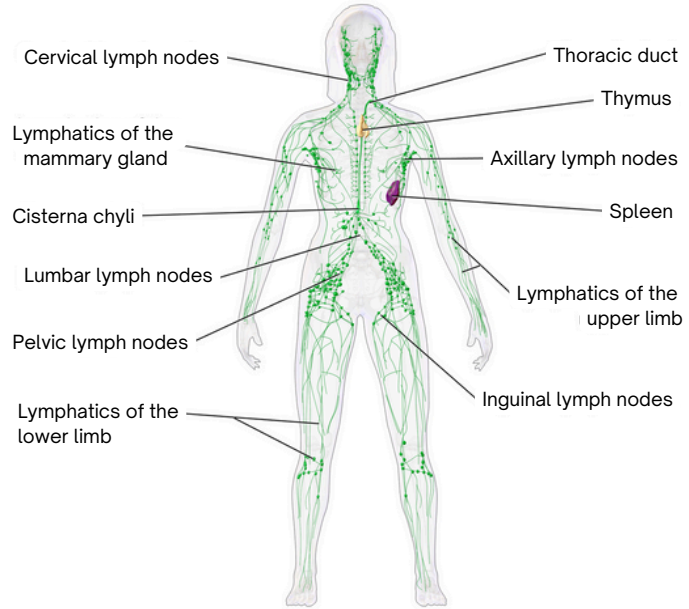


Lymphatic System



LOWER LIMB CANCER REHABILITATION



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ROLE OF ONCO PHYSIOTHERAPIST IN LOWER LIMB LYMPHOEDEMA

- Mostly Lymphoedema patients received chemotherapy and radiotherapy.
- 41.1% of People in India develop Lymphoedema after surgery.
- 33.50% had clinically significant Lymphoedema 17.21% had severe Lymphoedema. The prevalence Of Lymphoedema in patients treated with surgery was 13.4% whereas the prevalence was 42.4% in patients treated with surgery and radiotherapy.
- Lymphoedema is a global term used to designate pathological, regional accumulation of protein rich fluid.
- It can be either do primary or secondary and mainly occurs after cancer treatment.
- Lymphoedema is a chronic medical condition characterized by the abnormal growth of fat cells, typically in the legs, thighs, and buttocks, leading to bilateral and symmetrical swelling, pain, and tenderness.

STAGE OF DISEASE

- Body surface area >1.5m² Presence of other diseases, postoperative Radiotherapy and anthracycline- based chemotherapy were significant risk factors in univariate analysis and radiotherapy alone & Presence of other diseases emerged as independent risk factors.

LOWER LIMB LYMPHOEDEMA



SIGNS OF INFECTION INCLUDE

- Redness (may indicate a superficial infection called cellulitis)
- A streaking or rash appearance (may indicate a deeper infection called lymphangitis)
- Fever General Malaise

PRIMARY LOWER LIMB LYMPHEDEMA DISEASES

MILROY DISEASE

- A rare, inherited form of primary lymphedema that typically affects the legs.

MEIGE DISEASE

- A type of primary lymphedema that usually affects the legs and is characterized by swelling, especially after puberty.

LATE-ONSET LYMPHEDEMA

- A type of primary lymphedema that develops in adulthood, often affecting the legs.

LYMPHEDEMA PRAECOX

- A type of primary lymphedema that typically affects females and develops during puberty, often in the legs.

LYMPHEDEMA TARDA

- A type of primary lymphedema that develops in adulthood, often affecting the legs.

SIGNS OF INFECTION ARE PRESENT

- Stop wearing any form of compression on the limb (bandaging or garments)
- Seek medical attention immediately ; before the
- infection worsens (antibiotics are generally
- prescribed as treatment).
- Stop exercise and other activities.

SECONDARY LOWER LIMBS LYMPHEDEMA CAUSES

POST-SURGICAL LYMPHEDEMA

- After surgeries like lymph node removal or vein harvesting.

RADIATION-INDUCED LYMPHEDEMA

- After radiation therapy for cancer treatment.

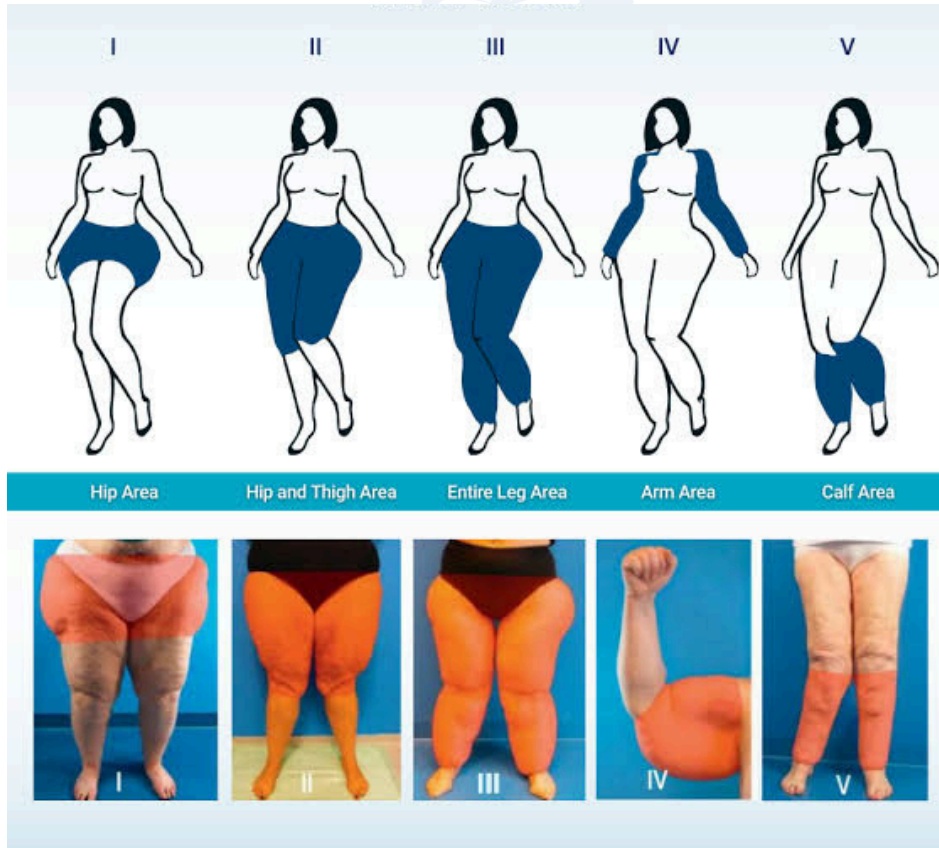
FILARIASIS-INDUCED LYMPHEDEMA

- Caused by the parasitic infection filariasis.

TRAUMATIC LYMPHEDEMA

- Resulting from injuries or trauma to the legs.

LIPEDEMA STAGES



COMMON SYMPTOMS

- Bilateral and symmetrical swelling in the legs, thighs, and buttocks
- Pain and tenderness in the affected areas
- Easy bruising and bleeding
- Skin thickening and hardening (fibrosis)
- Limited mobility and flexibility
- Disproportionate fat distribution, with sparing of the feet and hands
- Painful nodules or lumps under the skin
- Skin folds or creases, increasing the risk of infections

OTHER SYMPTOMS

- Fatigue
- Joint pain or stiffness
- Muscle weakness
- Decreased sensation or numbness in the affected areas
- Emotional distress and psychological impact

PHYSICAL SIGNS

- Visible swelling and fat accumulation
- Skin thickening and hardening (fibrosis)
- Bruising or discoloration
- Skin folds or creases
- Limited range of motion

Keep in mind that symptoms may vary in severity and impact daily life. If you're experiencing these symptoms, consult a healthcare professional for proper diagnosis and treatment.

EXERCISE FOR LOWER LIMB LYMPHOEDEMA

These exercises are best done lying on the floor with legs raised on pillows.



Bring knees to chest



Slowly straighten and lower each leg in turn.
Repeat 10 times.



Slowly point toes and then flex.
Repeat 10 times.



Move each foot in a circular movement to the left and then right.
Repeat 10 times.



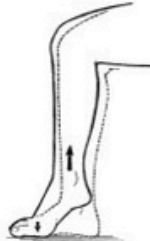
Bring knees to chest wall and do cycling movement.
Repeat 10 times.



EXERCISE TO REDUCE LOWER LIMB LYMPHOEDEMA



Roll your foot in a circle
Repeat in the opposite direction



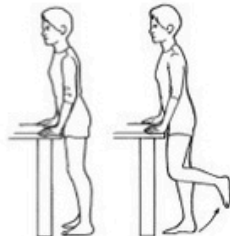
Place your foot flat on the floor
Tap your heels



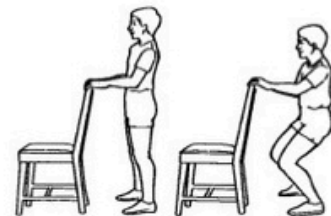
Sit with your feet down
Straighten and bend your knee



Stand holding on to a firm surface (e.g. table)
Lift one foot off the floor as high as you can
Slowly lower back down



Bend your knee, lifting your foot up behind you
and lower



Slowly bend both your knees and then slowly stand back up

All exercises should be done 10-15 repetition and 2 times a day.

After doing all these exercises, self MLD (Manual Lymphatic Drainage) should be done for 25-30 minutes.

DO'S

- Do protect your arm from sunburn.
- Do avoid insect bites.
- Do wear gloves when gardening.
- Do follow regular exercise.
- Do wear oven mitts when moving hot plates and from the oven or burner.
- Do keep your arm clean and apply moisturizing cream regularly.
- Do thoroughly clean and apply an antibiotic and bandage to any scratch or cut immediately after the injury occurs.
- Do dry your arm thoroughly after bathing
- Do wear a soft bra with padded shoulder straps.
- Do try to avoid burns.
- Do wear a compression sleeve anytime you travel by air.
- Do shave under your arms with a well maintained electric razor and use hair removal cream labelled for sensitive skin after checking sensitivity.
- Do the exercises twice a day until you get back your normal flexibility.
- Do wear comfortable loose clothing.
- Do use your affected arm for combing your hair, bath and get dressed.
- Do increase your fluid intake; eat high-fiber foods to prevent constipation and low salt diet.
- Do maintain BMI of 25.
- Do work with therapist to develop a gentle exercise for strengthening the arm and upper body.

DONT'S

- Do not bath in extremely hot water.
- Do not cut your cuticles when maintaining your nails.
- Do not wear tight jewellery of any kind on your arm or hand.
- Do not hang a heavy purse bag or briefcase over the shoulder of an at-risk arm.
- Do not allow blood to be drawn from an at risk-arm.
- Do not allow vaccines or other shots to be given at at-risk arm.
- Do not allow medical personnel to put a blood pressure cuff around an at-risk arm.
- Do not allow outdoor pets to scratch or bite your hand or arm.
- Do not expose at-risk limbs to the extreme heat of hot tubs.
- DO not play sports which may result in injury to your arm
- DO not sew unless wearing a thimble to protect against finger pricks.
- Do not cut vegetables without using kitchen gloves.
- Do not rub the arm harshly with your towel in the drying process.
- Do not sleep on your affected arm.