# BANDAGE OR ORTHOSIS WITH ABDOMINAL SUPPORT FUNCTION

## DESCRIPTION

The present invention relates to a bandage or orthosis which can be used in particular during pregnancy.

Due to weight gain, for example during pregnancy, caused by the growth of the child, back pain may occur. It can also lead to the formation of a hollow back because the pelvis is "tilted" during pregnancy to maintain balance. More specifically, it can lead to problems with the facet joints in the lumbar region and in the pelvis with the sacroiliac joint (SIJ) or the cross-iliac joint and the symphysis. Due to the additional weight to be carried the stress on the spine and the sacroiliac joint increases. Due to the hormonal change during pregnancy, the tendons and ligaments in the hips become softer and the pelvis begins to "slide apart", which is accompanied by symphysis pain.

Conventional back orthoses work according to a "3-point system" that applies force at the anatomical points: (1) abdominal area, (2) upper back area and (3) lower back area, wherein the main focus of the application of force is on points 2 and 3 – thus the back.

The underlying technical problem of the present invention is to provide an improved bandage or orthosis, for example a pregnancy orthosis, which can in particular relieve the spine and the sacroiliac joint as well as the symphysis, can compensate somewhat for the resulting excessive hollow back and additionally stabilise the pelvis in order to alleviate the SI joint and symphysis pain.

SUMMARY

In an aspect, the present disclosure refers to an orthosis or a bandage for the lumbar region, having

- an elongated, flat base body, having a first end region, a second end region, a central region and a first intermediate region between the first end region and the central region and a second intermediate region between the second end region and the central region, wherein the first end region and the second end region are reversibly connectable to each other,
- a first elongated abdominal lifting element and a second elongated abdominal lifting element, each having a first end, and
- a first elongated tensioning element and a second elongated tensioning element, each having a first end,

wherein the first intermediate region and the second intermediate region each have a deflecting element or wherein the first end region and the second end region of the base body each have a deflecting element,

wherein the first abdominal lifting element is located in the central region of the base body in the worn state above the first tensioning element and wherein the second abdominal lifting element is located in the central region of the base body in the worn state above the second tensioning element,

wherein the first tensioning element runs freely movable in the direction of the first end region of the base body and the second tensioning element runs freely movable in the direction of the second end region of the base body, wherein the first tensioning element ends with the first end at the first intermediate region of the base body, and the second tensioning element ends with the first end at the second intermediate region of the base body, and wherein the first end of the first tensioning element and the first end of the second tensioning element each have a deflecting element,

wherein the first abdominal lifting element runs from the central region of the base body to the deflecting element of the first intermediate region or of the first end region and is

deflected there, and the second abdominal lifting element runs from the central region of the base body to the deflecting element of the second intermediate region or of the second end region and is deflected there,

wherein the first abdominal lifting element runs from the deflecting element of the first intermediate region or of the first end region to the deflecting element of the first tensioning element and is deflected there, and the second abdominal lifting element runs from the deflecting element of the second intermediate region or of the second end region to the deflecting element of the second tensioning element and is deflected there,

wherein the first abdominal lifting element runs from the deflecting element of the first tensioning element in the direction of at least one of the end regions of the base body and wherein the second abdominal lifting element runs from the deflecting element of the second tensioning element in the direction of at least one of the end regions of the base body,

and wherein the first end of the first abdominal lifting element and the first end of the second abdominal lifting element are each reversibly attachable onto the first end region of the base body and/or onto the second end region of the base body and/or onto the first end of the other abdominal lifting element respectively.

The present disclosure solves the underlying problem by means of the subject matter of the above aspect.

The present disclosure relates in particular to a bandage or orthosis for the lumbar region, having

- an elongated, flat base body having a first end region, a second end region, a central region and a first intermediate region between the first end region and the central region and a second intermediate region between the second end region and the central region, wherein the first end region and the second end region are reversibly connectable to each other,
- a first elongated abdominal lifting element and a second elongated abdominal lifting element, each having a first end and
- a first elongated tensioning element and a second elongated tensioning element, each having a first end,

wherein the first intermediate region and the second intermediate region each have a deflecting element or wherein the first end region and the second end region each have a deflecting element, wherein the first abdominal lifting element is located state in the central region of the base body in the worn state above the first tensioning element and wherein the second abdominal lifting element is located in the central region of the base body in the worn state above the second tensioning element, wherein the first tensioning element runs freely movable in the direction of the first end region of the base body and the second tensioning element runs freely movable in the direction of the second end region of the base body, wherein the first tensioning element ends with the second end at the first central region of the base body and the second tensioning element ends with the second end at the second central region of the base body, and wherein the first end of the first tensioning element and the first end of the second tensioning element each have a deflecting element, wherein the first abdominal lifting element runs from the central region of the base body to the deflecting element of the first intermediate region or of the first end region and is deflected there, and the second abdominal lifting element runs from the central region of the base body to the deflecting element of the second intermediate region or of the second end region and is deflected there, wherein the first abdominal lifting element runs from the deflecting element of the first intermediate region or of the first end region to the deflecting element of the first tensioning element and is deflected there, and the second abdominal lifting element runs from the deflecting element of the second intermediate region or of the second end region to the deflecting element of the second tensioning element and is

deflected there, wherein the first abdominal lifting element runs from the deflecting element of the first tensioning element in the direction of at least one of the end regions of the base body and wherein the second abdominal lifting element runs from the deflecting element of the second tensioning element in the direction of at least one of the end regions of the base body, and wherein the first end of the first abdominal lifting element and the first end of the second abdominal lifting element are each reversibly attachable onto the first end region of the base body and/or onto the second end region of the base body and/or onto the first end of the other abdominal lifting element respectively.

In a preferred example, the first abdominal lifting element and the second abdominal lifting element and/or the first tensioning element and the second tensioning element are each connected with a second end to the central region of the base body and wherein preferably the connection of the second end of the first abdominal lifting element to the central region of the base body in the worn state is located above the connection of the second end of the first tensioning element to the central region of the base body and wherein the connection of the second end of the second abdominal lifting element to the central region of the base body in the worn state is located above the connection of the second end of the second tensioning element to the central region of the base body.

In a preferred example, the first and the second abdominal lifting elements are connected to each other in the central region of the base body and/or the first and the second tensioning elements are connected to each other in the central region of the base body.

In a preferred example, the abdominal lifting elements have a greater total elasticity than the tensioning elements.

In a preferred example, the abdominal lifting elements and/or the tensioning elements are straps.

In a preferred example, the deflecting elements of the tensioning elements are configured as buckles.

In a preferred example, the base body has stabilising rods in the central region and/or in the intermediate region.

In a preferred example, the end regions of the base body are designed as a hook-and-loop fastener.

In a preferred example, the end regions connectable to each other of the base body are at least 15 cm long. The end regions of the base body can also be shorter than 15 cm. The end regions can also be variably connectable to each other by means of an additional hook-and-loop strip (similar to a “fish-mouth hook-and-loop” strap extension).

In a preferred example, pads and/or heat cushions and/or cold cushions can be assigned to the base body.

The abdominal lifting element can also have different regions with different elasticity/stretch. The abdominal lifting element can also have different regions with different elasticity. The abdominal lifting element can also have different regions with different stretch. The abdominal lifting element can also have different regions with different elasticity and stretch. For example, a two-part strap with different stretches can be used.

Preferably, the bandage or the orthosis according to the disclosure is a pregnancy bandage or a pregnancy orthosis.

The present invention is explained in more detail by means of the following example and figures, wherein this is not to be understood limiting.

Showing:

Figure 1: A bandage or an orthosis according to the invention, here as a pregnancy orthosis, back view,

Figure 2: The bandage or the orthosis according to the invention of Figure 1, left side view,

Figure 3: The bandage or the orthosis according to the invention of Figure 1, right side view,