Lipoedema

Helpful information about lipoedema – for a better quality of life.
medi World of Compression

A strong brand. An extensive product range. A better quality of life.

medi World of Compression: signposting the future with more than 65 years of competence in the field of compression therapy, producing garments with the highest quality, innovation and design. You can trust the first class finishing and the special comfort that comes from wearing our compression. mediven positively enhances your well being.

Effective therapy concepts

Holistic treatment concepts - from the decongestion to the maintenance phase.

Innovative and effective products for compression treatment accompany you through your complete therapy journey.
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What is oedema?

Oedema develops when fluid accumulates in the tissues. This swelling can be seen and felt. Oedema can be localised or affect the whole body. The word oedema is used to describe a symptom, it is not a diagnosis.

Experts distinguish between localised oedema, e.g. swelling of the eyelids, swelling of an arm or leg, and generalised oedema, in which the entire body is swollen. Of the numerous forms of oedema, lymphoedema, lipoedema and lymphovenous oedema are the oedemas that can be managed with appropriate compression therapy.
What is lipoedema?

Lipoedema is a hereditary chronic disorder of fatty tissue distribution. This condition mostly develops below the waist, giving rise to wide hips, enlarged thighs and lower legs. Some patients can also experience it in their arms. The backs of the hands and feet remain free of swelling. It is marked by the accumulation of subcutaneous fatty tissue lipohypertrophy. Oedema and painful legs may develop later in the day.

Lipoedema is a potentially confusing name because it is predominantly a chronic adipose tissue disorder, with clinically apparent oedema as a secondary feature in some people.

At a glance
• Lipoedema is usually a chronic, hereditary disease. Susceptibility to lipoedema appears to be genetic, but it can skip a generation.
• Lipoedema is seen almost exclusively in women. Experts therefore suspect hormonal causes, but this has not yet been confirmed.
• The disease mostly starts towards the end of puberty, during pregnancy or during the menopause. Estimates suggest that 11% of the female population is affected by lipoedema.
• It is a chronic disease with a progressive course.
• The number of fat cells is higher in patients with lipoedema than in healthy individuals.
• Lipoedema cannot be counteracted by a reducing diet.
• Lipoedema changes the shape of the legs symmetrically. They are painful even on light pressure.
• The arch of the foot and the hands are not affected by lipoedema.
• Negative Stemmer’s sign.

Keynote
1 talklipoedema.org
2 Progression means the worsening of a disease.
3 A negative Stemmer’s sign is when it is possible to pick up skin at the base of the toes.
What causes lipoedema?

The exact causes of the formation of lipoedema are still unknown. Due to the fact that lipoedema almost exclusively affects women and it often presents first during puberty, pregnancy or the menopause, it is suspected that the cause of this congenital replication of fatty tissue may be due to the effects of oestrogen. It is assumed that hormonal changes play an important role in initiating the characteristic build-up of adipose tissue. Research also suggests a genetic predisposition to lipoedema but this is not identified fully.

Patients with lipoedema are often not recognised early, if at all1.

There are currently no scientific data on the exact number of people affected.

Therapeutic measures are often not used due to insufficient diagnosis. Common misdiagnosis include obesity or lymphoedema (see page 11/12). With severe consequences for patients: Undetected and untreated, the disease continues to progress. Further health issues arise and the quality of life becomes restricted.

Lipoedema is not a fat reservoir resulting from obesity and therefore should not be confused with obesity.

Keynote

1 78% of lipoedema sufferers questioned in Lipoedema UK Big Survey 2014 stated that they developed symptoms between the ages of 18-25 but only 7% received a diagnosis at that time.

Signs and symptoms

An overview of the clinical signs of lipoedema:

- Negative Stemmer’s sign
- Symmetrical swelling (in contrast to lymphoedema)
- Pain on touch and pressure
- Bursting pain
- Often ‘spider’ veins over the outside of the thigh
- Susceptibility to bruising
- Familial history
- In a few cases, the arms are also affected

Lipoedema changes the shape of the legs symmetrically. Those affected show an increase in the size of the legs, thighs, hips and buttocks, with sparing of the feet.

If there is no other sign of obesity, the difference between the slim face and upper body and the proportionally oversized hips and legs is often clear at first glance. The legs are funnel shaped or columnar, and only the thigh, the buttocks or the lower legs may be affected. In particular, there are often swellings on the insides of the knees. A characteristic feature is, that the arch of the foot and the hands are not affected by lipoedema, but as the condition progresses fat lobes start to protrude overlapping the knee and ankle joints. Another characteristic feature of lipoedema is, that bruising can easily occur due to fragile and hyperpermeable blood capillaries and a susceptibility to spider veins.

The onset of lipoedema is usually gradual, depending on the course of hormone changes in puberty, during pregnancy and sometimes during menopause. As the disease usually worsens over the course of the years, lipoedema is divided into different stages according to the degree of severity. The progression of lipoedema is genetically determined and cannot be predicted.

The skin texture feels different from normal fatty tissue; it is soft and mattress-like. The structure of the fat cells differ to fat cells seen in obesity and does not respond to a reduction in calories.

A dull feeling of swelling and sensitivity to touch or pressure is typical. This can become so acute that even crossing the legs or wearing tight clothing can be uncomfortable. Many of those affected also describe the pain as a bursting pain. If the disease progresses further, large bulges of tissue also develop on the thigh and inside of the knees.

This can result in:
- ‘Knock Knee’ posture
- Difficulty in mobilising

In summary:

Lipoedema is not a fat reservoir resulting from being overweight, but actually results from pathological changes to fat cells. However, obesity and weight fluctuations have negative effects on lipoedema.
DIY checkup

Lipoedema – Yes or no?

Look very carefully at the affected limbs and answer the following questions:

<table>
<thead>
<tr>
<th>Question</th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>Are both the arms or both the legs affected equally by the changes / swellings, and are the backs of the hands or feet free from swelling?</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>Are there fatty masses over the hips and on the inside of the knee?</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>Is the complete leg affected down to the ankle (symmetrical leg shape ending in a bracelet effect at the ankle)</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>Does the area bruise easily?</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>Do you have spider veins present in the area?</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>Is the swollen area already painful to light pressure?</td>
<td>☐</td>
<td>☐</td>
</tr>
</tbody>
</table>

You answered 'yes' to one of the questions?

Then please consult a doctor.

Information for clinicians

There is a free Royal College of General Practitioners elearning course on lipoedema available via www.lipoedema.co.uk
## Types and stages

Experts distinguish between different types and stages of lipoedema:

<table>
<thead>
<tr>
<th>Classification by location:</th>
<th>Classification by severity</th>
</tr>
</thead>
</table>
| **Type I:** Fatty tissue accumulation in the area of the buttocks and hips. | **Stage 1:**  
  - Fine, nodular surface, also called ‘orange peel’ skin.  
  - Soft, fatty tissue |
| **Type II:** The lipoedema extends as far as the knees. Accumulation of fat in the inside knee area. Fat pads increase to posterior / medial knees. | **Stage 2:**  
  - Coarse, nodular surface with large dimples, can feel mattress-like. |
| **Type III:** The lipoedema extends from the hips down to the ankles. Feet are spared unless there is an underlying lymphoedema which occurs if the condition is untreated. | **Stage 3:**  
  - Large fat masses grow, starting at the hips, then spreading to the thigh. If the insides of the knees are involved, inflammation may be caused by chafing. Advanced lipoedema impedes both the flow of blood through the veins and lymphatic drainage in the lymphatic system.  
  - May have clusters of spider veins on the side of the thigh.  
  - Reduced mobility and lymphovenous oedema occurs. |
| **Type IV:** Affects the arms and legs |  |
| **Type V:** Lipolymphoedema |  
  In lipoedema, the volume of fatty tissue increases, whereby some patients may also develop lymphoedema. In this case, experts talk of so-called ‘lipolymphoedema’. Damage to the lymphatic system is recognised when the feet and toes swell up (positive Stemmer’s sign, see page 11). |

Lipolymphoedema, before decongestion
Associated factors

Lymphoedema

In some cases lipoedema patients may also develop lymphoedema. In this instance the feet and toes will swell (positive Stemmer’s sign).

Lymphoedema is a swelling that occurs when the lymphatic system* can no longer work properly. Instead the fluid accumulates in the tissue spaces below the skin. This will result in a swelling of an area. There may be many reasons why this happens. It can be due to genetics (phenotype) or secondary to another condition (syndromatic) e.g., venous disease, recurrent infection, surgical or secondary to treatment for cancer (e.g. radiotherapy).

With lipoedema it seems that the proliferation of the fat cells in the tissues gradually squeeze the fine blood vessels and lymph vessels together.

The result:
Advanced lipoedema impedes venous return and the return flow of lymph in the lymphatic system. Fluid then builds up in the tissues. At this stage the condition of lipoedema is re-classified as lipolymphoedema.

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Lymphoedema
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Signs of lymphoedema
2. A feeling of heaviness at the affected site
3. Positive Stemmer’s sign: the skin on the second toe or finger cannot be raised between two fingers, instead it feels taut and hard
4. Initially the skin pits when pressed with a finger at the affected site
5. The natural skin folds around the joints become much deeper
6. At later stages, hardening (fibrosis) of the affected site
```

\[Stemmer’s\: sign:\: left\: side\: positive,\: right\: side\: negative\]

Note:
Patients with lipoedema who also develop oedema have lipolymphoedema. If they also have chronic venous insufficiency, it is called lipo-lymphovenous oedema.

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* In addition to the blood circulation, our body has a second major transport system – the lymphatic system. In contrast to the blood circulation, which forms a closed circuit (circulation) with arteries and veins, the lymphatic system is a semi-open system.
  The lymph vessels cover the human body like a net. They collect, transport, and filter substances dissolved in the body fluids. These can be, for example, blood proteins, metabolic waste or inflammatory products. Like a ‘special waste disposal service’, the lymphatic system transports up to four litres of lymph every day out of the tissues, thus playing an important role in our body’s own immune system.
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Obesity

In obesity, excessive fat distribution occurs all over the body. However, in lipoedema, for reasons not yet fully understood, excessive fat production occurs only in specific areas of the body. The distribution of fat can vary from one individual to another as can the severity.

Obesity responds well to diet and exercise, and weight loss is experienced usually from all areas of the body, but in lipoedema this is not the case. Weight loss will occur from the upper part of the body, but absolutely minimal improvement will occur from the areas below the waist affected with lipoedema. Attempts at weight loss will often only exacerbate the disproportion between upper and lower body. Unlike normal obesity, lipoedema fat deposits do not respond to dietary measures or to vigorous exercise. This is another useful tool in distinguishing lipoedema from obesity.

Alteration of skin / Varicose veins

In lipoedema the tiny blood capillaries supplying the fat cells are particularly fragile and easily become damaged. As a result, bruising readily occurs on the legs often following a minor trauma or sometimes for no apparent reason at all. This tendency does not occur in generalised obesity as there is no abnormality of the blood capillaries.

Note:
In patients with lipoedema who also have a chronic venous insufficiency (CVI) the tendency for interstitial fluid accumulation may be compounded, leading to the development of lipolymphovenous oedema.

Joint pain

Patients with severe lipoedema will frequently complain of hip and knee joint problems. This is due to the increase in the size of the limb impacting on the load of the joint. Permanent stress and overload of a joint can lead to deformities of the limb and development of osteoarthritis; this includes overusing the joints due to the lipoedema.
**Psychological impact**

For many of those affected by lipoedema, the emotional problems grow as the leg circumference increases. It is often difficult to cope with people staring, and sufferers find it best to keep their legs as well hidden as possible. But one thing is certain, “thick legs” are not just a cosmetic problem, and they are not always the result of a faulty diet and being overweight. It is very important not to underestimate the medical dimension.

Those affected by lipoedema may suffer considerable psychosocial distress as a result of the change in body shape. When diets no longer help and even sports are no use, those affected feel baffled and neglected. Due to the gradual increase in limb circumferences in spite of sporting activities and strict diets patients are often mentally, emotionally and psychologically strained. Difficulty in finding clothes that fit, coupled with shame and embarrassment can damage self-esteem and cause a lack of social confidence and mental health issues. All too frequently women with lipoedema are told that they are just obese, that they need to lose weight. This inappropriate advice often promotes self blame, increases desperation, and denies access to the correct diagnosis, treatment and preventable deterioration. Lipoedema, however is a diet resistant accumulation of fat.

Failure to lose weight and feeling unattractive may lead to a cycle of emotional or comfort eating and is often expressed in so-called ‘eating attacks”. As a consequence of this, patients’ weight often increases further, which exacerbates the disease. So although lipoedema is often misdiagnosed as simply being obesity, lipoedema and obesity can co-exist.

**Pain**

Further distress is caused by the pain people with lipoedema experience, even the slightest pressure can be painful. This pain does not occur in general obesity. Pain in lipoedema is caused when oedema develops between the fat cells, resulting in increased pressure, inflammation in the tissues, pain and discomfort. This can have a significant impact on daily life.

The pain may be described as aching, heaviness, tenderness or sensitivity to the touch.

**Mobility**

Lipoedema may further impair mobility, ability to perform activities of daily living and hence psychological wellbeing because of tissue bulk, pain or hip and knee problems.

**In summary:**

Assessment should include gaining an understanding of the patient’s insight into the condition and their personal expectations. Psychological support therefore is an important component of treatment. Local support groups may be available, or support from the lipoedema organisations may also be helpful.
How diagnosis is made

Diagnosis: Lipoedema

As discussed earlier, the symptoms of lipoedema are often mistaken for lymphoedema or obesity. Left untreated, lipoedema could develop into lipolymphovenous oedema. The first important diagnostic step is to distinguish between lipoedema and lymphoedema. The typical signs listed below help experts do this. In most cases, lipoedema can be recognized by the typical distribution pattern of the fatty pads. The spontaneous pain on pressure also clearly distinguishes lipoedema from lymphoedema.

As lipoedema is a clinical diagnosis, thorough examination is particularly important. In addition to characteristic signs such as the symmetrical swelling and reduced skin temperature, an altered tissue texture may be present and require palpation to detect. The clinician should also check for Stemmer’s sign, which can assist in differentiating lipoedema from lymphoedema.

Note: Diagnosis of lipoedema may be difficult in the early stages as the symptoms and signs may be subtle. The characteristics of lipoedema become more obvious as the disease progresses.

<table>
<thead>
<tr>
<th>Difference between lipoedema and lymphoedema</th>
</tr>
</thead>
<tbody>
<tr>
<td>lipoedema</td>
</tr>
<tr>
<td>Symmetrical swelling</td>
</tr>
<tr>
<td>Painful / tenderness</td>
</tr>
<tr>
<td>Bruising</td>
</tr>
<tr>
<td>No incidence of erysipelas</td>
</tr>
<tr>
<td>Dorsum of feet are spared</td>
</tr>
<tr>
<td>Negative Stemmer’s sign*</td>
</tr>
<tr>
<td>Predominantly female population</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>lymphoedema</td>
</tr>
<tr>
<td>Asymmetrical swelling</td>
</tr>
<tr>
<td>Not usually painful</td>
</tr>
<tr>
<td>No bruising</td>
</tr>
<tr>
<td>Increased risk of erysipelas</td>
</tr>
<tr>
<td>Oedema is often seen on dorsum of feet</td>
</tr>
<tr>
<td>Positive Stemmer’s sign*</td>
</tr>
<tr>
<td>Either gender is affected</td>
</tr>
</tbody>
</table>

* Stemmer’s sign please see page 11.
Treatment for lipoedema

The following treatments are recommended to help manage lipoedema and prevent other problems such as lymphoedema and varicose veins developing.
Treatment

Medicines
Lipoedema cannot be influenced by medicines or ointments.

Surgery
Surgical interventions that may be appropriate for some patients include liposuction. Liposuction can reduce the abnormal fat deposits and normalise fat distribution. However, every operation entails certain risks. There is a danger that pitting may occur in the skin after the operation and that, after a certain length of time, the fatty pads might form again. Before liposuction, it is essential to find out whether the lymphatic system has already been affected by the disease (see lipolymphoedema). Liposuction is the best currently available surgical procedure for halting the progression of lipoedema before the lymphatic system is also damaged (after several years or even decades).

Note:
Following liposuction patients should be advised on wearing flat knit garments for life.

Sports and Diet
Lipoedema cannot be counteracted by a reducing diet. Both lipoedema and lymphoedema are serious conditions that require treatment. However, weight reduction in combination with sports and compression therapy does have very positive effects. The compression garment offers better support for the muscles of the body to act against and thus helps build up muscle bulk.

Conservative lipoedema therapy
- Compression therapy -

The most widespread and best treatment method for lipoedema is a combined therapy with compression and exercise. Systematic skin care is also important for safeguarding against infection (e.g. medi day gel and medi night creme).

It is important to check the skin for damage regularly and treat or protect accordingly.

In lipoedema, compression therapy is used to:
- reduce discomfort and pain by supporting the tissues
- prevent lipoedema worsening, reducing the risk of developing lipolymphoedema
- reduce the risk of further oedema formation in the case of lipolymphoedema by encouraging venous and lymphatic return
- support tissues and streamline uneven, distorted limb shape
- improve functioning and mobility
- encourage self-care and mental health and well-being

Made-to-measure flat knit compression garments are now the ‘gold standard’ in lymphological therapy and must be correctly measured and fitted by a specialist. The necessary fit and therapeutic effectiveness (working pressure, micromassage, wall stability) can only be achieved in this way, because of the anatomy of these forms of oedema. Round knit garments should only be used for lipoedema in justified exceptional cases (lipoedema, stage 1).

The many positive results have shown that compression has an impressive range of therapeutic benefits. Flat knitted compression garments (e.g. mediven mondi and mediven 550) are made-to-measure, produced for each patient – offering the best fitting options and in styles tailored to the individual requirements. The materials used offer a firm wall stability, applying a ‘micromassage’ effect to the skin as well as applying the graduated compression to the limb which improves lymph and venous return out of the limb. Due to the wall stability of the fabric, it will not constrict in any folds in the skin. This constriction can occur with a thinner, more elastic fabric and will impede lymphatic flow out of the limb and is the reason why flat knit is the more appropriate fabric in these conditions.

Compression therapy may also reduce the level of pain and discomfort experienced in the limbs by supporting soft tissues and painful knee joints. In addition compression garments provide support to the loose connective tissues and help improve appearance. Compression therapy will not reverse the tissue enlargement of lipoedema and will not reduce the size of a limb unless there is oedema present. However, decreases in limb size may occur due to the streamlining effect of compression therapy in limbs. Consistent use of compression garments may reshape the limbs to a degree.

Compression is most effective when worn every day and is advisable even in the early stages of lipoedema. Getting it on and off may take practice and for some people pain can makes this more difficult. Most people find it easier to put on hosiery first thing in the morning, when the legs are at their smallest and using specially designed donning and doffing aids can be a great help.
Compression garments

Careful assessment of a patient with lipoedema is required to determine which type(s) of compression therapy are indicated. Assessment should include the severity and extent of the lipoedema, including the presence of skin folds or fat lobes, whether oedema is also present, the presence of pain, the goals of treatment and the patient’s ability to tolerate and self-manage compression garments.

In stage 1
Round knit compression garments can be used (e.g. mediven forte, mediven plus). However, in most cases, experts recommend flat knit compression garments that must also be worn during sporting activities.

In stage 2
Flat knit compression garments are recommended e.g. mediven mondi, mediven cosy or mediven 550. Alternatives to prescribed compression garments include adjustable compression garments (e.g. juxtafit). The garments should be worn every day. As with lymphoedema, complex physical decongestion therapy* may be necessary.

In stage 3
Complex physical decongestion therapy (CPD) is necessary. However this is not always readily available. CPD, if performed, should always be followed by compression, the most important element of the entire course of treatment. At this stage, wearing a flat knit compression garment (e.g. mediven cosy or mediven 550) consistently is indicated. Another option may be adjustable compression garments (e.g. juxtafit).

* Complex physical decongestion therapy (CPD) is divided into two phases: The decongestion phase and the maintenance phase.

The components of treatment are:
• Hygiene and skin care
• Manual lymphatic drainage (MLD) if appropriate and if prescribed by the lymphoedema therapist
• Compression treatment with bandages (during decongestion)
• Compression treatment with medical compression garments (during the maintenance phase)
• Special exercises
medi offers the most comprehensive line of compression garments for all individual needs. Mediven compression garments stand for maximum wearability and convenience while at the same time offering optimum medical effectiveness. Mediven products lead the market in terms of major quality criteria such as fabric selection, graduated compression allowing comfort for any limb shape. With lipoedema, it is particularly important that the compression garments are comfortable and suitable for everyday use, so that patients are happy to wear them daily. A perfect fit and optimum efficacy ensure that patients do not spend all day thinking about their garment, but that they soon feel better, even with their condition. Therefore mediven compression garments can be individually made-to-measure. Comfort and variety increase treatment compliance and improve well-being and quality of life.
medi compression solutions - inelastic compression garments

juxtafit - inelastic and instantly adjustable compression devices for the treatment of lipoedema.

Juxtafit products guarantee a constant compression level and feature a fast and easy donning and doffing system. The ability to instantly readjust the juxtafit system helps to consistently apply compression to a reducing limb. This is not possible with bandaging without completely removing the layers. Juxtafit garments promote self-management and thus an increased patient compliance as well as an improved quality of life.
mediven® compression

mediven compression stockings are used for lipoedema. They help to prevent oedema forming, as well as to further optimise the results. medi offers different qualities with functional characteristics, according to the indications. For example, breathable material results in a high wearing comfort.
**mediven® features**

These powerful product features speak for themselves.

<table>
<thead>
<tr>
<th>Feature</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Anatomical oblique borders as standard (distal and proximal)</strong></td>
</tr>
<tr>
<td>• Unimpeded lymphatic drainage</td>
</tr>
<tr>
<td>• Optimum fit and better hold</td>
</tr>
<tr>
<td><strong>Made-to-measure</strong></td>
</tr>
<tr>
<td>• For unusual leg shapes</td>
</tr>
<tr>
<td>• Offering many special features</td>
</tr>
<tr>
<td><em><em>Clima Comfort</em> for perfect climate exchange</em>*</td>
</tr>
<tr>
<td>• Well-being all year round</td>
</tr>
<tr>
<td>• Highly active breathing</td>
</tr>
<tr>
<td>• Prevents itching</td>
</tr>
<tr>
<td><strong>Clima Fresh for more freshness for the whole leg</strong></td>
</tr>
<tr>
<td>• Binds odours</td>
</tr>
<tr>
<td>• Special spinning technique that guarantees the effect, even after washing</td>
</tr>
<tr>
<td><strong>Perfect Fit</strong></td>
</tr>
<tr>
<td>• Very precise compression dosage</td>
</tr>
<tr>
<td>• Optimum medical care conditions</td>
</tr>
<tr>
<td>• Easy to care for</td>
</tr>
<tr>
<td>• Suitable for the delicates programme of washing machines and tumble driers</td>
</tr>
<tr>
<td><strong>Very good skin tolerability and suitable for daily wear</strong></td>
</tr>
<tr>
<td>• Without cotton or rubber</td>
</tr>
</tbody>
</table>

* **Clima Comfort**

Comfort, scientifically tested by the French Institute IFTH. The test result shows that the Clima Comfort technology from medi guarantees climate exchange between the skin and the stocking. medi achieved an outstanding total score of 11 out of 12 points.
Lipoedema

The mediven high-quality range offers you clear advantages.

mediven stockings are available in attractive colours and patterns, as well as inelastic compression solutions such as the juxtafit range. Perfect patient care by medi – all the way to the tips of the toes.

<table>
<thead>
<tr>
<th>Leg garment</th>
<th>Oedema stage</th>
<th>Knitting technique</th>
<th>S = Standard</th>
<th>M = Made-to-measure</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>mediven mondi</td>
<td>1, 2</td>
<td>flat knit</td>
<td>M*</td>
<td></td>
<td>26</td>
</tr>
<tr>
<td>mediven cosy</td>
<td>1, 2, 3</td>
<td>flat knit</td>
<td>M</td>
<td></td>
<td>28</td>
</tr>
<tr>
<td>mediven 550 leg</td>
<td>1, 2, 3</td>
<td>flat knit</td>
<td>M</td>
<td></td>
<td>30</td>
</tr>
</tbody>
</table>

* available on prescription
Suitable for:
• Normal to firm connective tissue
• Containment / maintenance of limb shape post oedema reduction
• Normal weight (normal leg shape)
• Atopic dermatitis (mondi with silver segments)
• CVI with severe oedema tendency

Indications
• Lipoedema, stages 1, 2
• Primary and secondary lymphoedema, stages 1, 2
• Severe venous indications with oedema tendency
• Scar treatment
• Post-operative and post-traumatic oedema

Product features
• Light wall stability
• High lateral elongation
• Soft, fine fabric

Special features
• Antibacterial effect for patients with e.g. atopic dermatitis
• NEW: stretchable, elastic panty section seams
• NEW: elastic gusset
• UV protection factor 80
• Many combination options with special extras such as Y-knitting marks
• Odour binding effect due to Clima Fresh
• Highly active breathing material thanks to Clima Comfort
• Hard-wearing fabric for long durability
• 6 standard colours, 7 trend colours

Compression
RAL CCL 1, 2, 3

Product benefits

Clima Comfort
Clima Fresh

Perfect Fit
Variety

Anatonic Fit

Standard colours
Black
Caramel
Sand
Cashmere
Anthracite
Navy

Trend colours
Moss green
Cherry red
Meli Magenta
Aqua
Blue Jeans
Coral
Mint-green

The m2m fabric on prescription
Suitable for:
- Soft to firm connective tissue
- Moderate deepened skin creases / Distorted or altered limb shape
- Associated weight disorders
- Lipoedema patients
- Travelling / sports

Indications
- Lipoedema stages 1, 2, 3
- Primary and secondary lymphoedema stages 1, 2
- Severe venous indications with oedema tendency
- Scar treatment
- Post-operative and post-traumatic oedema
- Mixed forms such as phlebo-lymphoedema, lipo-lymphoedema

Product features
- Medium wall stability
- High longitudinal elongation
- Flexible, supple fabric

Special features
- Special anatomical foot shape (prevents slipping and wrinkling)
- Extra hard-wearing sole and heel (fabric of mediven 550)
- Easy donning and doffing
- Stretchable, elastic panty section seams
- Elastic gusset
- UV protection factor 80
- Various combination options with special extras such as gluteal shaper, hallux/varus ease zone, flexure functional zones
- Numerous variants such as leg sections for double and multipart garments
- Odour binding effect due to Clima Fresh
- Highly active breathing material thanks to Clima Comfort
- Hard-wearing fabric for long durability
- 6 standard colours, 7 trend colours, 3 Design-Elements

Design-Elements
- Stars
- Ribs
- Pyramids

The Design-Elements can be freely combined with the standard and trend colours.

Standard colours
- Black
- Caramel
- Sand
- Cashmere
- Anthracite
- Navy

Trend colours
- Moss green
- Cherry red
- Medi Magenta
- Aqua
- Blue-jeans
- Ciral
- Mint-green

Compression
RAL CCL 1, 2, 3

Product benefits
- Clima Comfort
- Clima Fresh
- Perfect Fit
- Variety

Anatomic Fit

OEKO-TEX®
STANDARD 100
www.oeko-tex.com

Lipoedema • 29
Fashion-Elements were awarded with the iF Design Award 2017 and 2019 as well as the Red Dot Award 2017!

mediven® 550 leg

Strong. Greatest wall stability. Reliable hold.
Suitable for:
• Very soft to hardened connective tissue
• Deep skin folds and limb shape distortion
• Associated weight disorders
• Pronounced lymphoedema

Indications
• Lipoedema, stages 1, 2, 3
• Primary and secondary lymphoedema, stages 1, 2, 3
• Severe venous indications with oedema tendency
• Scar treatment
• Post-operative and post traumatic oedema
• Mixed forms such as phlebo-lymphoedema, lipo-lymphoedema

Product features
• Highest wall stability
• High working pressure
• Firm, strong fabric

Special features
• Fashion-Elements
• NEW: stretchable, elastic panty section seams
• NEW: elastic gusset
• UV protection factor 40
• Over 5,600 combination options with special extras such as gluteal shaper, hallux/varus ease zone, flexure functional zones
• Numerous variants such as leg sections for double and multipart garments
• Odour binding effect due to Clima Fresh
• Highly active breathing material thanks to Clima Comfort
• Hard-wearing fabric for long durability
• 6 standard colours, 7 trend colours, 3 Design-Elements, 4 Fashion-Elements

Design-Elements
• Stars
• Ribs
• Pyramids

Fashion-Elements
• Animal
• Ornaments
• Crosses
• Flower
• Berry
• Rosa
• Lilac
• Grey

Standard colours
• Black
• Caramel
• Sand
• Cashmere
• Anthracite
• Navy

Trend colours
• Moss green
• Cherry red
• Medi Magenta
• Aqua
• Blue-jeans
• Coral
• Mint-green

Four patterns, four colours, sixteen possibilities!
Please note: Fashion-Elements are at extra costs.
Combination garments
Sometimes due to the clinical presentation of an individual, therapeutic efficacy and comfortable compression can only be achieved by dividing the compression into 2 or 3 segments.

The need arises primarily from the anatomical conditions:
• Formation of deep skin folds or pads of tissue
• Pronounced natural skin and joint folds, e.g. in the hollow of the knee
• Pads of tissue hanging down over joints
• Shape of the limbs
• Elephantiasis changes to the limb

Combination garments are particularly useful where mobility or physical strength is limited.
Juxtafit®

Inelastic compression

Juxtafit garments have the unique Built-In-Pressure System (BPS) a method by which the pressure applied can be measured at initial fit, and monitored during the day. This makes application a simple and safe routine – ensuring the wearer has the optimal compression to deal with the underlying disease.
<table>
<thead>
<tr>
<th>Feature</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Built-In-Pressure system</strong></td>
<td>To set and control the correct therapeutic level of pressure.</td>
</tr>
<tr>
<td><strong>Breathe-O-Prene®</strong></td>
<td>Breathable, flexible and comfortable material for best wearing comfort.</td>
</tr>
<tr>
<td><strong>Juxtaposed band system</strong></td>
<td>Ensures a perfect fit as the straps can be individually adjusted while on the limb.</td>
</tr>
<tr>
<td><strong>Variety</strong></td>
<td>Wide range of styles and sizes available from stock.</td>
</tr>
<tr>
<td><strong>Easy handling</strong></td>
<td>Easy donning and doffing promotes patient empowerment.</td>
</tr>
<tr>
<td><strong>Inelastic</strong></td>
<td>Inelastic giraffe skin principle — core technology of all juxtafit products.</td>
</tr>
<tr>
<td><strong>Textile trust</strong></td>
<td>Guaranteed hypo-allergenic and latex-free</td>
</tr>
</tbody>
</table>
juxtafit®
leg garments
High quality instantly adjustable, inelastic compression garments for the lower and upper leg.
Indications
• Mild to severe lipoedema and lymphoedema
• For patients who are unable to apply medical compression stockings

Product features
• Guaranteed compression profile
• BPS to set and control the correct therapeutic pressure range
• Garment straps can be individually readjusted while on the limb
• Anti-odour and anti-microbial fabric
• Latex free for skin-friendly wearing comfort
• Sustained compression for up to 24 hours a day

Benefits for patients
• Promotes self-management:
  instantly adjustable
• Promotes patient empowerment:
  easy donning and doffing process
• Promotes a better quality of life:
  removable for bathing and skin care
• Promotes normal range of movement

Available variants
• Lower leg: 8 sizes, extra wide variants and 2 lengths from stock
• Comes with two liners and a single band ankle foot wrap
juxtafit®

essentials upper leg and knee piece

Inelastic compression garments for the upper leg.
Indications
• Mild to severe lipoedema and lymphoedema
• For patients who are unable to apply medical compression stockings

Product features
• Guaranteed compression profile
• BPS to set and control the correct therapeutic pressure range
• Garment straps can be individually readjusted while on the limb
• Anti-odour and anti-microbial fabric
• Latex free for skin-friendly wearing comfort
• Sustained compression for up to 24 hours a day if required

Benefits for patients
• Promotes self-management: instantly adjustable
• Promotes patient empowerment: easy donning and doffing process
• Promotes a better quality of life: removable for bathing and skin care
• Promotes normal range of movement

Variants
• 6 sizes and 3 lengths from stock
• Comes with two liners

Adjustable compression
20-30 mmHg
30-40 mmHg
40-50 mmHg

Product features

Built-In-Pressure®
Breathe-O-Prène®

Variety
Juxtaposed band

Easy handling
Inelastic

Colours
Sand

juxtafit essentials upper leg with knee and sock
Compression garments for stabilising the outcome of cosmetic surgery (e.g. liposuction)

Why choose lipomed compression garments?
It is very important to wear compressive clothing for a certain period of time after a cosmetic operation as this will help in achieving the desired result. Liposuction, for instance, creates a gap between the outer skin and the underlying fatty tissue. Without consistent aftercare, the skin starts to form waves, which leads to an unacceptable surgical outcome. Compression therapy isn’t just a useful aid in the prevention of pitting after the procedure, it is absolutely essential. Medically correct compression promotes skin shrinkage and, at the same time, prevents the formation of swelling (oedema) and bruising (haematomas).

How do I care for lipomed compression garments

<table>
<thead>
<tr>
<th>Symbol</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>40</td>
<td>gentle machine wash at 40 degrees</td>
</tr>
<tr>
<td></td>
<td>not suitable for tumble drying</td>
</tr>
</tbody>
</table>

How is lipomed used?
lipomed is used to compress the operation site after liposuction and provides postoperative compensation for the irregularities on the skin surface caused by the suction cannulas. The garments are worn for about 4 to 6 weeks as advised by practitioner. After 4-6 week of wearing lipomed patients should be advised on wearing flat knit garments for life. It offers a pressure around 20-30mmHg.
lipomed blackline (black) is available as a made-to-measure garment. It provides the utmost in patient safety and medical compliance.

**Indications**
- Post-operative compression therapy after liposuction and liposculpture
- Post-operative compression therapy after abdominoplasty
- Support for lax connective tissue, e.g. after pregnancy

**Contraindications**
- Arterial circulatory disturbances
- High risk of thrombosis
- Breathing difficulties
- Intolerability of the material

**Benefits**
- The highly elastic, active breathing material ensures the necessary postoperative tissue compression and stabilises the results of surgery
- All seams are on the outside of the garments, thus preventing the development of furrows
- Additional compression elements optimise shaping of the abdomen, buttocks and upper thighs
- Comfortable to wear, fashionable design and smart features make it easier for patients to wear lipomed continuously and feel good throughout the day

**Product features**

**Dual closures for extra hold**
- The combination of hook-and-eye closures and Velcro fasteners makes it easy to put on and provides an extra secure hold.

**Massaging action**
- The fabric structure gently massages the tissue and enhances compression without discomfort.

**Comfort opening**
- Has a open crotch area.

**Available variants**

<table>
<thead>
<tr>
<th>Model</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>B – M</td>
<td>Waist to ankle</td>
</tr>
<tr>
<td>D – M</td>
<td>Waist to below the knee</td>
</tr>
<tr>
<td>F – M</td>
<td>Waist to mid-thigh</td>
</tr>
<tr>
<td>G – M</td>
<td>Waist to groin</td>
</tr>
</tbody>
</table>

**Important**

The garments should only be worn for a certain period of time after cosmetic operation (about 4–6 weeks). lipomed has been created for postoperative care and therefore should not be worn longer unless under medical supervision. After 4–6 week of wearing lipomed patients should be advised on wearing flat knit garments for life.
Tips for everyday living with lipoedema
Useful information that will make everyday life easier

**Prevention**

Sport and a healthy diet help during the early stages of lipoedema. Patients should exercise at least 3 times a week, if possible for at least 45 minutes at each session (the body only starts burning fat after 30 minutes). It is essential to wear compression garments during sporting activities. This prevents swelling, because the improved circulation forces more water into the tissues.

**Sports & Balanced diet**

The following sports are particularly recommended:

- Yoga
- Nordic walking
- Power walking
- Going for walks or hiking
- Aerobic
- Aqua-jogging or swimming (the water pressure has a positive effect).

High impact sports are not advised. Always check with your practitioner if you are uncertain.

In addition to the positive effects of sports on weight maintenance, physical activity also help to combat negative feelings associated with lipoedema.

People with lipoedema should avoid sitting or standing for long periods and always try to build some form of exercise into their daily routine. Make sure you have a balanced diet with plenty of fibre and drink 2 litres of water a day. Weight gain must be avoided at all costs.

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**Comfortable clothing**

It is recommended to wear loose clothes and flat, comfortable shoes. Any tight belts or bras should be avoided.

**Skin care**

Hygiene is especially important for patients with lipoedema. Patients should always clean and care for their skin with pH-neutral care products.
medi donning and doffing aids

Simple donning and doffing with medi’s everyday ‘helping hands’. The donning and doffing aids from medi are suitable for all compression garments, are robust and extremely easy to use.

medi Butler
Various medi Butler models are available depending on the patient’s need. These enable the compression stockings to be put on in next to no time.

The medi Butler prestrech the fabric to aid application. You then pull on the handles and gently bring the stocking up to below the knee.

medi 2in1 – donning and doffing aid
The silk material of the medi 2in1 enables the compression stocking to glide up over your instep and heel. The stocking can be put on and taken off.

medi textile gloves
medi textile gloves for easier donning of compression garments.

• Provides a an effective grip
• Breathable and skin friendly material
• Easy sizing system