

## ISRAELI LYMPHEDEMA ASSOCIATION AND WEBSITE

The website and explanations are a project of the Israeli Lymphedema Association, registration number 58035766.

The Association was established as a non-profit entity because of:

1. Lack of information about lymphedema and lack of awareness of many medical personnel in hospitals and in health funds, as a result of which the potential patient is not informed about the situation, the kinds of lymphedema and its risks; accordingly, many of the patient's questions remain unanswered.
2. Lack of knowledge of medical teams, as a result of which the institutions do not provide a response and solution to relevant problems, resulting in lack of sufficient awareness of the patient's needs.

The Association was established as a non-profit entity to promote and deepen knowledge regarding lymphedema. The Association can be contacted y email at [lal\\_lymph@walla.com](mailto:lal_lymph@walla.com).

### REASONS FOR ESTABLISHMENT OF THE ASSOCIATION

- Because of the various stages of lymphedema, different implications exist for each patient.
- Lack of information about lymphedema and lack of awareness of many medical personnel in hospitals and in health funds, as a result of which the potential patient is not informed about the situation, the kinds of lymphedema and its risks; accordingly, many of the patient's questions remain unanswered.
- Lack of knowledge of medical teams, as a result of which the institutions do not provide a response and solution to relevant problems, resulting in lack of sufficient awareness of the patient's needs.

### LYMPHEDEMA (OR LYMPHATIC EDEMA)

Accumulation of lymphatic fluid (clear protein fluid) in body tissue as a result of insufficiency or impairment or lack in the lymphatic system. The impairment may appear in the extremities (usual circumstances), in the chest, breast, or in any other part of the body.

#### Lymphatic System

Responsible for return of fluids and protein from inter-cellular tissue to the blood, removal of bacteria, viruses, cancer cells and inorganic material, and constitutes a central component of the body's immune system.

#### Important

Lymphedema is a chronic illness that cannot be cured but can be controlled with appropriate treatment and maintenance.

## SYMPTOMS

Indications of lymphedema may be physical or sensed:

- Principal symptom – edema somewhere in the body, generally in the extremities.
- Sense of heaviness and discomfort somewhere in the body.
- Hardness in the area of the edema and appearance of pain (in more advanced stages).
- Restriction or limitation of movement.
- Changes in skin including excretion of lymphatic fluid.

Reasons for impairment of the lymphatic system are different and varied. Two principal groups of edema exist: resulting from impairment of the lymphatic system hereditarily (primary lymphedema) or development as a result of impairment of the lymphatic system during one's life (secondary lymphedema).

Primary lymphedema generally appears in the body when there are insufficient lymph vessels, insufficient lymph nodes or undeveloped lymph nodes. This kind of edema may appear at birth, later, during development or after age 35years.

Secondary lymphedema appears after damage to the lymphatic system, in the lymphatic channels (through which the lymphatic fluid flows) or in the lymph nodes themselves.

Principal reasons for secondary lymphedema:

- Surgery for removal of lymph nodes, e.g. lymphedema of lower extremities after removal of lymph nodes from the groin as a result of surgery for treatment of hysterectomy, prostate cancer. Lymphedema of upper extremity after removal of lymph nodes in the armpit as a result of surgery for treatment of breast cancer.
- Radiation therapy.
- Infections from various sources.
- Chronic vein insufficiency.
- Accidents or surgery (including plastic surgery).

## RISKS

Lymphatic edema that is not treated may result in:

- Recurring infections.
- Distortion of the affected extremity.
- Restriction or limitation of movement and decrease in daily functioning.
- Slow healing of wounds.
- In severe cases – appearance of cancerous growth (lymphangiosarcoma) in impaired area.

## TREATMENT OF LYMPHATIC EDEMA

Treatment of lymphedema is the responsibility of a team including a physical therapist and a physician, in order to reduce the level of the edema, to prevent any increase, to maintain the status insofar as possible and to improve the patient's lifestyle. Best conservative treatment today includes skin treatment to prevent infections, lymphatic massage, pressure bandaging, appropriate exercises, self-maintenance and physical activity.

When swelling is diagnosed in a part of the body as lymphatic edema, the patient's physician (treating blood vessels, surgeon, oncologist, orthopedist etc.) should issue a referral for physical therapy treatment for lymphatic edema (lymphatic physical therapy). The treatment is included in the National Health Law and is provided in physical therapy institutes of the health funds or in a private institute with approval of the patient's health fund. The treatment must be provided by a physical therapist with training for lymphatic edema.

The first visit includes an examination and determination of the stage of the lymphatic edema: measurement of the edema, kind of lymphedema, examination of skin, determination of body status and activity level. The patient will receive a detailed explanation of the physical therapy treatment for lymphatic edema and a treatment plan.

## LYMPHATIC TREATMENT COMPONENTS

### Prevention

In situations of vein impairment, after surgery, accident, paralysis resulting in lymphatic edema, guidance can be received to prevent development or increase in edema of the lower extremities. Also in circumstances of primary lymphedema, a preventative program may be established if diagnosed in the early stages. Preventative treatment may sometimes be prepared before or after oncologic surgery if excision of lymph nodes is planned.

If lymphedema is diagnosed:

### In the first stage –

- Frequency of treatment in this stage is determined according to the severity of the lymphedema, the status of the skin and the rate of decrease in the edema. If the edema is severe, the frequency of treatment may be 3 – 5 times weekly.
- The physical therapist measures and records the scope of the extremity to determine the volume of the edema.
- The physical therapist explains means of caution to prevent increase in the lymphatic edema, including skin care to avoid wounds, prevention of infection.
- Lymphatic massage or manual lymph drainage is a special massage technique intended to transmit the lymphatic fluid from areas of edema to other parts of the body in which the lymphatic system is functioning well. The massage also softens the skin, lessens any pain and helps to heal any chronic wounds.
- Guidance regarding the patient's self-treatment including breathing exercises, self-massage and/or use of a mechanical instrument.

- Use of pressure bandages or elastic sleeves/socks intended to improve removal of excess lymphatic fluids and prevention of return of fluids that were drained. The physical therapist teaches the patient self-bandaging and the patient is bandaged during most of the day except during showering, in order to achieve optimal results. In this stage of treatment, the elasticity of the bandages is low so that during rest the pressure will be reasonable and comfortable and during activity of the extremity, the result will be more effective.
- The period of the first bandages may vary from several days to several weeks. Today, a comfortable alternative exists to these bandages, including bandages with Velcro closure, night bandages, etc. The decision regarding bandaging technique and kind of bandaging should be determined between the physical therapist and the patient.
- The physical therapist provides guidance regarding appropriate exercises for activation of muscles in order to assist in draining the lymphatic fluids and reducing the edema.

In the chronic stage – maintenance – follow-up –

- Frequency of treatments decreases significantly and depends on the level of improvement of the lymphatic edema and its volume.
- The patient learns to treat himself/herself and to maintain reduction of the volume of the edema in the affected extremity through self-massage and/or with help of a pneumatic pressure instrument.
- When the edema decreases to a minimum level and is stable (according to measurements), an elastic pressure accessory will be ordered: sleeve/glove/pant/sock/bra. The accessory will be ordered in accordance with the size and form of the extremity – according to personal measurement or shelf size. Also, many different accessories have been developed to supplement and assist pressure preparations.
- Physical activity in general is recommended – the patient's physical therapist will suggest the kind of exercise, frequency, use of pressure bandaging during exercise and follow-up regarding results of exercise on the lymphatic edema. If athletic trainers are used, they should be familiar with lymphedema or should contact the patient's physical therapist to receive information and guidance.
- Follow-up regarding maintenance of the volume of the extremity – regular measurement of the extremity by the patient according to pre-determined measurement points or at the physical therapy institute.
- Check-up of pressure accessory (accessories lose their effectiveness after periods of use).
- Special exercise in water is highly recommended (e.g. Tidhar Method).
- Referral to support groups for patients with lymphatic edema/Israeli Lymphedema Association.

### Pneumatic pressure instruments (e.g. Lympha-Press)

These instruments create varying air pressure to assist in transmitting the lymphatic fluid. The instrument should be used in consultation with the treating physician and the physical therapist and requires guidance regarding appropriate use. It should be emphasized that preliminary lymphatic self-massage constitutes part of the treatment program.

### Lymphedema surgery

In the last century, several surgical techniques have been developed to decrease or even to cure lymphedema. Many of the techniques were discarded. Surgical approach should be considered carefully, has risks and does not necessarily cancel the need for continuation of chronic treatment and care. The surgery is not appropriate for patients with active oncologic status. In Israel, as in most of the western world, the place of such surgery in the framework of lymphedema treatment is marginal and rarely is recommended as a primary alternative for treatment. Long-term results of lymphatic surgery are not generally available.