

Description of Invention

"Corset for alleviation of lumbago"

THIS INVENTION relates to a corset to be used by a patient suffering from Lumbago for alleviation thereof.

5 Generally, corsets of this type are advantageous to protect the lumbar region and assist dorsal muscles and abdominal muscles to keep a healthy posture of the human body, thereby alleviating lumbago. To achieve such advantages, it is essential that a corset is tightly fitted to the waist, particularly to the lumbar region.

10 A corset for alleviating lumbago has been proposed, which comprises a stretchable belt a and which is fastening tightly around the waist using the stretchable belt as illustrated in Figure 5 of the accompanying drawings.

15 However, because each person has his or her own individual physical shape of the human body, a problem exists in that differences in body shape amongst individuals are not accommodated by the known corset, resulting in a poor fit between the corset and the waist of the user in many cases.

20 Even if a corset is tightly fitted at the waist, there arises another problem that routine motions of the waist necessary for daily life are restricted because a certain portion of the waist is fully restrained.

25 Moreover, the posture or position of a user's waist

varies frequently with routine motions, such as bending forward, sitting and so on. The conventional lumbago-alleviating corset has a further disadvantage in that fit of the corset at the user's waist is considerably affected by such routine motions with the lapse of time, thereby reducing the ability of the corset to protect the lumbar region and eventually bringing about a feeling of physical discomfort when the corset is worn.

The present invention aims to overcome or at least mitigate the above-discussed problems and has an object of providing a corset for alleviation of lumbago in which routine motions of the waist in daily life are not restricted, and which fits the waist of a user irrespective of differences in physical shape amongst individuals and of variations in posture or position according to the motions of the waist, thereby achieving adequate protection of the waist without a feeling of physical discomfort when wearing the corset.

Accordingly, the present invention provides a corset for the alleviation of lumbago, comprising a non-stretchable section positioned to correspond to the lumbar at the centre of the back of the human body, sections of the corset other than the non-stretchable section being made of stretchable material, in which corset resilient cores are respectively connected to left and right side edges of the non-stretchable section, and a gel pad is detachably connected to said non-stretchable section.

In a corset of above construction, the gel pad is interposed between the corset body and lumbar. Because of its fluidity, the gel pad can adapt to any gap formed between the corset body and the lumbar region irrespective of differences in the physical figures of individuals or of variations in posture according to motions of the wearer's waist. As a result, a close fit between the corset and lumbar is maintained, thereby protecting the lumbar and removing the feeling of _____

physical discomfort in wearing the corset.

5 In order that the invention may be more readily understood, embodiments thereof will now be described, by way of example, with reference to the accompanying drawings, in which:

10 Figure 1 is a front view of one lumbago-alleviating corset embodying the present invention;

Figure 2 is a cross-sectional view of the Figure 1 corset;

15 Figure 3 is a front view of another lumbago-alleviating corset embodying the invention;

Figure 4 is a longitudinal sectional view of the Figure 3 corset when putting the corset on; and

20 Figure 5 is a front view of a conventional lumbago-alleviating corset.

25 Two preferred embodiments of the present invention will now be described hereinafter with reference to Figures 1 to 4 of the accompanying drawings, in which like reference numerals designate like parts.

30 Figures 1 and 2 both illustrate one embodiment of a corset embodying the invention, in which a non-stretchable section 1 of the corset is provided at a position which corresponds to the lumbar at the centre of the back of the human body. The non-stretchable section 1 can be made of a non-stretchable material such as non-stretchable cloth, film or the like. On the other hand,
35 sections of the corset body 2 other than the non-stretchable section 1 ^{are} ~~can~~ be made of a stretchable material.

Numerals 3, 3 indicate resilient cores which are respectively connected to the left and right side edges of the non-stretchable section 1. Each of the resilient cores 3, 3 can be formed as a strip made of a material such as synthetic resin or the like having proper hardness and elasticity. In view of the desired tight fit between the corset and the waist, it is preferable for the resilient cores 3, 3 to be shaped or bent at the centre thereof along a circular arc conforming to the physical shape of the waist so that the convex portions thereof face the waist when the corset is worn on. Each of the resilient cores 3, 3 can be attached to the corset by inserting it between the surface cloth and backing cloth of the corset body 2 and sewing up peripheral edge portions. The resilient cores 3, 3 are located at left and right sides of the lumbar to protect the lumbar area when putting the corset on.

Numeral 4 indicates a gel pad which is detachably connected to the non-stretchable section 1 inside the corset. The gel pad 4 is composed of a gel material 4a, such as artificial silicone rubber which is similar to human fat, which gel material is tightly enclosed in a packaging member 40. To mount the gel pad 4 detachably to the corset body 2, the pad 4 is inserted into a bag 5 which has its upper end open and which is sewn to the portion where the resilient cores 3, 3 are attached. It is also possible to attach the gel pad 4 using retainer pieces 6, 6 (made for example of the hook and loop material sold under the Trade Mark VELCRO) sewn to the rear of the gel pad 4 for co-operation with complementary retainer pieces 7, 7 sewn to corresponding locations on the non-stretchable section 1, as illustrated in the embodiment of Figures 3 and 4. The gel pad 4 is interposed between the corset body 2 and waist when the corset is worn, and is freely deformable because of its fluidity. In this manner, a tight fit between the corset

5
10 and the lumbar is maintained, and the lumbar is reliably protected irrespective of differences in physical shape amongst individuals and of variations in posture or position according to the motions of the waist of a wearer. Furthermore, a force directed toward waist portion is exerted by the resilient cores 3, 3 and the non-stretchable section 1 disposed between the resilient cores 3, 3, and, as a result, an even force is applied to the entire gel pad 4, which is also advantageous in protecting the waist portion.

15 Numeral 8, 8 indicate auxiliary resilient cores which may be additionally provided at desired locations such as the sides of the corset body 2. The auxiliary cores 8, 8 can, in the same manner as the resilient cores 3, 3, be constituted by a strip of material such as metal, synthetic resin or the like having proper hardness and elasticity. Each of the auxiliary cores 8, 8 can also be attached to the corset by inserting it in between the surface cloth and backing cloth of the corset body 2 and sewing up peripheral edge portions.

25 Numeral 9 indicates a fastener for opening and closing the corset body 2 when putting the corset on and taking the corset off. An open front section of the corset body 2 could alternatively be constructed so as to be laced up.

30 Since a corset embodying the invention for the alleviation of lumbago is constructed as described above, when the corset is worn the lumbar is exactly protected, maintaining a healthy posture without restricting the routine motions of the waist in daily life, and lumbago is effectively alleviated, irrespective of differences in the physical figures of individuals and of variations in posture or position resulting from motions of the waist.

Furthermore, because of the force exerted by the non-stretchable section interposed between the resilient cores, an even force is applied to the entire gel pad, which also results in satisfactory protection of waist as a whole.

CLAIMS:

1. A corset for the alleviation of lumbago, comprising a non-stretchable section positioned to correspond to the lumbar at the centre of the back of the human body, sections of the corset other than the non-stretchable section being made of stretchable material, in which corset resilient cores are respectively connected to left and right side edges of the non-stretchable section, and a gel pad is detachably connected to said non-stretchable section.
2. A corset according to claim 1, wherein the non-stretchable section is provided with a pocket to receive the gel pad.
3. A corset according to claim 1, wherein the gel pad is provided with retaining means co-operating with complementary retaining means on the non-stretchable section.
4. A corset according to any one of claims 1 to 3, wherein the non-stretchable section is made of non-stretchable cloth.
5. A corset according to any preceding claim, wherein each resilient core comprises a strip of hard elastic material.
6. A corset according to claim 5, wherein each resilient core has an arcuate portion.
7. A corset according to any preceding claim, wherein the gel pad comprises a packaging member filled with silicone rubber.



8. A corset for the alleviation of lumbago substantially as hereinbefore described with reference to Figures 1 to 4 of the accompanying drawings.



* C L M S *