

### DORSOLUMBAR ORTHOSIS

## **Dorsotech**<sup>®</sup>









### Background

Osteoporosis (OP) is a common disease, **responsible for many** of the fractures that occur in people over 50 years of age.

Osteoporosis is characterised by a decrease in bone mass and an increase in bone fragility, which increases the risk of fractures.

The most frequent are hip and vertebral fractures.

Vertebral fractures cause very acute pain in the back and lead to the gradual deformity of it, due to vertebral crushing.

This pain can become dull and more continuous, produced by microfractures that are usually the most frequent symptom for detecting the disease and making a diagnosis.



Without osteoporosis



With osteoporosis



#### INCIDENCE OF THE OSTEOPOROTIC FRACTURE





Osteoporosis is a global public health problem that affects between **150-200 million\*** people in the world, with around 9 million osteoporotic fractures: approximately one in three women and one in every five men.

\*International Osteoporosis Foundation / OMS



## Origin and development of the disorder in vertebral fractures



# Highest prevalence index

In general, it is estimated that around **33%**\* of women over 50 years of age have OP and it usually affects postmenopausal women. The prevalence in women increases by **15%**\* for the interval between 50-59 years, to more than 80% in those over 80 years of age.



In men, prevalence is lower, 8%\*.

\*OMS y Estudio NHANES.

## PREDISPOSITION FOR SUFFERING VERTEBRAL FRACTURES



A continuous increase is expected in the incidence of this disorder and its consequent fractures, due to increased life expectancy, which increases the risk of occurrence to a greater degree. Orliman, aware of this problem and its evolution in vertebral fractures, presents his new:

# Dorsolumbar brace Dorsotech®

66.000 vertebral fractures

In Spain, it is estimated that about 66,000 vertebral fractures occur every year.

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1,7 million vertebral fractures

Europe United States

> \*Study Source: International Osteoporosis Foundation / OMS



MAIN FORCE



ADJUSTMENT TECHNOLOGY

Dorsotech<sup>®</sup> design and materials prevent your muscles from losing strength, making you more active; this is achieved through a dynamic adaptation system, through a combination of rigid and elastic points, obtaining constant stabilisation and counteracting the curve of your spine.





#### Ref.: TC300 🌑

### Dorsolumbar brace **Dorsotech**®

#### Ocharacteristics

Lightweight and ergonomically designed dorsolumbar brace made from breathable materials for proper stabilisation and posture correction.

The rear component is composed of a rigid fabric base and a height-adjustable aluminium plate. It provides an individualised fit to the curvature of the back thanks to its mouldability and properly controls the alignment of the spine.

The front area features semi-rigid elements to increase intra-abdominal pressure and provide a stable base for posture correction.

Both components are connected by a system of straps which, once adjusted (in position and traction), enables the kyphotic curvature characteristic of osteoporotic patients to be decreased.

#### > Effects

- Kyphotic curve correction, producing a slight increase in the patient's height.
- Stabilisation of the spine.
- Restriction of movements that may be harmful to the integrity of the vertebrae.
- Improved functional mobility, increasing the user's independence.
- Improved dynamic balance, preventing falls.
- Enables muscle activity.
- Increased intra-abdominal pressure.
- · Pain relief, improving quality of life.

## $\stackrel{\circ}{\bigtriangledown}$



ONE SIZE







LIGHT WEIGHT AND

**DISCREET DESIGN** 



#### Indications

- Stable osteoporotic fracture.
- Osteoporosis.
- Muscle weakness.
- Scheuermann's juvenile kyphosis.
- Kyphosis with back pain.
- · Vertebral misalignments.
- Postural rehabilitation.

#### › Colour

Grey



Height of the metal plate: 45-55 cm Abdominal perimeter: 70-130 cm









Adjustable intermediate strap. It allows you to adjust its height to optimise the corrective effect of the brace.





The aluminium plate\* can be moulded and allows for its length to be adjusted to obtain the correct height of the brace. Perfect adjustment to the curve of your back.

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\*Patented design

#### CHARACTERISTICS /Dorsotech®

Ergonomic rigid straps for retropulsion of shoulders, progressively correcting the upper part of the trunk. Its armpit protectors are properly fixed to stop them from moving.



Rotating joints, which help to adjust the brace to the correct position for each patient for them to move freely.

The abdominal area is very large and is reinforced to increase intra-abdominal pressure and provide a stable base for posture correction.





Three-layer breathable material at the rear:



Multi-cell foam fabric for greater resistance.

**0** 0 0 0 0 **0** 0 0

Memory foam in the middle.

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Smooth towelling inside sweat absorption.





Its previous locking system is designed with pins to make it a perfect fit; it is very easy for the patient to put on once all the elements have been adapted.





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