

# Breast Cancers- Body Image Issues; Lymphedema Care



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# Introduction

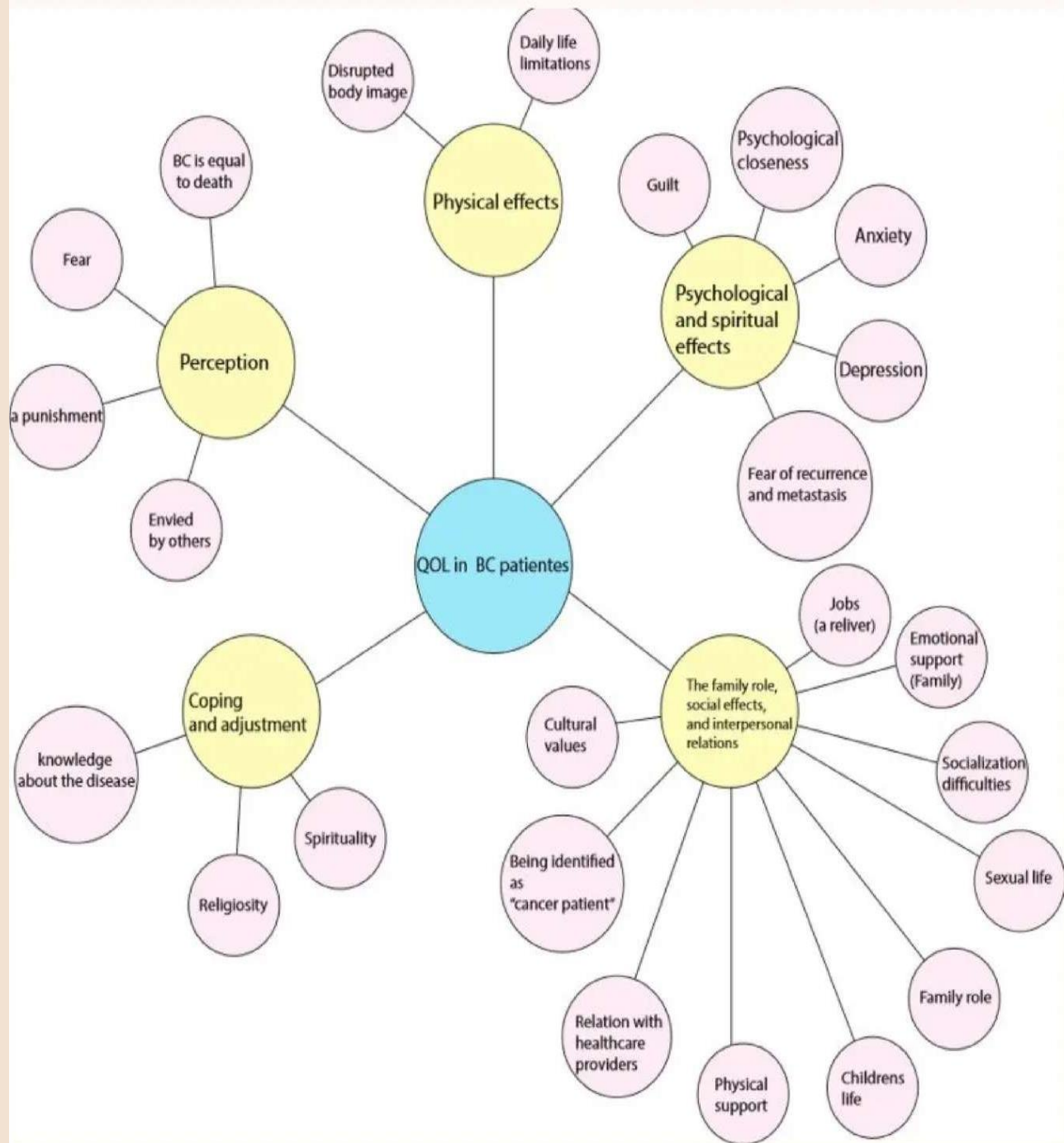
- Breast cancer is the commonest cancer in the world. Higher proportion of the disease is occurring at a younger age in Indian women, compared to the West.
- Management of breast cancer involves both systemic therapy and a locoregional approach with surgery and radiation therapy.
- Breast surgery has evolved from total mastectomy to breast-conserving surgery to oncoplasty and more complex reconstruction procedures.
- With increase in survivorship, issues related to toxicity, quality of life(QOL) and patient reported outcomes have become the cornerstone in improving results.

# Road Map

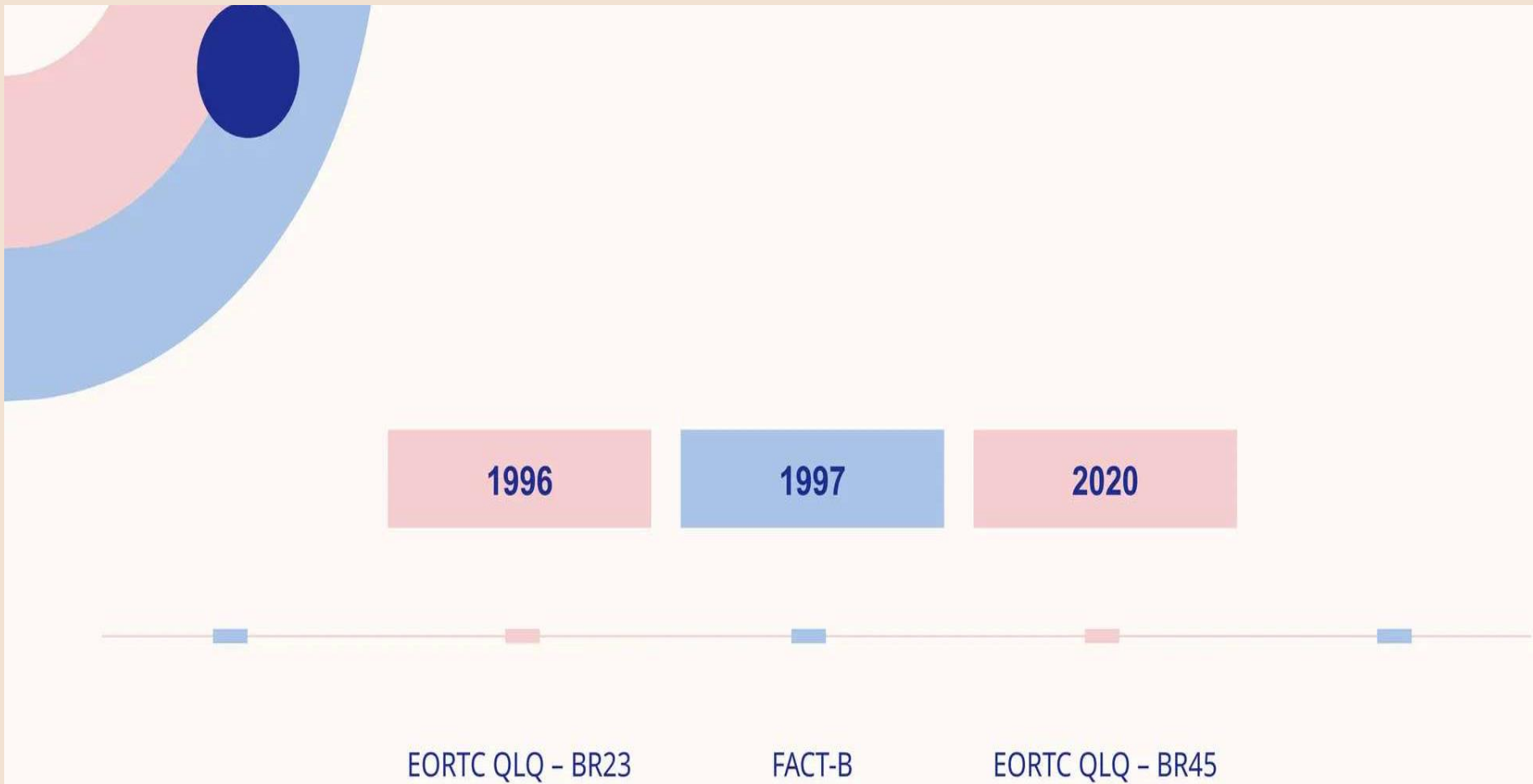
- Introduction
- What are the concerns and body image issues faced by the breast cancer patients.
- Tools for objective assessment of body image disturbances.
- Lymphedema precautions, grading and management

# Breast Cancer: Changes In Self And Body Image Issues

- Hair loss, nail changes post chemotherapy
- Body image issues post mastectomy, scarring, reconstruction
- Weight gain/ arthralgia/ osteoporosis/Hot flashes/ Fertility /Vaginal dryness,, dyspareunia due to hormonal therapy
- Arm functions, Lymphedema, axillary neuropathy post ALND and adjuvant RT
- Psychosocial factors :Fear of recurrence and anxiety
- Role change-with family, partner, work, children



# Tools for objective assessment



# Quality Of Life, Cosmesis And Toxicity Assessment

- **EORTC QLQ C-30** questionnaire comprises of a global health status/QOL scale;
- Five functional scales – physical, role, emotional, cognitive and social;
- Three symptom scales – fatigue, nausea and vomiting, and pain;
- Six single item scales - dyspnoea, insomnia, appetite loss, constipation, diarrhea, and financial difficulties.
- High score for a functional scale represents a high/health level of functioning, a high score for the global health status/QOL represents a high QOL but a high score for a symptom scale/item represents a high level of symptomatology/problems.
- **EORTC BR-23** questionnaire incorporates five multi-item scales to assess systemic therapy side effects, arm symptoms, breast symptoms, body image and sexual functioning.
- **QLQ-BRECON23** questionnaire – for Breast Reconstruction
- Many language formats of the validated questionnaire available on the website



## EORTC QLQ - BR23

Patients sometimes report that they have the following symptoms or problems. Please indicate the extent to which you have experienced these symptoms or problems during the past week.

During the past week:	Not at All	A Little	Quite a Bit	Very Much
31. Did you have a dry mouth?	1	2	3	4
32. Did food and drink taste different than usual?	1	2	3	4
33. Were your eyes painful, irritated or watery?	1	2	3	4
34. Have you lost any hair?	1	2	3	4
35. Answer this question only if you had any hair loss: Were you upset by the loss of your hair?	1	2	3	4
36. Did you feel ill or unwell?	1	2	3	4
37. Did you have hot flushes?	1	2	3	4
38. Did you have headaches?	1	2	3	4
39. Have you felt physically less attractive as a result of your disease or treatment?	1	2	3	4
40. Have you been feeling less feminine as a result of your disease or treatment?	1	2	3	4
41. Did you find it difficult to look at yourself naked?	1	2	3	4
42. Have you been dissatisfied with your body?	1	2	3	4
43. Were you worried about your health in the future?	1	2	3	4

During the past <u>four</u> weeks:	Not at All	A Little	Quite a Bit	Very Much
44. To what extent were you interested in sex?	1	2	3	4
45. To what extent were you sexually active? (with or without intercourse)	1	2	3	4
46. Answer this question only if you have been sexually active: To what extent was sex enjoyable for you?	1	2	3	4

Please go on to the next page

## FACT-B (Version 4)

Below is a list of statements that other people with your illness have said are important. Please circle or mark one number per line to indicate your response as it applies to the past 7 days.

	Not at all	A little bit	Some-what	Quite a bit	Very much
<b>PHYSICAL WELL-BEING</b>					
GP1	0	1	2	3	4
GP2	0	1	2	3	4
GP3	0	1	2	3	4
GP4	0	1	2	3	4
GP5	0	1	2	3	4
GP6	0	1	2	3	4
GP7	0	1	2	3	4

	Not at all	A little bit	Some-what	Quite a bit	Very much
<b>SOCIAL/FAMILY WELL-BEING</b>					
GS1	0	1	2	3	4
GS2	0	1	2	3	4
GS3	0	1	2	3	4
GS4	0	1	2	3	4
GS5	0	1	2	3	4
GS6	0	1	2	3	4
GS7	0	1	2	3	4
GS8	0	1	2	3	4
GS9	0	1	2	3	4
GS10	0	1	2	3	4
GS11	0	1	2	3	4
GS12	0	1	2	3	4
GS13	0	1	2	3	4
GS14	0	1	2	3	4
GS15	0	1	2	3	4
GS16	0	1	2	3	4
GS17	0	1	2	3	4
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GS96	0	1	2	3	4
GS97	0	1	2	3	4
GS98	0	1	2	3	4
GS99	0	1	2	3	4
GS100	0	1	2	3	4



# Indian Scenario

- Apprehension, poorer sexual function and anxiety related with social acceptability after mastectomy causes future uncertainty in post mastectomy patients.
- In a study by Cherian et al (South Asian J Cancer, 2022), body image issues were significantly better in patients undergoing BCS as compared to those undergoing mastectomy .
- Another Indian study by Munshi et al (Radiother Oncol, 2010) found that there was no significant difference in body image in patients with BCS versus those with mastectomy however patients who underwent mastectomy had poorer future perspective score compared with BCS patients.
- These results challenge the common belief that patients from developing countries do not possess a strong body image.

# Body Image and Sexuality in Women Survivors of Breast Cancer in India: Qualitative Findings

**Michelle S Barthakur, Mahendra P Sharma<sup>1</sup>, Santosh K Chaturvedi<sup>2</sup>, Suraj K Manjunath<sup>3</sup>**

Manukau Community Mental Health Centre, Counties Manukau District Health Board, Auckland, New Zealand, Departments of <sup>1</sup>Clinical Psychology and <sup>2</sup>Psychiatry, National Institute of Mental Health and Neurosciences, <sup>3</sup>Department of Surgical Oncology, St. John's Medical College and Hospital, Bengaluru, Karnataka,

*Indian J palliat care, 2017*

- Qualitative in-depth interviews were done in breast cancer survivors using semi-structured format that was developed for the study.
- In body image, emerging themes were about identity (womanhood, motherhood, and attractiveness), impact of surgery, hair loss, clothes, and uncomfortable situations.
- “Maybe our society is such that you will conceal breast... That’s why always one dupatta (scarf) will be there... So losing a breast was not really big thing for me”
- Those undergoing mastectomies used substitutes such as prosthesis, padded bras, and pads. The use of prosthesis on an everyday basis was convenient, but its weight was a concern and others would use pads made out of cloth.
- In relation to lymphedema, the need for different sleeve sizes was a matter of concern as they had to be stitched in different sizes.
- In relation to feeling uncomfortable in particular situations due to fears of exposure, it occurred when going for swims, massages, changing clothes others presence, frisked by security personnel

# Cancer Support Group



# Monthly Group Counseling



Sharing helps in bearing pain!

NGO support for prosthesis, lymphedema kits



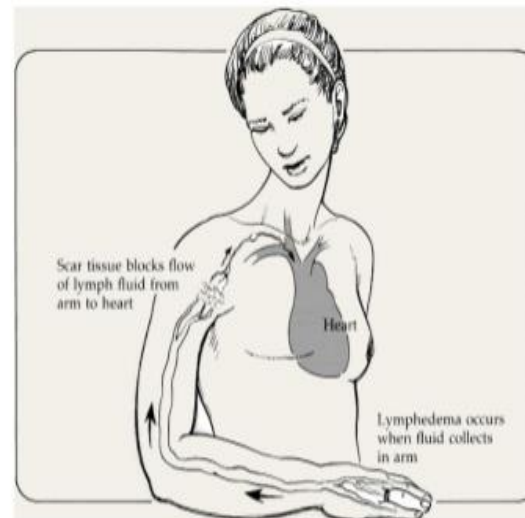
# How Does Lymphedema Develop ?

- Lymphedema is an abnormal accumulation of protein-rich fluid within the interstitial tissue that can occur after breast cancer surgery or radiation therapy.
- Lymphedema affects up to 50% of breast cancer patients

## EARLY BREAST CANCER TREATMENT COMPLICATIONS - LYMPHEDEMA -

More common in patients who have undergone both axillary RT and surgery

- ❑ SLNB + radiation therapy → frequency 23%
- ❑ ALND + radiation therapy → frequency 35% in node-negative and 48% in node-positive patients



# Seminal Randomized Clinical Trials and the Risk of Lymphedema With Various Axillary Interventions

Clinical Trial	Risk of Lymphedema
ACOSOG Z0011 <sup>12</sup> : SLND v cALND (19% of patients received protocol-prohibited third-field irradiation); mastectomy patients: none	SLNB + cALND group had more wound infections ( $P < .0016$ ), seromas ( $P < .001$ ), and paresthesia ( $P < .001$ ) than did those in the SLND alone group. At 1 year, lymphedema was reported subjectively by 13% of patients after SLNB + ALND and 2% after SLNB alone ( $P < .001$ ).
ALMANAC <sup>13</sup> : SLNB v standard axillary treatment (levels I-III cALND or four node sampling); mastectomy patients: 8%-10%	At 18 months postsurgery, approximately twice as many patients in the cALND group than in the SLNB group reported substantial arm swelling (14% v 7%; $P = .002$ ) or numbness (19% v 8.7%; $P < .001$ ).
AMAROS <sup>14</sup> : All patients received SLND (those who had positive SLND received either cALND or axillary radiation); mastectomy patients: 17%-18%	Clinical lymphedema: 23% and 11% in the cALND and axillary radiation arms, respectively, at 5 years. On the basis of the measurement of arm circumference of $\geq 10\%$ : 13% v 6% in the cALND and axillary radiation arms, respectively.
NCIC-MA20 <sup>15</sup> : RNI (internal mammary, supraclavicular, and axillary fields) v no RNI; mastectomy patients: none	8.4% v 4.5% ( $P = .001$ ; after a median follow-up of 9.5 years) in the RNI group v no RNI group, respectively.
EORTC 22922/10925 <sup>16</sup> : RNI (medial supraclavicular and internal mammary nodes) v no RNI; mastectomy patients: 24%	10.5% v 12.0% (no RNI v RNI, respectively); the low frequency of lymphedema is likely a result of the avoidance of irradiation in the operated axilla unless adverse risk factors were present. Overall, only 7.4% of patients in the control group and 8.3% in the RNI group underwent irradiation to the axilla.
Veronesi et al <sup>17</sup> : Tumors < 2 cm in size (randomly assigned to SLNB v cALND); mastectomy patients: none	cALND group: 8% and 12% at 6 and 12 months, respectively, v none in the SLNB group.

# Symptoms & Stages Of Lymphedema

Typically within 3 years of surgery.

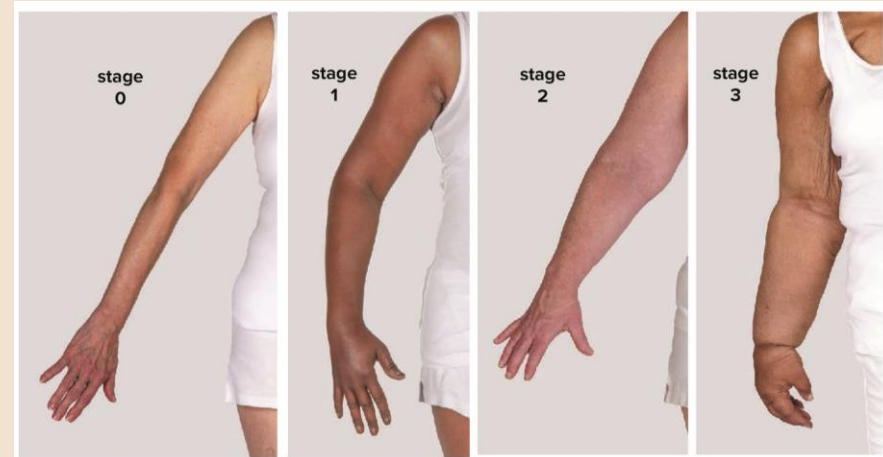
Tingly, ache, fullness.

Triggered by overuse/injury.

Difficult in fitting clothes, watches  
,rings, bracelets

*‘There is no such thing as little bit of swelling’-  
Nicole Stout*

- Stage 0 (latent)
- Stage 1 (mild)-pitting edema
- Stage 2 (moderate)-non pitting edema
- Stage 3 (severe)-large misshapen limb, wrinkled, leathery





# Stages Of Lymphedema

Stage	International Society of Lymphology	American Physical Therapy Association	NCI-CTCAE Grade
0	Subclinical swelling not apparent on clinical exam despite impaired lymph flow	Mild: Maximum girth difference between the affected and unaffected limb of less than 3 cm	Grade 1: Trace thickening or faint discoloration
1	Soft edema that pits with no dermal fibrosis and subsides with limb elevation within 24 hours.	Moderate: Maximum girth difference between the affected and unaffected limb between 3-5 cm	Grade 2: Marked discoloration, leathery skin texture, and papillary formation that limit IADLs
2	Nonpitting lymphedema that does not resolve with limb elevation, reflecting evolution of dermal fibrosis	Severe: Maximum girth difference between the affected and unaffected limb greater than 5 cm	Grade 3: Severe symptoms that limit self-care and ADLs
3	Lymphostatic elephantiasis with nonpitting edema with skin changes of acanthosis and warty overgrowths		

**SURVIVOR AT RISK  
FOR LYMPHEDEMA****SCREENING****WORKUP IF LYMPHEDEMA  
IS SUSPECTED****TREATMENT<sup>k</sup>**Survivor  
at risk for  
lymphedema

- Inquire at regular intervals about:
  - ▶ Swelling or feeling of heaviness, fatigue, or fullness
  - ▶ Frequency and severity of swelling
  - ▶ Swelling, tightness, or uncomfortable sensation that interferes with daily activities
  - ▶ Pain/discomfort
  - ▶ Range of motion and mobility (ie, bending, stretching, flexibility)
  - ▶ Strength
- Perform clinical examination, which may include, but is not limited to:
  - ▶ Range of motion
  - ▶ Muscle performance
  - ▶ Circulation
  - ▶ Sensation
  - ▶ Hemodynamic functioning
  - ▶ Functional mobility
- If available, obtain objective measurements to identify early signs of lymphedema; tools may include bioimpedance spectroscopy

- Rule out recurrence of cancer, infection, or deep vein thrombosis (DVT) of an extremity
- Refer to a certified lymphedema therapist (if available)<sup>i</sup> for assessments such as:
  - ▶ Subjective symptoms/signs
  - ▶ Limb volume measurement<sup>l</sup>
  - ▶ Clinical examination, which may include, but is not limited to range of motion, muscle performance, circulation, sensation, hemodynamic monitoring, and functional mobility
- Lymphoscintigraphy, if clinically indicated
- Assess distress ([SANXDE-1](#))

- Survivor lymphedema education, including self-care management, skin care, and self-bandage ([SLYMPH-A](#))
- Refer to certified lymphedema therapist (if available)<sup>i</sup> for consideration of the following:
  - ▶ Compression<sup>l</sup>
    - ◊ Fit for compression garments
    - ◊ Review use of garments
    - ◊ Pneumatic compression for ongoing home management
    - ◊ Review use of multilayered bandage wrapping
  - ▶ Progressive resistance training under supervision<sup>m,n</sup>
  - ▶ Manual lymphatic drainage<sup>l,o</sup>
- Refer to qualified therapist for range-of-motion exercises<sup>p</sup>
- For select patients, consider referral to a lymphedema surgeon, in consultation with a certified lymphedema therapist and/or physiatrist specializing in lymphedema

Surveillance  
([SLYMPH-4](#))  
or  
If no  
response, but  
persistent  
symptoms,  
consider  
reviewing  
adherence  
to treatment  
plan and/  
or self care  
management

[Footnotes on SLYMPH-3A](#)

Note: All recommendations are category 2A unless otherwise indicated.

# Reducing Risk of Lymphedema

- **Avoid Infection**

- Treat even small injuries/hangnails with care.
- Wash the injury with soap and water, apply antibiotic ointment, then cover with a band-aid.
- Keep skin of the hand and arm clean and moisturized.
- Apply moisturizing lotion several times a day

# Reducing Risk of Lymphedema

## Avoid Constriction

- Avoid clothing with elastic sleeve bands or with tight arms.
- Don't wear a watch, rings, glass bangles on affected arm.
- Avoid carrying a heavy purse or bag with the affected arm.
- Blood pressure taken on the unaffected arm.
- Underclothing should not leave pressure marks.
- When traveling in a car or plane for long distances, keep the affected arm above the level of the heart.

# Reducing Risk of Lymphedema

## Avoid Muscle Strain

- Avoid heavy lifting if muscles are not used to it.
- Avoid vigorous, repetitive movements such as scrubbing, pulling, hammering.
- Avoid sudden and forceful strokes.
- Begin any new exercise/activity involving the arms gradually and with caution

# Lymphedema Treatment Includes

- Light exercises which encourage lymph fluid drainage
- Compression garments
- Multi layer lymphedema bandaging (MLLD)
- Massage/ manual lymphatic drainage
- Pneumatic compression
- Complete decongestive therapy (CDT).
- Surgical treatments

# Lymphedema Treatment Plan

- Stage 0- compression sleeves and special exercises
- Stage 1-compression sleeves and special exercises
- Stage 2 or 3-CDT (Complete Decongestive Therapy)



# Exercises



Open and close your hand



Move your wrist forward and back



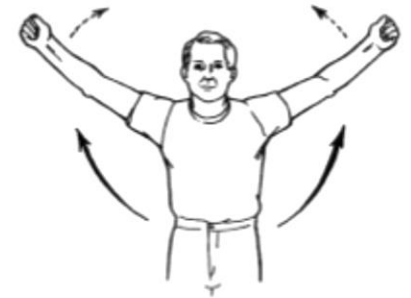
Bend and straighten your elbow



Roll your shoulders in a backward direction



Lift your hand up toward the ceiling and gently lower back down



Raise arms from your side up above your head and gently lower back down



# Compression Sleeves And Garments

- Good compression garments can be custom-made or prefabricated
- Measurement and fit by trained personnel
- Two sleeves to alternate them for washings.
- Sleeve/fingerless glove or gauntlet/support for chest and breast
- Creates graded pressure

# Massage (Manual Lymphatic Drainage)

- Uses light touch to move excess lymph and fluid out of the tissues.

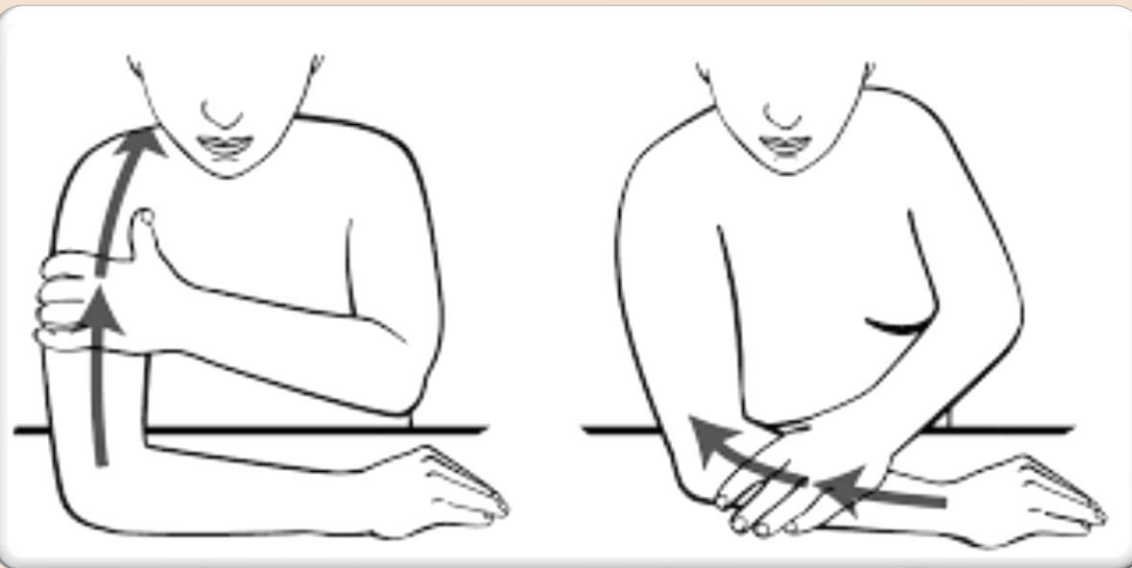
ARM / HAND - 30 HAND: Dorsum of Hand to Axilla Sweep



Involved palm down, fingers in web spaces, sweep \_\_\_\_\_ times over top of hand and forearm, back of upper arm, shoulder, chest front, to uninvolved armpit.

Do \_\_\_\_\_ times per day.

Copyright 1997, 2006



# Bandaging

- Compact bandaging material (not bulky)
- Short stretch bandages of varying sizes

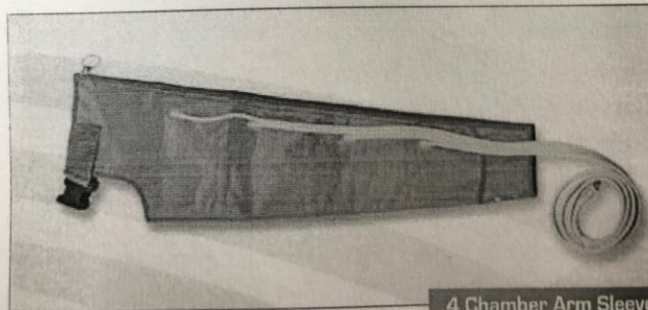


# Pneumatic Compression Pumps

## Lympha Press® Arm Garments



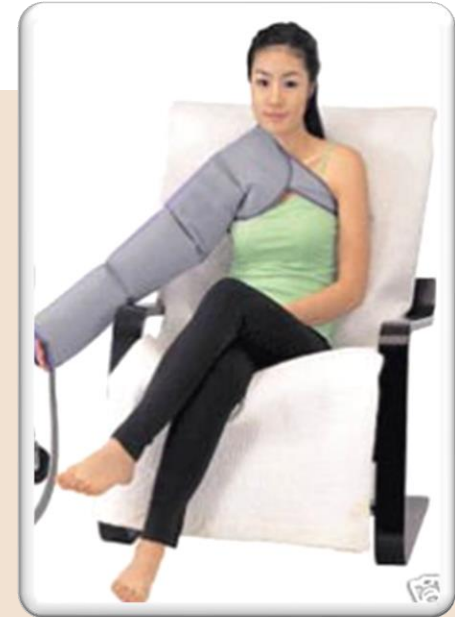
12 Chamber Arm Sleeve



4 Chamber Arm Sleeve

# Pneumatic Compression Pumps

- 2-week cycle of 5 pump sessions per week, each session lasting ½-2 hours, followed by a 5-week break, and then another 2-week treatment cycle
- Sequential, multichambered pumps
- Linear pressure wave from distal to proximal portions of the limb that reduces the tendency of fluid to collect in the hand.



# Complete Decongestive Therapy (CDT)

- Phase I-Reductive CDT
- MLD+ compression bandaging + pneumatic compression + exercise
- Phase II-maintenance CDT
- Compression sleeve +self care

## Figure





Treatment	Treatment	Proposed mechanism
<p>Compression therapy</p> 	<p>Multilayer bandaging or pneumatic compression (treatment phase 2-4 weeks) or using a graduated hosiery/compression sleeve (prevention and ongoing maintenance phase)</p>	<p>Enhance lymph flow, increase muscle pump function, and prevent further swelling</p>
<p>Exercise</p> 	<p>Specific remedial exercises that involve repetitive, non-resistive motion of the involved body part. The exercise sequence progresses from proximal to distal</p> <p>General exercises such as resistance exercise, yoga, and Nordic walking</p>	<p>Enhance lymph flow, increase muscle pump function, and prevent further swelling</p>
<p>Manual lymph drainage</p> 	<p>Gentle manual massage techniques applied by a specialised health professional (physiotherapist or skin therapist)</p>	<p>Enhance lymph flow to prevent or treat oedema</p>
<p>Decongestive lymphatic (complete decongestive) therapy (treatment only)</p> 	<p>A combination treatment for manifest lymphoedema, usually comprising compression therapy, manual lymph drainage, exercise, and skin care. There is a reduction phase (2-4 weeks) and a maintenance phase which aims at preventing relapse</p>	<p>All of the above combined</p>

Fig 1 Clinical and patient management and treatment of lymphoedema

# Surgery For Lymphedema

- Indicated only for failed conservative management, recurrent cellulitis, disfigurement, or a limitation of function.
- **Physiologic methods**, such as lymphatic bypass, flap transposition, and vascularized lymph node transfers, are feasible if fibrosis and fat hypertrophy are not severe.
- **Ablative techniques** include excisional procedures and liposuction.
- Immediate lymphatic reconstruction during ALND with a supermicrosurgery technique is also a feasible **preventative surgery**





# Take Home Message

- Physiological and psychosocial impact of breast cancer treatment and lymphedema needs psycho educational support
- *New normal* for breast cancer patients post treatment
- Support group services with dietician , psychologist, lymphedema therapist may be of help.

THANK  
you

