Omo Neurexa<sup>plus</sup>
Promote movement. Stay independent.
The Omo Neurexa plus shoulder orthosis is a medical device for the rehabilitation of patients suffering from shoulder pain and dysfunction after a stroke or injuries to the central or peripheral nervous system. The proven functionality of the well-known Omo Neurexa orthosis has been integrated in its entirety into the newly developed Omo Neurexa plus. In addition, the orthosis can now be applied by patients themselves with one hand.
The Omo Neurexa plus facilitates active rehabilitation by correctly positioning the arm without limiting its movement.

Patients with hemiplegia frequently suffer from shoulder pain and dysfunction. In case of flaccid paralysis, the humeral head is often poorly positioned (subluxation); this can result in pain, reflexive muscle dysfunction and secondary joint damage. The Omo Neurexa was the first product in our stroke therapy range, the Neurexa line.

Indications

Shoulder pain and dysfunction (including subluxation) after stroke, hemiplegia, spinal disc herniation in the cervical spine, injuries of the brachial plexus, peripheral nerve damage etc.

“The arm is taken care of so the patient can better concentrate on gait training.”

Prof. Dr. med. Stefan Hesse
Head of the Department of Neurology at Medical Park Berlin Humboldtmühle

Function and mode of action

For patients who have suffered a stroke or injuries to the central or peripheral nervous system, the load-relieving Omo Neurexa plus orthosis improves body posture and gait pattern through enhanced sensomotoric control and support of the shoulder joint and arm, in addition to relieving pain.

The Omo Neurexa plus consists of two parts – a shoulder cuff and a forearm cuff. The cuffs are connected by two straps. The Omo Neurexa plus positions the humeral head precisely inside the socket of the shoulder joint. This is a prerequisite for the physiological, pain-free interplay of the three true and two false joints of the pectoral girdle during movement.

The Omo Neurexa plus also extends the arm and rotates it slightly outwards, which counteracts the development of the typical spastic posture pattern consisting of flexion with internal rotation.

Omo Neurexa plus supports soft tissues
Re-establishing the correct physiological position of the shoulder joint prevents hyperextension of the capsules, ligaments, tendons and nerves as well as excessive muscular strain, secondary osteoarthritis and the resulting pain this causes. Once pain is eliminated, functional motor rehabilitation in accordance with the patient’s diagnosis can begin.

A repositioning of the humeral head, pain relief and the positioning the upper extremity to counteract spasticity facilitates the free functional treatment and activity of the pectoral girdle and arm (see x-ray images). A muscle stimulation pad that can be easily attached to the inside of the shoulder orthosis by means of a hook-and-loop strap is available for optional additional stimulation of weakened muscles such as the M. rhomboideus, the lower section of the M. trapezius, or the upper section of the M. latissimus dorsi.

Position of the humeral head

*Without Omo Neurexa*
Humeral head dislocated, see upper edge of blue line

*With Omo Neurexa*
Humeral head repositioned in the joint, see upper edge of yellow line
**Features**

- Positively influences the proprioceptors, which can in turn positively affect the sensorimotor system
- The orthosis can also be worn during arm and shoulder training sessions
- A silicone band on the inside prevents slipping, thus ensuring the functionality of the orthosis
- Buttons in different colours make the orthosis easy to use
- Soft TriTech material ensures excellent wearer comfort
- The special textile structure supports the positioning of the orthosis and helps prevent slipping
- Soft edges prevent chafing and sores
- Muscle stimulation pad made of silicone
- Machine washing at 40 °C is recommended

**Supports and centres the shoulder joint**
Corrects subluxation and internal rotation while arm remains freely movable

**Inhibits pathological movement patterns**

**Facilitates active rehabilitation**
As the user can focus on walking rather than worrying about the affected arm

**Improves body posture and gait pattern**
The Omo Neurexa plus is recommended for use at an early stage in rehabilitation, along with functional and specific muscle training and physiological movement of the arm. However, the orthosis is also an excellent medical device later in the rehabilitation process as well.

The Omo Neurexa plus must be adapted to the patient by a therapist or orthotist. The initial donning of the orthosis should be performed by the therapist or orthotist. Depending on the severity of the disability, the patient may be able to apply the orthosis themselves. Prior to doing so, the patient, as well as their carers and relatives, must be provided with detailed instructions regarding the proper use of the orthosis.

Sizes
Proper sizing and application are key factors in achieving optimal functionality. The product is available in six sizes (XXS–XL) for the right and left sides.

<table>
<thead>
<tr>
<th>Article number</th>
<th>Size</th>
<th>Circumference (cm)</th>
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<tbody>
<tr>
<td>5065N</td>
<td>XXS</td>
<td>73 – 78</td>
</tr>
<tr>
<td></td>
<td>XS</td>
<td>79 – 86</td>
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<td></td>
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<td>L</td>
<td>103 – 110</td>
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<td></td>
<td>XL</td>
<td>111 – 118</td>
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Measure the circumference above the chest, as indicated in the illustration.

Additional products in the Neurexa line:
- **Genu Neurexa** (order no. 8165) to prevent hyperextension of the knee
- **Manu Neurexa** (order no. 4165) for supporting and positioning of the wrist
- **Malleo Neurexapro** (order no. 28U50) for effective and dynamic correction of the lower leg musculature
Please don’t hesitate to contact us if you have any further questions or you would like more information.