COMPRESSION THERAPY FOR PATIENTS WITH EDEMA
No disclosures related to the presentation.

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EDEMA

A LOCAL OR GENERALIZED CONDITION IN WHICH THE BODY TISSUES CONTAIN AN EXCESSIVE AMOUNT OF TISSUE FLUID
Edema occurs when forces such as an elevation in capillary hydraulic pressure, an increase in capillary permeability or interstitial oncotic pressure, or a reduction in plasma oncotic pressure increase net filtration. As well as Inflammation and Autoimmune or external Trauma. Whether it is caused by decreased cardiac output or other conditions, edema persists because of compensatory mechanisms geared toward maintaining plasma volume. Leg Edema of any cause can cause the legs to feel heavy and can hinder a person’s ability to ambulate.
Fluid in the Interstitial Tissue

Capillary Microcirculation

- Blood flow
- Capillary
- Venous end
- Interstitial fluid
- Hydrostatic pressure
- Osmotic pressure

INTERSTITIAL FLUID
The Importance of Treating Edema

- Compression Therapy
- Diuretics
- Horse Chestnut - Oral & Cream
- Diosmin – Oral & Cream

*Health Benefits Of Horse Chestnut*
- Effective for Varicose veins
- Best Herb to treat circulatory problems
Types of Edema Commonly Treated

- Lymphedema
- Edema Secondary to Venous Stasis

2 Types – Primary & Post Thrombotic
Lymphedema is swelling in one or more extremities that results from impaired flow in the lymphatic system.
Venous Stasis Edema is the loss of proper function of the veins in the legs that normally carry blood back to the heart, and causes swelling.
Edema in the Past

Causes ulceration
Increases infection
Greatest Advancements Have Been in Types of Compression

- Short Fiber
- Long Fiber
- Elastic
- Non-Elastic
- Best uses
There are 4 main compression levels which are measured in millimeters of mercury (mmHg). The higher the numbers, the higher the compression.

<table>
<thead>
<tr>
<th>Compression Therapy Guide</th>
<th>15-20 mmHg* [Moderate Compression]</th>
<th>20-30 mmHg* [Firm Compression]</th>
<th>30-40 mmHg* [Extra Firm Compression]</th>
</tr>
</thead>
<tbody>
<tr>
<td>Provides relief and minimizes tired and achy legs.</td>
<td>For the prevention and relief of minor to moderate varicose and spider veins.</td>
<td>Helps prevent and relieve moderate to severe varicose veins (also during pregnancy).</td>
<td>Helps prevent and relieve severe varicose veins.</td>
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<tr>
<td>Prevents fatigued legs from long periods of sitting or standing.</td>
<td>Helps relieve tired, aching legs, and minor swelling of feet, ankles, and legs.</td>
<td>For post-surgical and post-sclerotherapy treatment to help prevent the reappearance of varicose and spider veins.</td>
<td>Used in the treatment of severe edema and lymphedema.</td>
</tr>
<tr>
<td>Helps relieve minor swelling of feet, ankles, and legs.</td>
<td>During pregnancy, helps prevent varicose veins and spider veins.</td>
<td>Helps in treatment of moderate to severe edema or lymphatic edema.</td>
<td>Used in post-surgical and post-sclerotherapy treatment to help prevent the reappearance of varicose and spider veins.</td>
</tr>
<tr>
<td>During pregnancy, helps prevent the formation of varicose and spider veins.</td>
<td>Helps prevent deep vein thrombosis (DVT), also known as economy class syndrome.</td>
<td>Helps with the management of active ulcers and manifestations of post-thrombotic syndrome (PTS).</td>
<td>Helps reduce symptoms of Orthostatic Hypotension and Postural Hypotension</td>
</tr>
<tr>
<td>Helps maintain healthy, energized legs.</td>
<td>Used in post-sclerotherapy treatment to help prevent the reappearance of varicose veins and spider veins.</td>
<td>Helps relieve superficial thrombophlebitis.</td>
<td>For the management of Venous Ulcers and manifestations of Post-Thrombotic Syndrome (PTS).</td>
</tr>
<tr>
<td>Ideal compression level used for those traveling long distances.</td>
<td>Helps prevent orthostatic hypotension (sudden fall in blood pressure when standing).</td>
<td>Helps prevent deep vein thrombosis (DVT), also known as economy class syndrome.</td>
<td></td>
</tr>
</tbody>
</table>

COMPRESSION THERAPY FOR PATIENTS WITH EDEMA

Types of Compression
Knee High vs Thigh Length

Why is Higher Compression Better Than Lower Compression Stockings?

Hunters Canal is an Important Factor Allowing Flow of Blood in Legs. Coordinates With Gastrocnemius Pump. Venous Return to the Thigh, the Output Increases Percentage.
A paste bandage with zinc oxide, glycerin, etc.

Applied without tension distal to proximal to below knee

Primary dressing applied first

Boot dries to a semi rigid cast

Changed 1-2 times per week, depending on drainage.

Perfect Example of Non-Elastic
Throughout history the negative effects of having an edematous limb have been well documented. The treatment of Edema will prevent serious complications and infections. Deciding on which compression to use is essential in the effective and timely treatments of lower extremity edema.
The use of Compression for Venous Insufficiency provides comfort due to the special attention to the pressure gradient along the leg returning blood to the body and aids the musculoskeletal pump in bringing blood volume back to the core.
COMPRESSION THERAPY FOR PATIENTS WITH EDEMA

- Femoral Vein
- Popliteal Vein
- Great Saphenous Vein
- Small Saphenous Vein

Muscles
Vein
Valve open
Valve closed
Calf muscles contracted
Calf muscles relaxed
Sequential compression devices with progression for lower limbs which are presently used post surgery and are being prescribed as a preventive method and also for treatments.

The Future...
Thank You

THANK YOU FOR YOUR PATIENCE AND KIND ATTENTION....