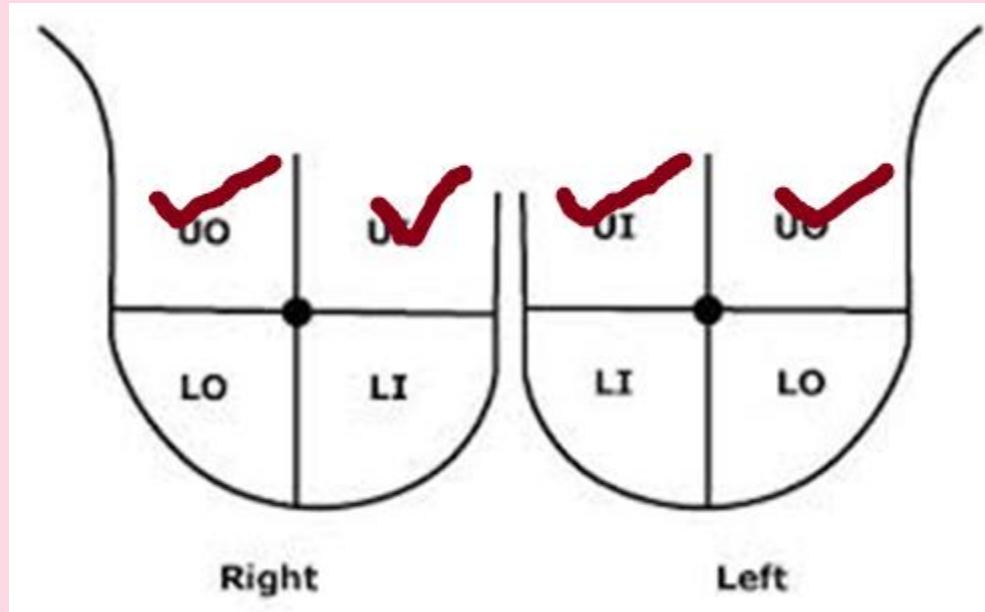
Volume Replacement

(fill up by extra-breast tissue/material)

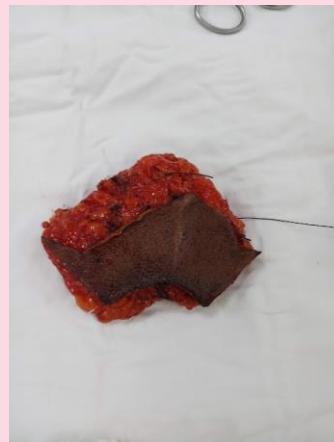
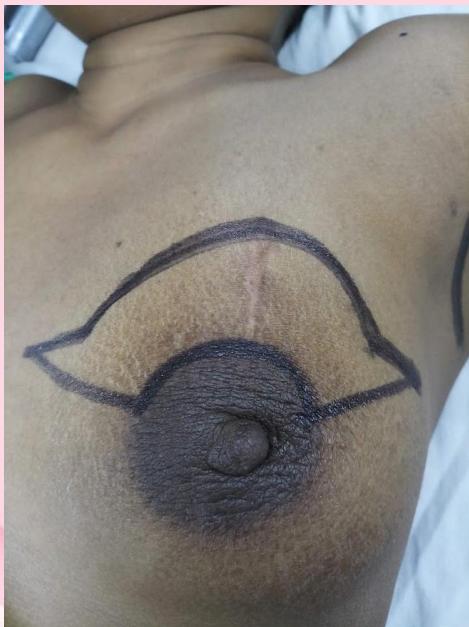
- Implants
- Local(advancement/ rotation) flaps like LICAP
- Distant flaps like TRAMP flap

Our Experiences Of OPBS

Upper Quadrant



Batwing/Hemi-Batwing Mammoplasty



OPS

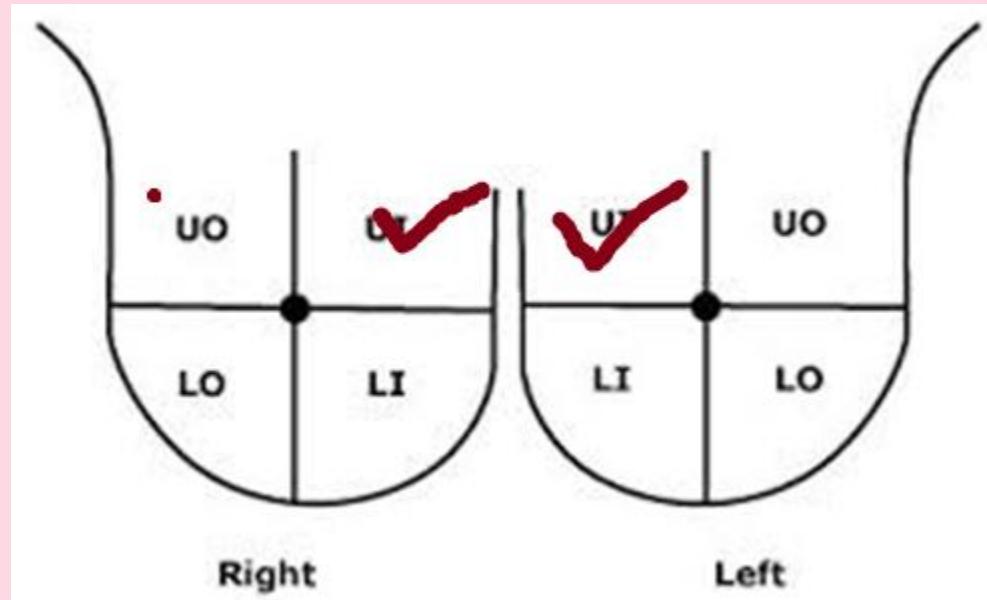
Breast Unit, NICRH

13

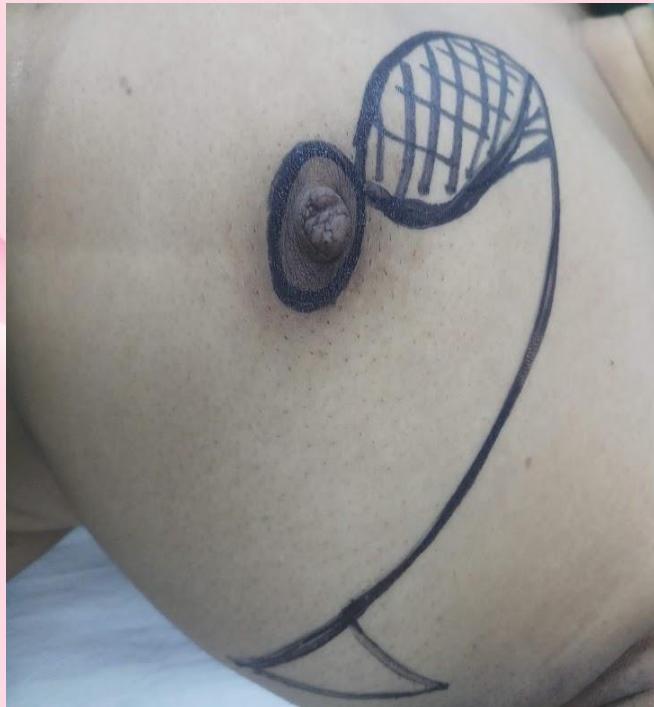
9-mon down the line after RT



UIQ



Matrix Rotation technique



OPS

Breast Unit, NICRH

16

Matrix Rotation technique...



Final result



3-mon down the line

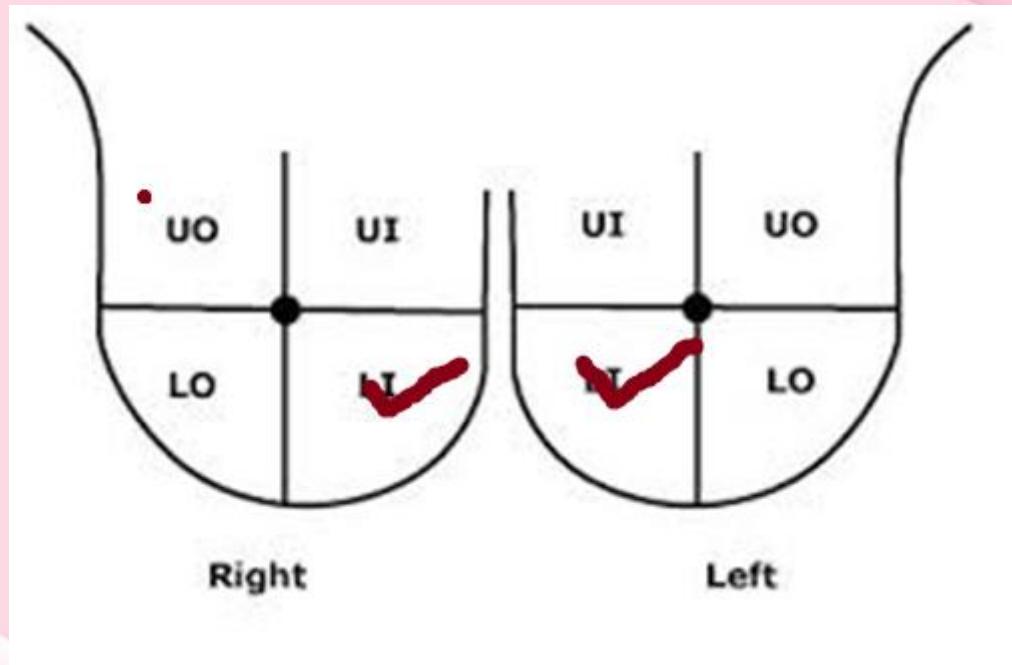


OPS

Breast Unit, NICRH

17

LIQ



V-Mammoplasty



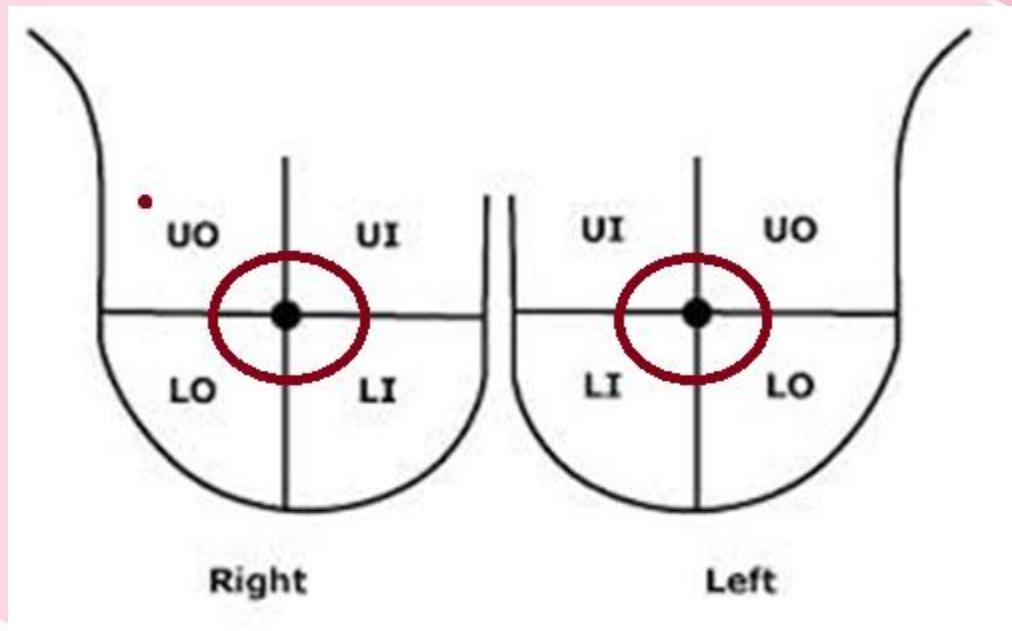
OPS

Breast Unit, NICRH

CANCER CONFERENCE 2025

BSBCS
C

Peri-areolar tumor



Round block ē SLNB by duel tracer technique

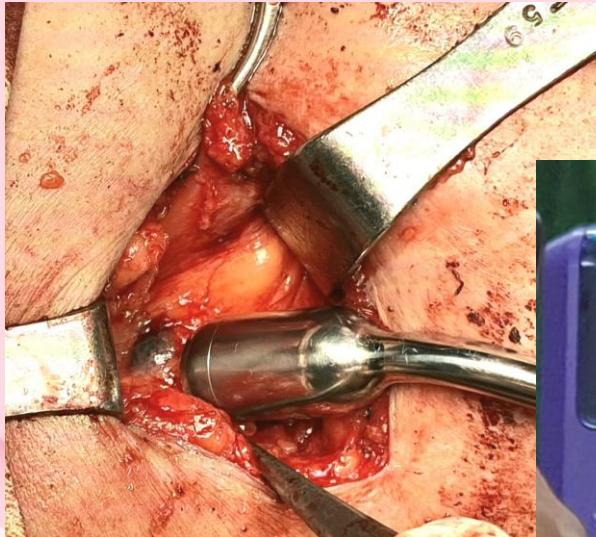


OPS

Breast Unit, NICRH

21

Round block...slnb



OPS

Breast Unit, NICRH

22

Crescent Mastopexy



Crescent mastopexy- 12 mons down the line

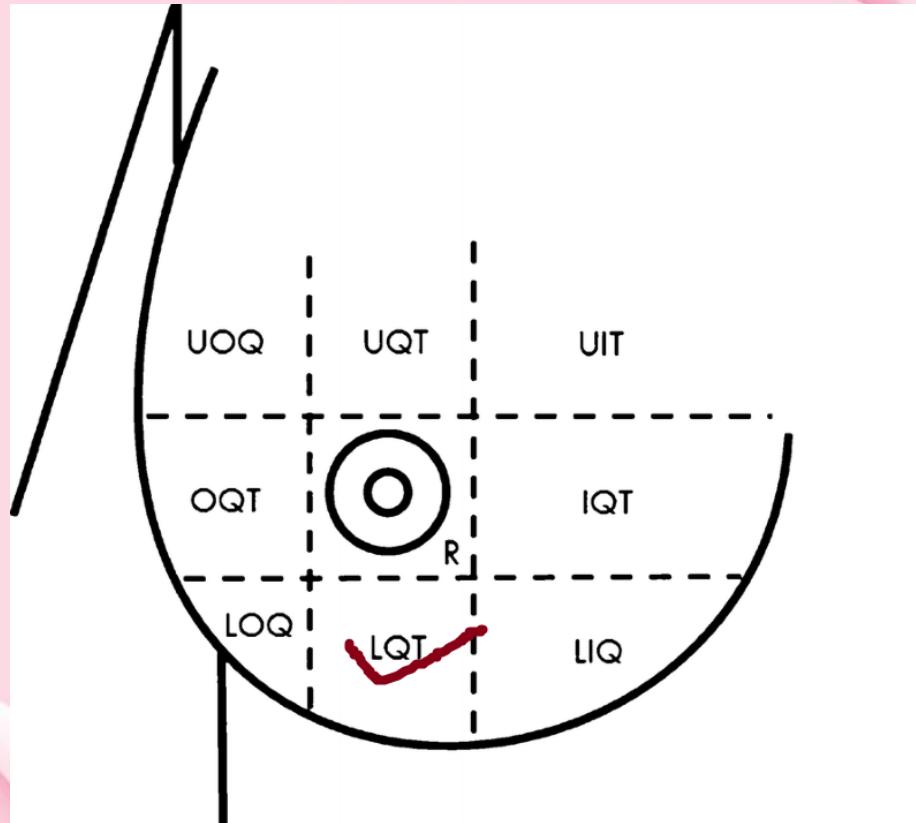


OPS

Breast Unit, NICRH

24

Lower Quadrant Tumor



Inverted T Mammoplasty



OPS

Breast Unit, NICRH

26

Inverted -T Mammo-plasty (3-mon down the line)



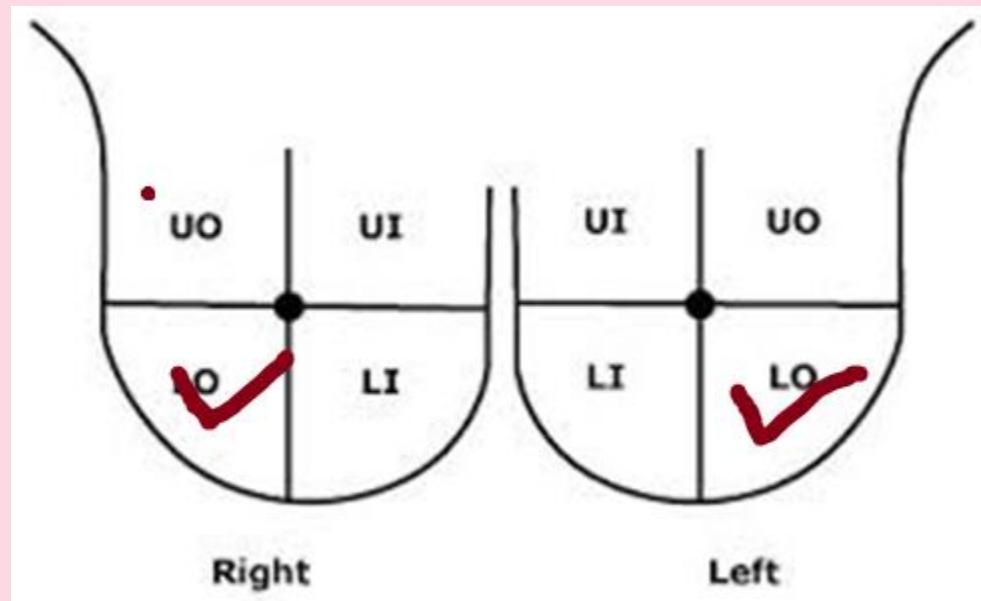
Inverted -T Mammo-plasty (7-mon down the line following RT)



Inverted -T Mammo-plasty (24-mon down the line)



LOQ



J-Mammoplasty



J-mammoplasty- 12 month F/U after RT

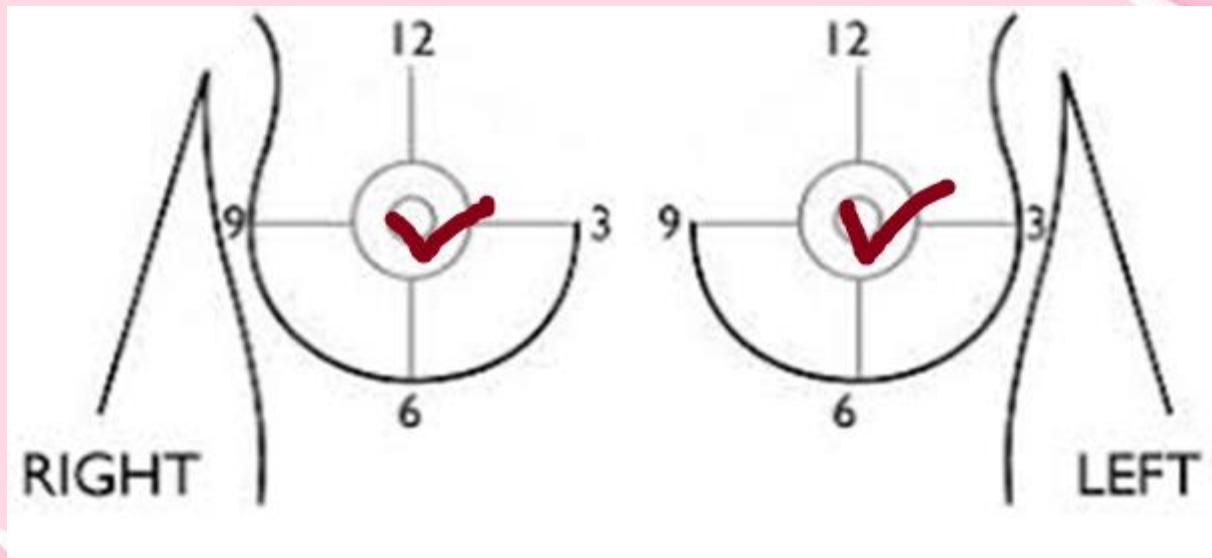


OPS

Breast Unit, NICRH

32

Central Quadrant



Grissoti Mammoplasty



Key hole-shaped dermo-glandular flap



Key hole-shaped dermo-glandular flap

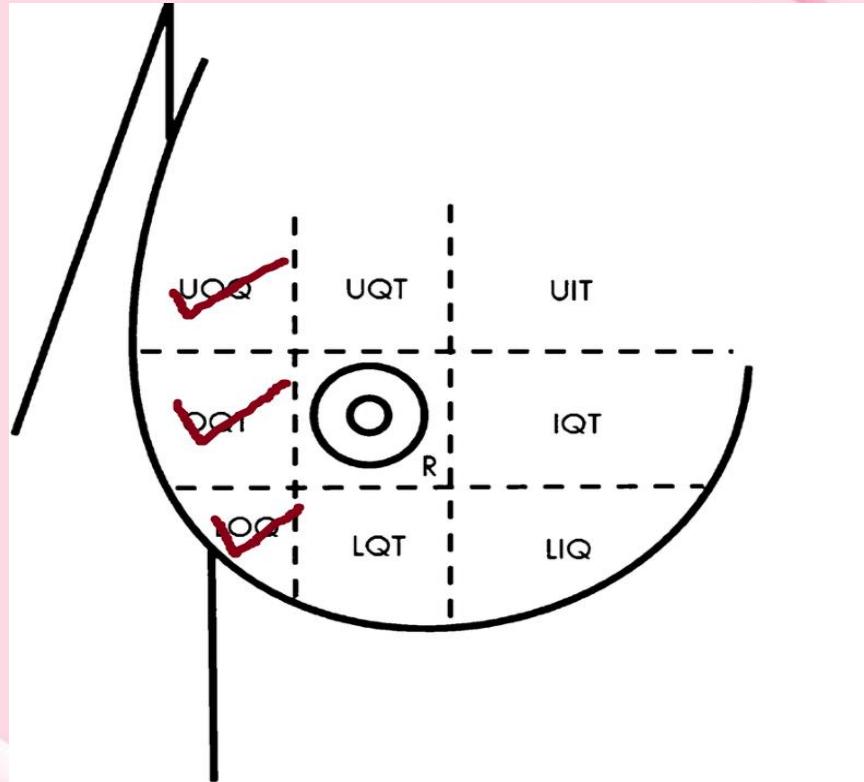


OPS

Breast Unit, NICRH

36

Outer Quadrant Tumor



LICAP



LICAP



OPS

Breast Unit, NICRH

39

OPS techniques performed

SI No	Tecnicue	No.	%
1	Round Block	08	13.8
2	Crescent mastopexy	05	8.6
3	Medial Mammaplasty	06	10.4
4	Lateral Mammoplasty	04	6.9
5	Matrix Rotation Mammaplasty	01	1.7
6	Cross technique mastopexy	06	10.4
7	Parallelogram mastopexy	07	12.1
8	Batwing/Hemi-Batwing Mastopexy	08	13.8
9	Inverted-T Mammaplasty	03	5.2
10	J-Plasty	03	5.2
11	V-Plasty	04	6.9
12	LICAP	01	1.7
13	Grissoti Mammaplasty	01	1.7
14	Ker hole-shaped darmoglandular flap	01	1.7

OPS

Breast Unit, NICRH

40

Follow up series

Data are accumulating.

- **Total OPS** - 58 (from September 2021 to February 2022 at NICRH)
- **Techniques applied** -14
- **Follow up range** – 30 – 38 months (from September 2021 to September 2024)
- **Median follow up**- 3 years/36 months
- **Immediate Complication** – 04

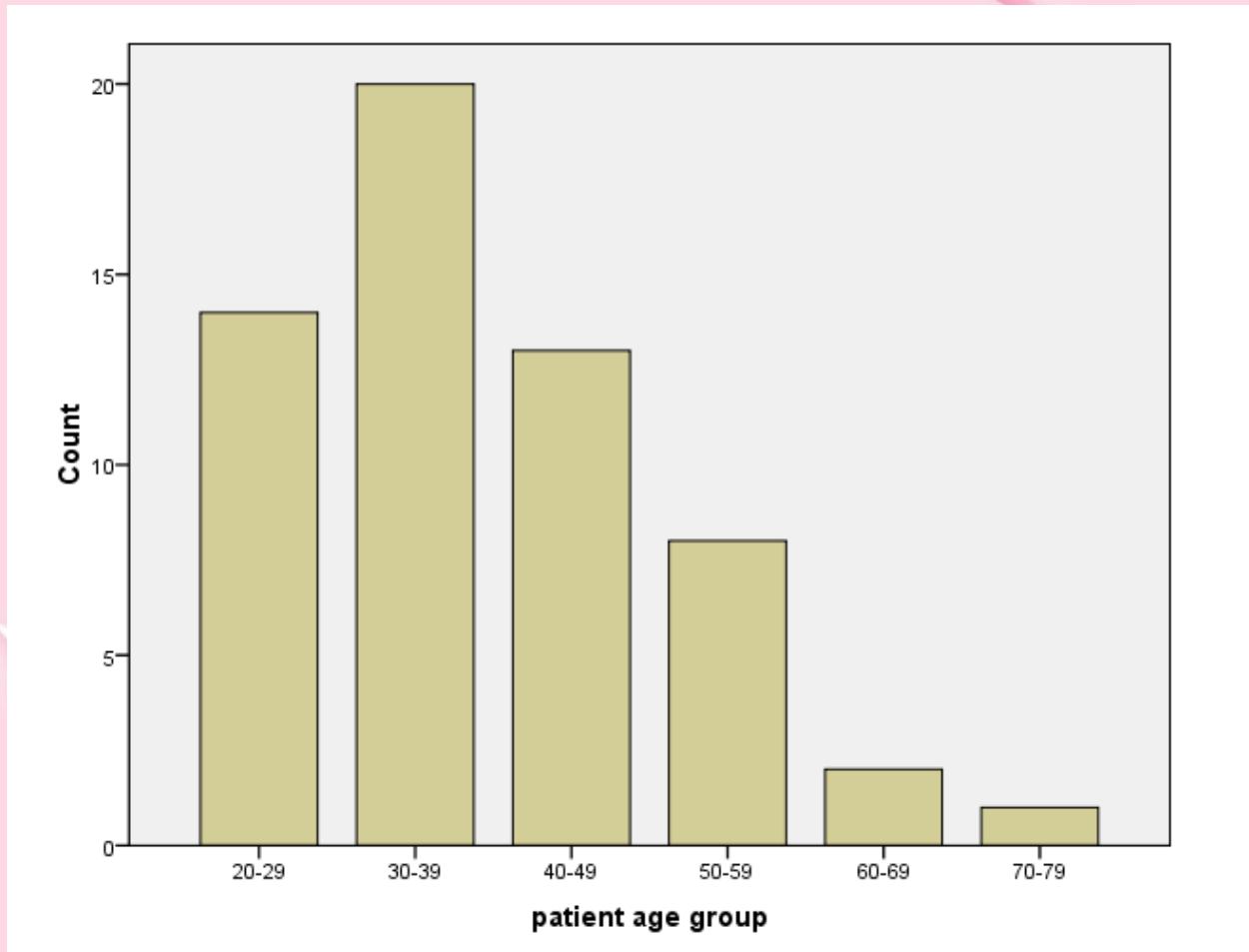
End Points

- Primary end points:
 - ✓ Cosmesis
 - ✓ Recurrence
 - ✓ DSF & OS
- Secondary end points:
 - ✓ Quality of life (QoL)

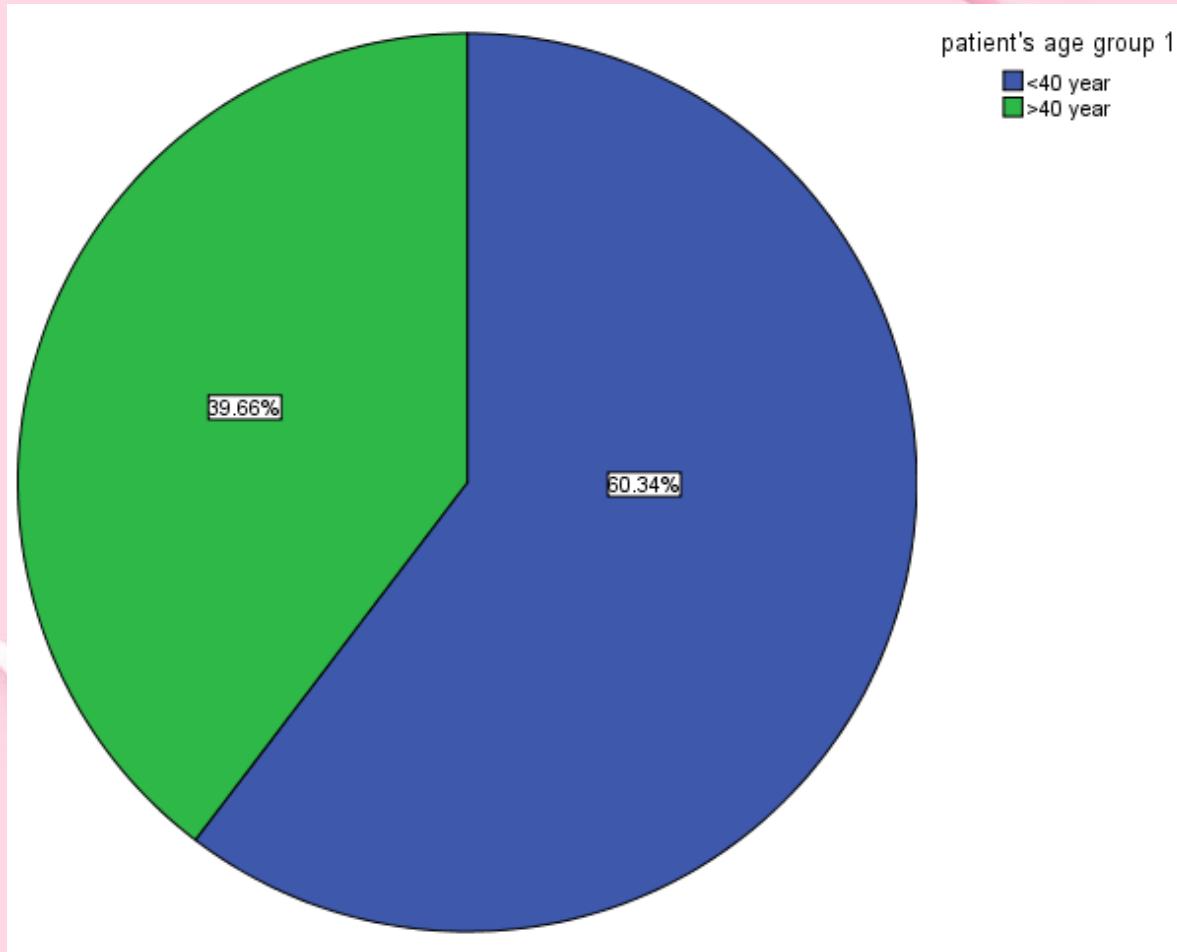
Age of patients

Total	Age Range (Yr.)	Average (Yr.)	Std. Deviation
58	22-73	39.33	11..370

Age of series



Age of patients



Outcome Variables

- **Cosmesis** - 4 point Likert scale
Ipsilateral shape, Cleavage, Scar visibility & Symmetry
- **Recurrence**- Local, Regional & Distant
- **Quality of Life** - Body image scale, Fear of recurrence, Patient satisfaction with treatment and Cosmetic results

Cosmesis

4-point Likert scale (16)

Variables	Poor (1-4)	Fair (5-8)	Good (9-12)	Excellent (13-16)
Ipsilateral shape	0	3	21	34
Cleavage	1	4	13	40
Scar visibility	2	10	21	25
Symmetry	1	5	19	33

Cosmesis

Category	Frequency (n)	Percent (%)	Good to Excellent (9-16)
Good (9-12)	19	32	
Excellent (13-16)	33	58	52 (90%)

Recurrence



Recurrence Rate, n=58



Key hole-shaped D-G flap - 21 mons follow up: Breast normal but Axillary recurrence

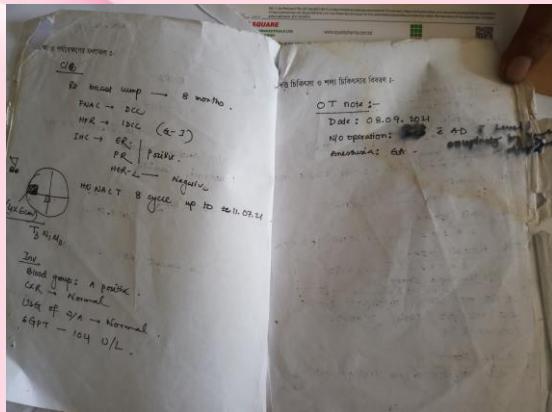
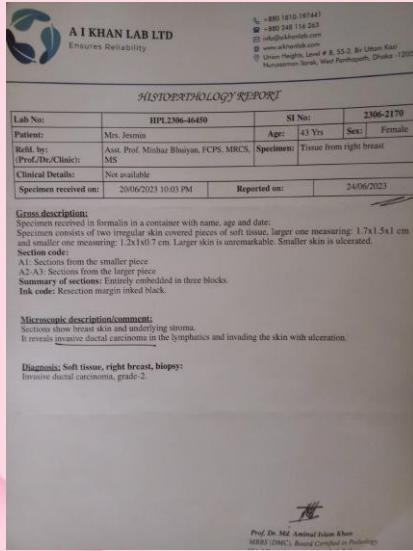


OPS

Breast Unit, NICRH

50

Loco-Distant (Vertebral) Recurrence



OPS

Breast Unit, NICRH

51

Inverted T Mammoplasty – Recurrence as Paget Disease of nipple after 29 mons

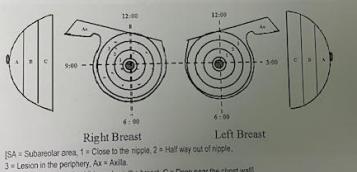


RADIOLOGY SERVICES					
RID No.:	11648200	RIS No.:	3176105		
Patient Name:	Mrs. Aleya Begum	Age/Gender:	45 Y/F		
Referred By:	Dr. Minaj Bhuiyan, MBBS,FCPS.	Bed No/Ward:	OPD		
Ref Date:	28/02/2024 6:27PM	Scan Date:	24/03/2024		
Report Date:	24/03/2024 1:34PM	Report Status:			

USG of ABVS (Both Breast) (R)

Category: BI-RADS-2
Final Assessment and Recommendation:
A benign finding

Routine screening recommended according to the age.



Dr. Sharmin Akhter Rupa
MBBS, M.Phil FCPS
Radiologist



RADIOLOGY SERVICES

RID No.:	11648200	RIS No.:	3176105
Patient Name:	Mrs. Aleya Begum	Age/Gender:	45 Y/F
Referred By:	Dr. Minaj Bhuiyan, MBBS,FCPS.	Bed No/Ward:	OPD
Ref Date:	28/02/2024 6:27PM	Scan Date:	24/03/2024
Report Date:	24/03/2024 1:34PM	Report Status:	

USG of ABVS (Both Breast) (R)

L.M.P.: Chemo induced amenorrhea.

Family H/O breast carcinoma: Nil.

Indication: Post BCT state of carcinoma right breast.

SKIN THICKNESS	:	Normal.		
BREAST TISSUE	:	<ul style="list-style-type: none"> Mild subcutaneous edema is noted in right breast due to post radiation change. Left breast appears normal. No solid or cystic lesion could be detected. 		
DUCT	:	Both breast ducts and ductules are normal.		
FATTY TISSUE	:	Fatty tissue in between glandular tissue and muscles appear normal.		
CALCIFICATION	:	No calcification is seen.		
MUSCLES	:	The underlying muscles appear normal.		
Lymph node	Number	Size (short axis)	Shape	CMD
Right axilla	—	—	—	—
Left axilla	Single	8.0 mm	Oval	Maintained

Comment:

S/P BCT state for carcinoma right breast, follow up USG finding suggests –

1. Mild subcutaneous edema in right breast - post radiation change.
2. Normal left breast with normal left axillary lymphnode.
3. Normal right axilla.



Patient ID: 1000651895
DOB: 17-Jun-1978
Gender: Female
Ref. By: Dr. Minaj Bhuiyan

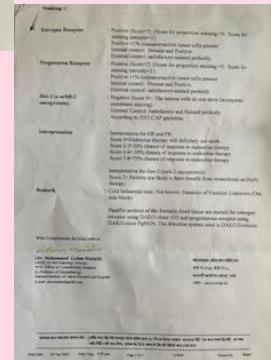
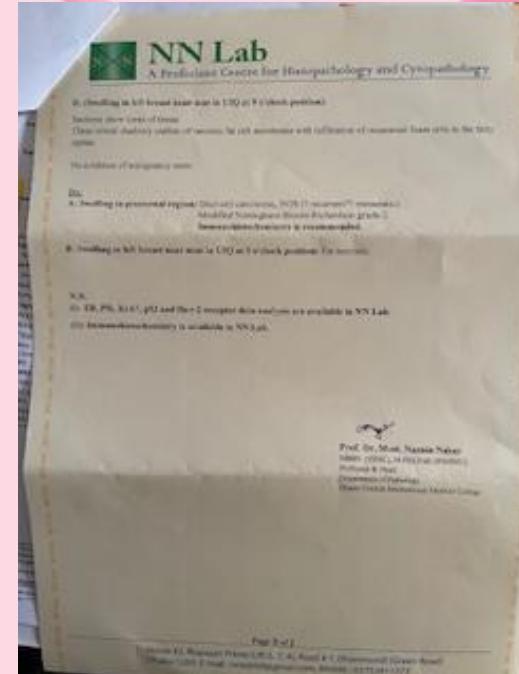
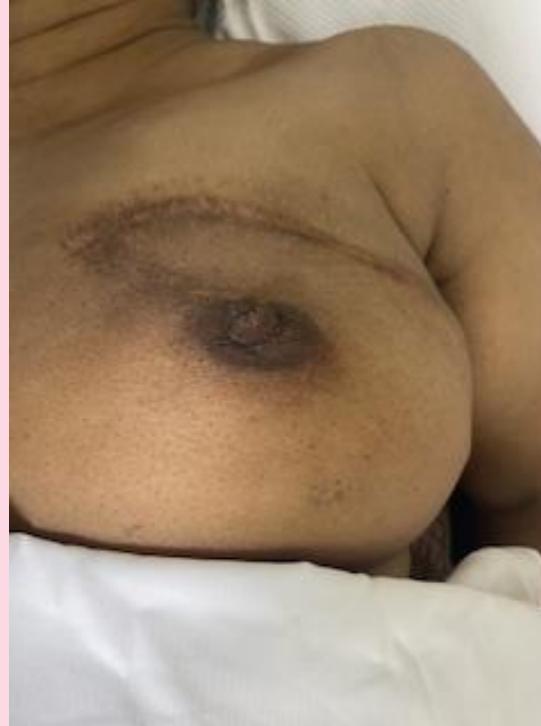
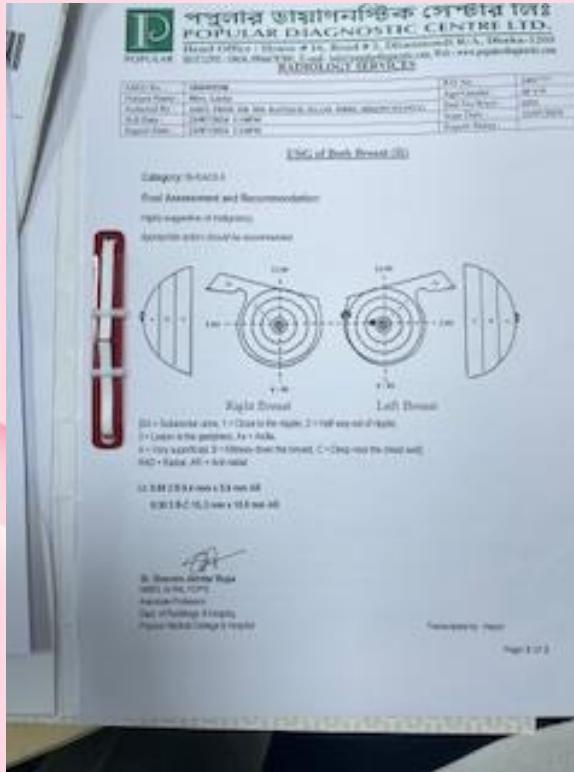
Department of Pathology Laboratory
Histopathology Report

Specimen Information	Collected	06-Jul-2024 8:16 pm
Tissue	Received	07-Jul-2024 4:21 pm
	Report Generated	09-Jul-2024 11:59 am

LAB ID: H-724924
Specimen: Tissue from nipple ulcer, right
Investigation Histopathology
Clinical History: ? Paget's disease of nipple
Gross: Specimen received in formalin with proper lab number consists of a single irregular partly skin covered piece of tissue measuring 2.5x0.1 cm, with surface marked mentioned as short suture-superior margin and long suture -fetal margin. The skin surface is ulcerated.
Section code: Embedded in seven blocks.
A1-A3 = 3 x Sections from greyish white area with deep resection margin.
B1-B3 = 1 x Section from superior margin (short suture).
C = 1 x Section from deep resection margin (long suture).
Microscopic Examination: Sections from the tissue of the nipple reveal focal ulceration of the epidermis covered over by non-inflammatory exudates. The epidermis also shows single as well as clusters of paget cells having large irregular nuclei with prominent nucleoli and abundant pale cytoplasm. The underlying tissue shows increased collagen fibers and dense infiltration of both acute and chronic inflammatory cells. Margins marked with suture as short stitch-superior and long stitch-lateral are free. Deep margin is also free.
Diagnosis: Tissue from nipple, right (Biopsy): Features are consistent with Paget's disease of the nipple.

Plot 15 Road 71 Gulshan Dhaka-1212
Hotline: 10866 | www.uhbd.com

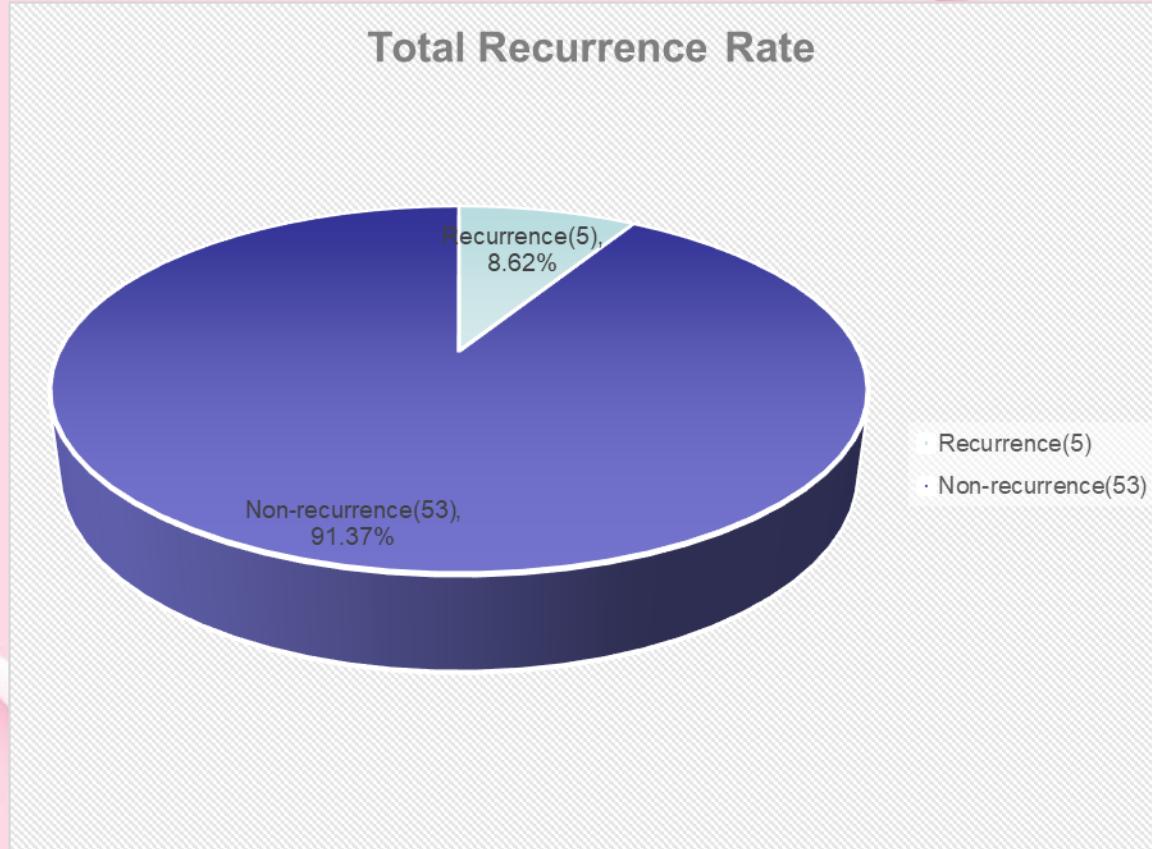
35-mon after local recurrence following Matrix rotation mammoplasty



OPS

Breast Unit, NICRH

Recurrence



Recurrence

5 patients presented with recurrence.

Total Patients	Local Recurrence	Regional Recurrence	Loco-Distance Recurrence	Total Recurrence	Percent (%)
58	2	1	2	5	8.6

QoL

Body image scale (1-100)

Scale	No. of Patients	Percent (%)
Highly satisfied (91-100)	44	76
Satisfied (81-90)	13	22.5
Acceptable (51-80)	1	1.7
Not acceptable (<50)	0	0

QoL ... contd.

Fear of recurrence (1-90)

Scale	No. of Patients	Percent (%)
80-90	2	3.4
70-79	10	17.2
60-69	12	20.6
40-59	26	44.8
0-39	8	13.7

QoL...contd.

Patient satisfaction with treatment (1-100)

Scale	No. of Patients	Percent (%)
Highly satisfied (100)	48	84
Satisfied (75)	8	14
Acceptable (50)	2	2

QoL...contd.

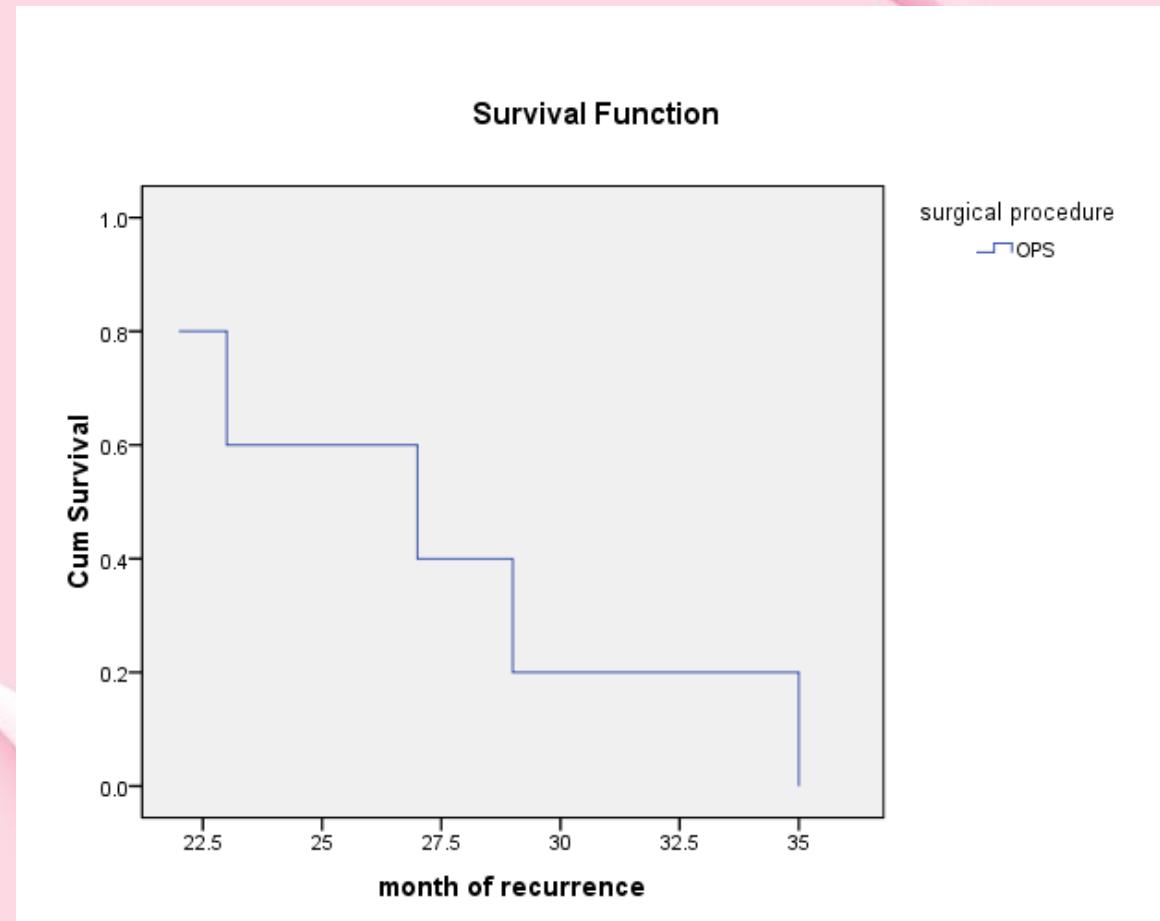
Cosmetic result (1-100)

Scale	No. of Patients	Percent (%)
Highly satisfied (75-100)	46	80
Satisfied (60-75)	12	20
Acceptable (50-60)		0
Not acceptable (<50)		0

QoL...contd.

Category	Level	No. (%)	Comment
Body image	Highly satisfied (91-100) & Satisfied (81-90)	57 (99)	Satisfactory
Fear of recurrence	70-90	12 (20%)	Satisfactory
Satisfaction of treatment	Highly satisfied (100)	48 (84%)	Satisfactory
Cosmetic result	Highly satisfied (75-100)	46 (80%)	Satisfactory

3-Year DFS → 91.4%

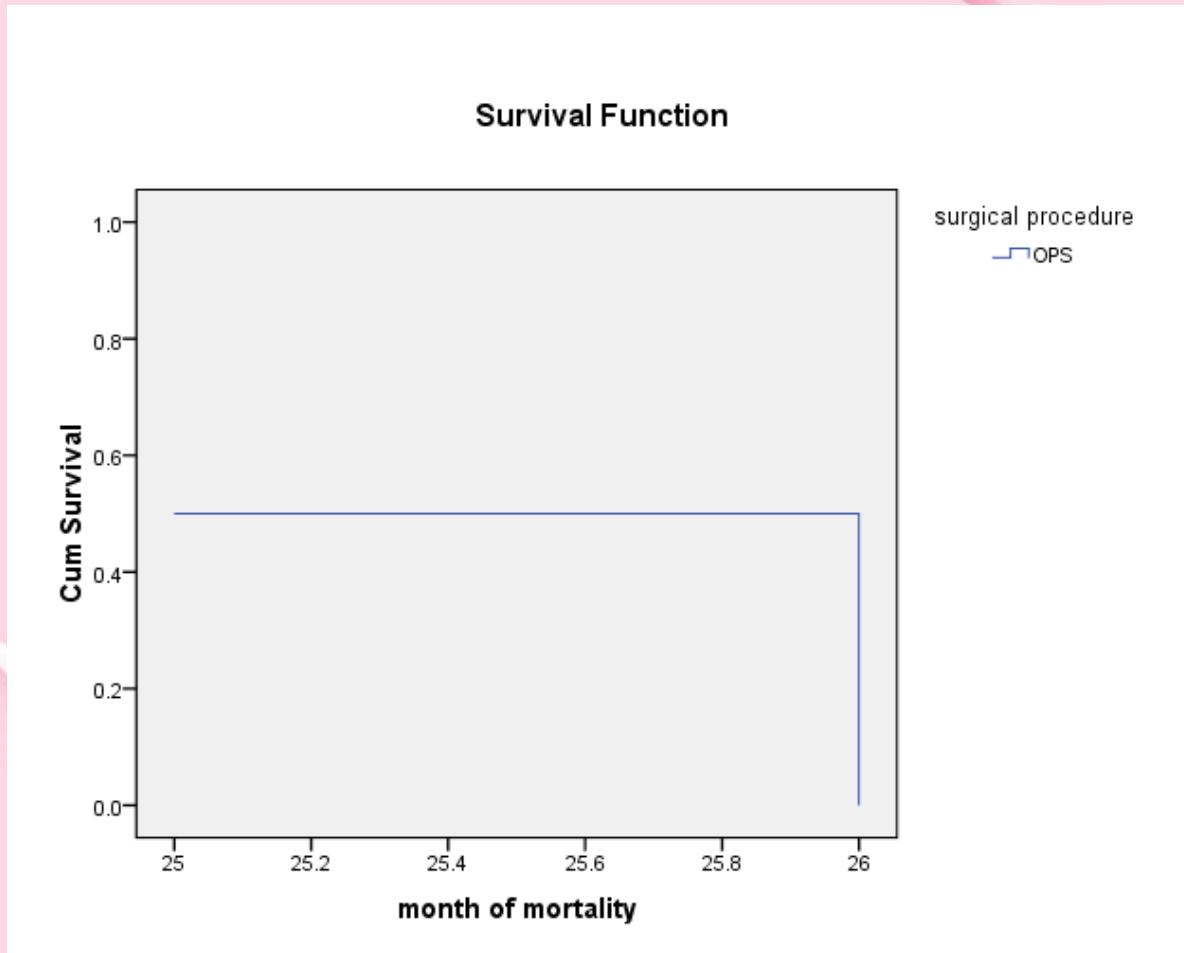


OPS

Breast Unit, NICRH

61

3-Year OS → 96.6%



OPS

Breast Unit, NICRH

62

Conclusions

- OPS is safe & feasible for Bangladeshi breast cancer patients and it should be the standard of care in breast cancer surgery when appropriate.
- It is still under practiced though it offer better cosmesis without compromising oncological safety.
- Basic oncoplasty to advanced oncoplasty to extreme oncoplasty is the learning curve.



THANKS FOR LISTENING