A post-abdominal-surgery garment comprising a body having an upper portion and a lower portion, said lower portion including at least one compression region capable of providing a pressure level to an item contained beneath said compression region and a selectively sealable division capable of transitioning from a first configuration and a second configuration; said selectively sealable division being located substantially within said upper portion, wherein said selectively sealable division can have maintain any configuration between said first configuration and said second configuration without substantially affecting the pressure level beneath the compression region.
Fig. 6
POST-ABDOMINAL-SURGERY GARMENT

CLAIM OF PRIORITY

This application claims the benefit of priority under 35 U.S.C. 119(e) to U.S. Provisional patent application No. ______ filed 24 Jan. 2005, by R. Kasprzak, the complete contents of which is hereby incorporated herein by reference.

BACKGROUND

1. Field of the Invention

Additionally, modern, cosmetic surgical procedures such as abdominoplasty have become popular. Such procedures can therefore leave a new mother with impaired abdominal strength and an incision mark which can scar significantly if the surrounding tissue and muscles are not properly rested and given time to heal.

2. Background

In today’s modern world, child birth can often be complicated and/or difficult for women. Thus, many women and their doctors opt for or are forced to deliver children via caesarian section surgery. Such surgical procedures can be fairly invasive and can, and do, result in trauma to the abdominal muscles. Such surgical procedures can therefore leave a new mother with impaired abdominal strength and an incision mark which can scar significantly if the surrounding tissue and muscles are not properly rested and given time to heal.

Additionally, modern, cosmetic surgical procedures such as abdominoplasty have become popular. Such procedures can also leave the patient with weakened abdominal muscles. More problematic, give the cosmetic nature of the surgery, is how to minimize scarring. Significant movement or agitation of the tissue can result in significant scarring.

Presently, most doctors wrap patients in large bandages to prevent movement and agitation of the tissue. However, such bandages can interfere with everyday tasks. Particularly, for new mothers, the bandages can restrict or prohibit breast feeding without removal of the bandages.

What is needed is a garment that provides appropriate support and compression that can be easily removed and/or partially released, when desired, without causing unnecessary abrasion, so that the user can perform normal functions.

BRIEF DESCRIPTION OF THE DRAWINGS

FIG. 1 depicts a front view of one embodiment of a post-abdominal-surgery garment in a first configuration.

FIG. 2 depicts a front view of the embodiment shown in FIG. 1, in a second configuration.

FIG. 3 depicts a rear view of the embodiment shown in FIGS. 1 and 2.

FIG. 4 depicts an alternate rear view of the embodiment shown in FIGS. 1 and 2.

FIG. 5 depicts an alternate embodiment of the post-abdominal-surgery garment shown in FIG. 1

FIG. 6 depicts an alternate embodiment of the post-abdominal-surgery garment shown in FIG. 1

FIG. 7 depicts a rear view of the embodiments shown in FIGS. 6 and 7.

FIG. 8 depicts an alternate rear view of the embodiments shown in FIGS. 6 and 7

DETAILED DESCRIPTION

FIG. 1 depicts one embodiment of a post-abdominal-surgery garment 100. In the embodiment shown in FIG. 1, the garment 100 includes a body 102, shoulder supports 104, arm holes 106, leg openings 108 and a selectively sealable division 110. Additionally, in some embodiments, the garment 100 can include a compression region 112 and breast support 114.

In the embodiment shown in FIG. 1, the body 102 can be comprised of any capable of elastic deformation. In some embodiments, the body 102 can be comprised of 90% cotton with a 10% elastic thread composition, such as Lycra®. However, in alternate embodiments, the body 102 can be comprised of synthetic material, such as Nylon® and/or any known and/or convenient material or can be comprised of any natural material, such as cotton, wool and/or any known and/or convenient material. In still further alternate embodiments, the body 102 can be comprised of any combination of natural and/or synthetic materials. In the embodiment shown in FIG. 1, the garment 100 can be formed as a single, seamless unit made from any known and/or convenient material.

In some embodiments, the garment 100 and/or the body 102 can be comprised of two or more layers of material bound together at the perimeter of the garment 100. In some embodiments, the two or more can be selected such that they have a low coefficient of friction relative to each other, such that the layers slide easily against each other.

In the embodiment shown in FIG. 1, the shoulder straps 104 can be integral with the body 102 of the garment 100 and can be comprised of the same material. However, in alternate embodiments, the shoulder straps 104 can be comprised of a material different from the body 102 of the garment. In some embodiments, the shoulder straps 104 can be comprised of a translucent material and can be removable attached to the body 102 using any known and/or convenient detachable mechanism. In alternate embodiments, the straps can be fixed to the body 102 of the garment 100, but can be a contrasting material.

In the embodiment shown in FIG. 1, the shoulder straps 104 are depicted as uniform in thickness. However, in alternate embodiments the shoulder straps 104 can have any convenient geometry or proportions and/or can be adjustable in any known and/or convenient manner. In some embodiments, the shoulder straps 104 may be absent.

In the embodiment shown in FIG. 1, the garment 100 includes arm holes 106 which are specifically identified and located below the shoulder straps 104. In alternate embodiments, the shoulder straps 104 and the arm holes 106 can be integral and have any convenient geometry. Additionally, in alternate embodiments, the arm holes 106 can include elastomeric elements at the edge of the garment 100.

In the embodiment shown in FIG. 1, the garment 100 includes leg openings 108. The leg openings 108 can be proportioned to accommodate a human leg. In some embodiments, the perimeter of the leg openings 108 can include an elastomeric member.
In the embodiment shown in FIG. 1, the garment 100 includes a selectively sealable division 110. In some embodiments, the selectively sealable division can incorporate a zipper, hook/loop patch closure (such as Velcro®), spaced fasteners and/or any other known and/or convenient selectively sealable mechanism.

In the embodiment shown in FIG. 1, the garment 100 can include a compression region 112. The compression region 112 can be located such that it encompasses the abdominal region and/or part of the torso of a wearer. In alternate embodiments, the compression region 112 can have any convenient geometry and/or location relative to the garment 100 and/or selectively sealable division 110. The compression region 112 can be formed by including a higher composition of elastomeric material within the region 112 or can be created by the introduction of an additional layer of elastomeric material associated with the body 102. In alternate embodiments, the compression region 112 can be formed and/or created in any known and/or convenient manner using any known and/or convenient mechanism, material and/or composition thereof. In some embodiments, the compression region 112 can be formed from the same material as the body 102 of the garment 100.

In the embodiment shown in FIG. 1, the upper portion of the garment 100 can include breast support 114. In the embodiment shown in FIG. 1, the breast support 114 can be an elastomeric member integrated and/or coupled with the body of the garment designed to provide support to the wearer’s breast tissue. In alternate embodiments, the breast support 114 can be any known and/or convenient mechanism or material that can be used to support the breast of the wearer. In still further alternate embodiments, the breast support 114 can be absent.

The garment 100 can be appropriately sized such that the body, and in particular the abdominal region and torso, of the wearer will be bound with a prescribed level or range of pressure. Sizing and material composition can be altered such that a prescribed level or range of pressure is achieved.

FIG. 2 depicts a front view of an embodiment of the garment 100 shown in FIG. 1. In the embodiment shown in FIG. 2, the selectively sealable division 110 is in an unsealed position. Although the selectively sealable division 110 is in the unsealed position, the compression region 112 can still deliver a prescribed level or range of pressure is maintained. The pressure level in the compression region 112 when the selectively sealable division 110 is in an unsealed position can be lower than or equal to the pressure level in the compression region 112 when the selectively sealable division 110 is in the sealed position. In some embodiments, the selectively sealable division 110 can be in a partially open and/or closed position. The geometry of the garment 100 and the selectively sealable region can be selected such that a mother can uncover her breast to breast feed her child without significantly impacting the pressure level in the compression region 112.

In the embodiment shown in FIG. 2, the garment 100 can include a fastening mechanism 202 located in the nether and/or lower region of the garment 100. In some embodiments the fastening mechanism 202 can be located between the leg openings 108 and can be a hook/loop patch, snap-type fastener and/or any other known and/or convenient fastening mechanism. In alternate embodiments, the fastening mechanism 202 can be located in any convenient location below the compression region 112. The fastening mechanism 202 can be opened to allow a wearer to urinate and/or defecate without removal of the garment 100. In some alternate embodiments, the fastening mechanism 202 may be absent.

FIG. 3 depicts a rear view of the garment 100 shown in FIGS. 1 and 2. In the embodiment shown in FIG. 3, the rear of the body 102 of the garment 100 has a dropped region 302. In the embodiment shown in FIG. 3, the dropped region 302 is substantially horizontal. However, in alternate embodiments, the rear of the body 102 can have any convenient geometry that does not interfere with the pressure level in the compression region 112 while the selectively sealable division 110 is in any possible position.

FIG. 4 depicts a rear view of an alternate embodiment of the garment 100 shown in FIGS. 1 and 2. In the embodiment shown in FIG. 4, the rear of the body 102 of the garment 100 has a rounded dropped region 402. In the embodiment shown in FIG. 4, the rounded dropped region 402 is adjacent to the compression region 112. However, in alternate embodiments, the rear of the body 102 can have any convenient geometry that does not interfere with the pressure level in the compression region 112 while the selectively sealable division 110 is in any possible position.

FIG. 5 depicts a front view of an alternate embodiment of the garment 100 shown in FIG. 1. In the embodiment shown in FIG. 5, the lower portion of the garment 100 including the leg holes 108 and fastening mechanism 202 are absent. In the embodiment shown in FIG. 5, the lower portion of the garment 100 can include fasteners 502 designed to attach the garment 100 to another item of clothing and/or any other convenient attachment point. The fasteners can be any known and/or convenient fastening mechanism. In the embodiment shown in FIG. 5, the fasteners 502 are located within the compression region 112. However, in alternate embodiments, the fasteners can be located in any convenient location on the garment 100 and/or may be absent. In the embodiment shown in FIG. 5, the base of the garment 100 can also include an elastomeric member 504. In the embodiment shown in FIG. 5, the elastomeric member 504 can be integral with the body 102, coupled with the body 102 or detachably coupled with the body 102. However, in some embodiments the elastomeric member can be absent.

In the embodiments shown in FIG. 5, the front of the body 102 of the garment 100 can have a depressed neckline 506. In alternate embodiments, the neckline 506 can have any convenient geometry that does not substantially interfere with the operation of the selectively sealable division 110 and/or the pressure within the compression region 112.

FIG. 6 depicts an alternate embodiment of the garment 100 shown in FIG. 1. In the embodiment shown in FIG. 6, the selectively sealable division 110 can be held in the closed position by a continuous and/or partially continuous hook/loop patch, such as Velcro®, a resealable adhesive and/or any other known and/or convenient selectively sealable mechanism, collectively 602.

In the embodiment shown in FIG. 6, the garment can include hook/loop fasteners 604 that can selectively
attach to other articles to secure the lower portion of the garment. In the embodiment shown in FIG. 6, the hook/loop fasteners are located at the perimeter of the lower portion of the garment. However, in alternate embodiments, the hook/loop fasteners can be located in any convenient location on the garment.

FIG. 7 depicts a rear view of an embodiment of the garment. In the embodiment shown in FIG. 7, a substantial portion of the rear portion of the garment has been removed to leave a plunged back. In some embodiments the garment can be manufactured in the suggested geometry or be tailored into the desired geometry. In alternate embodiments, the rear of the garment can have any convenient geometry that does not substantially interfere with the pressure level in the compression region at the abdomen of the wearer.

The embodiment shown in FIG. 8 depicts a rear view of an alternate embodiment of the garment. In the embodiment shown in FIG. 8, a substantial portion of the rear portion of the garment has been removed to leave a plunged back having at least a partially rounded edge. In some embodiments the garment can be manufactured in the suggested geometry or be tailored into the desired geometry. In alternate embodiments, the rear of the garment can have any convenient geometry that does not substantially interfere with the pressure level in the compression region at the abdomen of the wearer.

In the embodiment shown in FIG. 8, the garment can include a strap that can connect opposing sides of the back of the body across a plunged back. In the embodiment shown in FIG. 8, the strap can be comprised of any known and/or convenient material capable of connecting opposing sides of the back of the body across the plunged back. In some embodiments, the strap may not be present.

In the embodiment shown in FIG. 8, the strap can be removable and coupled with the garment via connectors. In the embodiment shown in FIG. 8, the connectors can be hook/look fasteners, snap-style fasteners, hook-style fasteners and/or any known and/or convenient fastening mechanism. In some embodiments, the connectors can be permanent fastening mechanisms, can be integral with the body and/or can be absent.

Although the description of the garment has been provided in conjunction with specific embodiments thereof, it is evident that many alternatives, modifications and variations will be apparent to those skilled in the art. Accordingly, the apparatus, as described and hereinafter claimed, is intended to embrace all such alternatives, modifications and variations that fall within the spirit and broad scope of the appended claims.

What is claimed is:

1. A garment comprising:
   - a body having an upper portion and a lower portion, said lower portion including at least one compression region capable of providing a pressure level to an item contained beneath said compression region; and
   - a selectively sealable division capable of transitioning between a first configuration and a second configuration; said selectively sealable division being located substantially within said upper portion;
   - wherein said selectively sealable division is capable of maintaining any configuration between said first configuration and said second configuration without substantially affecting the pressure level beneath the compression region.

2. The garment of claim 1, wherein said body is comprised of a material capable of a unidirectional elastic response.

3. The garment of claim 1, wherein said body is comprised of a material capable of a multidirectional elastic response.

4. The body of claim 2, wherein the orientation of material capable of a unidirectional elastic response in a first compression region varies from the orientation of material capable of a unidirectional elastic response in a second compression region.

5. The body of claim 3, wherein the orientation of material capable of a multidirectional elastic response in a first compression region varies from the orientation of material capable of a multidirectional elastic response in a second compression region.

6. The garment of claim 1, wherein said selectively sealable division is comprised of a vertically oriented closure structure.

7. The selectively sealable division of claim 6, wherein said vertically oriented closure structure is at least one of the group consisting of buttons, zippers, hook and loop fasteners, and touch fasteners.

8. The garment of claim 1, wherein said pressure levels range between approximately 5 PSI and approximately 80 PSI applied to said item contained beneath said compression region.

9. The garment of claim 1, wherein said compression region comprises of at least two sub-compression regions located at different areas of an item contained beneath said compression region.

10. A method of selectively compressing comprising:
   - providing a garment having a body, having an upper portion and a lower portion, said lower portion including at least one compression region capable of providing a pressure level to an item contained beneath said compression region; and
   - transitioning a selectively sealable division between a first configuration and a second configuration, said selectively sealable division being located substantially within said upper portion; and
   - maintaining any configuration from said selectively sealable division between said first configuration and said second configuration without substantially affecting the pressure level beneath the compression region.