The present invention provides pants for a surgery patient including a body including a front part, a rear part, and a crotch part, and waist fixing members provided to the front part and the rear part, respectively, the waist fixing members fixing the body to a patient's body, in which the crotch part has a cut portion having a reversed "L" shape and including a first cut portion extending in a direction from the front part to the rear part and a second cut portion extending in a direction from one side to a center portion thereof.
PANTS FOR SURGERY PATIENT

CROSS REFERENCE


BACKGROUND OF THE INVENTION

[0002] 1. Field of the Invention
[0003] The present invention relates to pants for a surgery patient, and more particularly to pants for a surgery patient, which have a cut portion to allow a tube of a Foley catheter (i.e. urinary catheter) to be placed therein.
[0004] 2. Description of the Related Art
[0005] When a patient gets a surgical operation under a general anesthetic, a patient is in a state of being incapable of urinating because he/she is unconscious. For this occasion, a Foley catheter (urinary catheter) is needed. The Foley catheter is connected to the patient’s genital organ in an aseptic manner for a patient who cannot willfully urinate or a patient undergoing a surgical operation.
[0006] When a patient is under general anesthetic, the patient cannot willfully pass his or her urine, and thus the Foley catheter must be used. When a patient is given a general anesthetic or a spinal anesthetic, the patient might not feel the sensation of urination even when his or her bladder is fully filled with urine, which can lead to rupture of the bladder, hyperpiesia, and cardiovascular accidents such as tachycardia.
[0007] Generally, a patient gets a surgical operation while naked in the case in which the operation is performed under general anesthesia. The operation performed under the condition such that the patient is naked compromises the privacy of a patient. In the case of female patients, the patients may be embarrassed when the patients recover their consciousness, even though they do not feel a sense of shame during the operation.
[0008] Trying to perform an operation in the condition under which the patient is wearing underpants in order to prevent the patient from being embarrassed, it is difficult to connect the Foley catheter to the patient’s genital organ because general underpants are manufactured without taking into consideration the requirement to fit the Foley catheter.
[0009] In order to solve the above-mentioned problem, Korean Utility Model Registration No. 415967 discloses pants having an insertion hole in a predetermined place thereof to allow the Foley catheter to pass therethrough and a technique of using general pants by cutting the pants during the operation.
[0010] However, it is inconvenient to use known pants and techniques because a Foley catheter is connected to the patient’s genital organ in the state in which the Foley catheter has passed through the insertion hole of the pants or because the pants have the insertion hole (cut portion) at a side of the pants, which makes it difficult to fit the Foley catheter.

SUMMARY OF THE INVENTION

[0011] The present invention aims to solve the above-mentioned problems, and provides pants for a surgery patient having a cut portion which allows a Foley catheter to be connected to a patient’s genital organ so as to easily pass therethrough.

[0012] According to one aspect of the invention, there is provided pants for a surgery patient including a body including a front part, a rear part, and a crotch part, and waist fixing members provided to the front part and the rear part, respectively, the waist fixing members fixing the body to a patient’s body, the crotch part having a cut portion having a reversed “L” shape and including a first cut portion extending in a direction from the front part to the rear part and a second cut portion extending in a direction from a side to a center portion thereof.

[0013] In the pants, it is preferable that the pants further include a first detachable member which can be attached to and detached from the body and provided near the second cut portion of the cut portion having a reversed “L” shape, and a second detachable member which can be coupled to the first detachable member and provided near the second cut portion.

[0014] In the pants, it is preferable that the first and second detachable members be a combination of hook and loop tapes, a combination of buttons and button-holes, or a combination of hooks and hook eyes.

[0015] According to another aspect of the invention, there is provided pants for a surgery patient including a body including a front part, a rear part, and a crotch part, and a waist fixing member for fixing the body to a patient’s waist, in which the crotch part has a cut portion having a “U” shape, and including a third cut portion extending in a direction from the front part to the rear part and a fourth cut portion extending in a side-to-side direction thereof.

[0016] In the pants, it is preferable that the pants further include a third detachable member which can be attached to and detached from the body and which is provided to a left side portion of the crotch part, precisely, near the fourth cut portion, a fourth detachable member which can be attached to and detached from the body and which is provided to a right side portion of the crotch part, precisely, near the fourth cut portion, and a fifth detachable member provided near the fourth cut portion and coupled to both the third detachable member and the fourth detachable member.

[0017] In the pants, it is preferable that the third detachable member, the fourth detachable member, and the fifth detachable member be a combination of hook and loop tapes, a combination of buttons and button-holes, or a combination of hooks and hook eyes.

[0018] According to further aspect of the invention, there is provided pants for a surgery patient including a body including a front part, a rear part, and a crotch part, and a waist fixing member for fixing the body to a patient’s waist, in which the crotch part has a cut portion having a “U” shape, and including a fifth cut portion extending in a direction from the front part to the rear part and a sixth cut portion and a seventh cut portion extending from a side to a center portion thereof.

[0019] In the pants, it is preferable that the pants further include a sixth detachable member and a seventh detachable member, which can be attached to and detached from the crotch part near the sixth cut portion and the seventh cut portion, respectively, and an eighth detachable member and a ninth detachable member coupled to the sixth detachable member and the seventh detachable member, respectively.
In the pants, it is preferable that the seventh detachable member, the eighth detachable member, and the ninth detachable member be a combination of hoop and loop tapes, a combination of buttons and button-holes, or a combination of hooks and hook eyes. In the pants, it is preferable that the fixing members be strings, hoop and loop tapes, buttons and button-holes, or hooks and hook eyes. In the pants, it is preferable that the pants be made of unwoven fabric, paper, or woven fabric such as cotton fabric.

**BRIEF DESCRIPTION OF THE DRAWINGS**

The above and other features and advantages of the present invention will be more clearly understood from the following detailed description when taken in conjunction with the accompanying drawings, which:

- **Fig. 2A and 2B** are perspective views illustrating a detailed structure of pants for a surgery patient according to a second embodiment;
- **Fig. 3A and 3B** are perspective views illustrating a detailed structure of pants for a surgery patient according to a third embodiment;
- **Fig. 4A, 4B, 4C and 4D** are perspective views illustrating a detailed structure of pants for a surgery patient according to a fourth embodiment;
- **Fig. 5A and 5B** are perspective views illustrating a detailed structure of pants for a surgery patient according to a fifth embodiment;
- **Fig. 6A and 6B** are perspective views illustrating a detailed structure of pants for a surgery patient according to a sixth embodiment; and
- **Fig. 7A and 7B** are perspective views illustrating a detailed structure of pants for a surgery patient according to a seventh embodiment.

**DETAILED DESCRIPTION OF THE INVENTION**

Hereinafter, a preferred embodiment of the invention will be described in detail with reference to the accompanying drawings.

As shown in Figs. 1A, 1B, 1C and 1D, the pants for a surgery patient 100 according to the first embodiment include a body 10 comprised of a front part 110, a rear part 120, and a crotch part 130 provided between the front part 110 and the rear part 120. The pants 100 further include waist fixing members 141 and 142 which fix the body 10 to the waist of a patient.

The front part 110 and the rear part 120 are provided in a separated form, so that the pants can be easily put on even a patient who cannot move. When the pants 100 are worn by a patient, the front part 110 and the rear part 120 of the pants 100 are fixed to the patient’s body using the waist fixing members 141 and 142. The waist fixing members 141 and 142 are coupled to each other using a hoop-and-loop tape coupling manner, for example, a hook-and-loop fastener, such as Velcro tape. Alternatively, the waist fixing members 141 and 142, provided to the front part 110 and the rear part 120, respectively, may be coupled to each other in a manner of tying a string, in a push-button manner, or a hook-and-eye manner.

The pants 100 for a surgery patient according to the first embodiment have a reversed “L”-shaped cut portion 150 at the crotch part 130 in order to allow the Foley catheter to be easily placed thereon. The cut portion 150 is comprised of a first cut portion 151 extending in a direction from the front part 110 to the rear part 120 and a second cut portion 152 extending from the side to the center of the crotch part 130.

A first detachable member 153, which can be attached to and detached from the body 10, is provided around the second cut portion 152, and a second detachable member 154 coupled to the first detachable member 153 is also provided around the second cut portion 152. The first detachable member 153 and the second detachable member 154 form a set, and have a hoop-and-loop tape structure so that they can be repeatedly coupled to and decoupled from each other many times.

The pants 100 have the cut portion 150 having a reversed “L” shape composed of the first cut portion 51 and the second cut portion 52. Accordingly, with this structure of the pants 100, it is possible to prevent the patient’s genital organ from being visible and to allow the Foley catheter to be easily installed.

Hereinafter, the process of using the pants 100 for a surgery patient according to the first embodiment will be described in greater detail. First, the first detachable member 153 is detached from the second detachable member 154. Next, the Foley catheter is connected to the patient’s genital organ and is placed at the cut portion 150 having a reversed “L” shape. Next, the first detachable member 153 is attached to the second detachable member 154. Finally, the body 10 of the pants 100 is fixed to the patient’s body using the waist fixing members 141 and 142.

As described above, the pants 100 according to the first embodiment have the cut portion 150 having a reversed “L” shape at the crotch part 130, the cut portion 150 being comprised of the first cut portion 151, extending in the direction from the front part 110 to the rear part 120, and the second cut portion 152. Accordingly, it is possible to easily and freely install the Foley catheter at the desired position regardless of the patient’s sex, i.e., the position of the genital organs. Once the Foley catheter is placed at the first cut portion 151, the pants can be easily put on or taken off from a patient without disconnecting the tube of the Foley catheter from the patient’s genital organ by attachment and detachment of the first detachable member 153 to or from the second detachable member 154.

**Fig. 2A, 2B and 3A, 3B** are perspective views illustrating the detailed structure of pants for a surgery patient according to a second embodiment and a third embodiment, respectively.

With reference to Fig. 2A and 2B, the pants 200 for a surgery patient according to the second embodiment have a first detachable member 155 which can be attached to and detached from the body of the pants 200 and which is provided around the second cut portion 152, and a second detachable member 156 which is attached to or detached from the first detachable member 155 and is provided around the second cut portion 152. The first detachable member 155 and the second detachable member 156 form a
set and are in a form of a button and a button-hole, respectively, so that the first and second detachable members 155 and 156 can be freely attached to and detached from each other.

[0042] With reference to FIG. 3A and 3B, the pants 300 for a surgery patient according to the third embodiment have a cut portion 150 having a reversed “L” shape, a first detachable member 157 which is provided around a second cut portion 152 of the cut portion 150 and which can be attached to and detached from the body of the pants 300, and a second detachable member 158 which is provided around the second cut portion 152 and which can be attached to or detached from the first detachable member 157. The first detachable member 157 and the second detachable member 158 form a set, and are in the form of a hook and a hook eye, respectively, so that the first detachable member 157 and the detachable member 158 can be coupled to or decoupled from each other.

[0043] FIGS. 4A, 4B, 4C and 4D shows the detailed structure of pants for a surgery patient according to the fourth embodiment.

[0044] With reference to these figures, the pants 400 according to the fourth embodiment include a body 40 comprised of a front part 410, a rear part 420, and a crotch part 430. The pants 400 further include waist fixing members 441 and 442.

[0045] The waist fixing members 441 and 442 are a hoop-and-loop tape, respectively. Alternatively, the waist fixing members 441 and 442 may be strings. Further alternatively, the waist fixing members 441 and 442 may be a button and a button-hole, respectively. Still further alternatively, the waist fixing members 441 and 442 may be a hook and a hook eye.

[0046] The pants 400 according to the fourth embodiment have a cut portion 450 having a “T” shape at the crotch part 430 so that the Foley catheter can be placed at the cut portion 450 of the crotch part 420. The “T”-shaped cut portion 450 is composed of a third cut portion 451 extending in a direction from the front part 410 to the rear part 420, and a fourth cut portion 452 extending in the lateral direction of the crotch part 430.

[0047] A third detachable member 453 is provided to the body of the pants 400 near the fourth cut portion 452, precisely, on the left side of the crotch part 430 with respect to the fourth cut portion 452. A fourth detachable member 454 is provided to the body of the pants 400 near the fourth cut portion 452, precisely, on the right side of the crotch part 430 with respect to the fourth cut portion 452. A fifth detachable member 455 is provided to the body of the pants 400 near the fourth cut portion 452 and is coupled to both the third detachable member 453 and the fourth detachable member 454. The third, fourth, and fifth detachable members 453, 454, and 455 form a set, and can be coupled to or decoupled from each other many times because they are made of hoop-and-loop tapes.

[0048] As described above, the pants 400 according to the fourth embodiment has the “T”-shaped cut portion 450, composed of the third cut portion 451 extending in a direction from the front part 410 to the rear part 420, and the fourth cut portion 452 extending in a direction perpendicular to the third cut portion 451. Accordingly, the pants 400 can prevent the patient’s genital organ from being visible and can allow the Foley catheter to be freely and easily fitted regardless of the patient’s sex, that is, the difference in the position of the patient’s genital organ.

[0049] Hereinafter, the use of the pants 400 according to the fourth embodiment will be described. First, the third detachable member 453 and the fourth detachable member 454 are detached from the fifth detachable member 455. A tube of the Foley catheter is connected to the patient’s genital organ and the Foley catheter is placed at the “T”-shaped cut portion 450. Next, the third detachable member 453 and the fourth detachable member 454 are attached to the fifth detachable member 455, and then the body 40 of the pants 400 is fixed to the patient’s body using the waist fixing members 441 and 442.

[0050] Other elements and operations in this embodiment are the same as in the first embodiment, except for the above-mentioned elements and operations.

[0051] FIG. 5A and 5B shows the detailed structure of pants for a surgery patient according to the fifth embodiment, and FIG. 6A and 6B shows the detailed structure of pants for a surgery patient according to the sixth embodiment.

[0052] With reference to FIG. 5A and 5B, the pants 500 according to the fifth embodiment have a third detachable member 456 provided to the left side portion of the crotch part 430 with respect to a fourth cut portion 452, precisely, near the fourth cut portion 452, and have a fourth detachable member 457 provided to the right side portion of the crotch part with respect to the fourth cut portion 452, precisely, near the fourth cut portion 452. The pants 500 further include a fifth detachable member 458 provided near the fourth cut portion 452 and coupled to both the third and fourth detachable members 456 and 457. The third, fourth, and fifth detachable members 456, 457, and 458 form a set, and they are structured in a form of buttons and button holes so that they can be coupled to and decoupled from each other.

[0053] With reference to FIG. 6A and 6B, the pants 600 according to the sixth embodiment have a third detachable member 461 provided to the left side portion of the crotch part 430 with respect to a fourth cut portion 452, precisely, near the fourth cut portion 452, and have a fourth detachable member 462 provided to the right side portion of the crotch part with respect to the fourth cut portion 452, precisely, near the fourth cut portion 452. The pants 600 further include a fifth detachable member 463 provided near the fourth cut portion 452 and coupled to both the third and fourth detachable members 461 and 462. The third, fourth, and fifth detachable members 461, 462, and 463 form a set, and they are structured in the form of hooks and hook eyes so that they can be repeatedly coupled to and decoupled from each other.

[0054] FIGS. 7A and 7B show the detailed structure of pants for a surgery patient according to a seventh embodiment.

[0055] As shown in FIGS. 7A and 7B, the pants 700 according to the seventh embodiment include a body 70 comprised of a front part 710, a rear part 720, and a crotch part 730. The pants 700 further include waist fixing members 741 and 742, which fix the body 70 to the patient’s waist.

[0056] The waist fixing member 741 of the front part 710 and the waist fixing member 742 of the rear part 720 are in a form of hoop and loop tapes. Alternatively, the waist fixing member 741 of the front part 710 and the waist fixing...
member 742 of the rear part 720 may be in a form of strings, buttons and button-holes, or hooks and hook eyes.

[0057] The pants 700 according to the seventh embodiment have a “U”-shaped cut portion 750 at the crotch part 730 in order to allow the Foley catheter to be placed there. The “U”-shaped cut portion 750 is comprised of a fifth cut portion 751 extending in a direction from the front part 710 to the rear part 720 and a sixth cut portion 752 and a seventh cut portion 753 extending in a direction from one side to the center of the crotch part 730.

[0058] A sixth detachable member 754 and a seventh detachable member 755 are provided to the crotch part 730 at a position near the sixth cut portion 752 and the seventh cut portion 753. The sixth detachable member 754 and the seventh detachable member 755 can be attached to and detached from the crotch part 730 of the pants 700. An eighth detachable member 756 and a ninth detachable member 757 are provided near the sixth cut portion 752 and the seventh cut portion 754 so as to be coupled to the sixth detachable member 754 and the seventh detachable member 755, respectively. The sixth, seventh, eighth, and ninth detachable members 754-756, 756, 757 form a set, and are in a form of hoop and loop fasteners so that they can be repeatedly attached to and detached from each other many times.

[0059] As described above, the pants 700 according to the seventh embodiment have the “U”-shaped cut portion 750, comprised of the sixth cut portion 752 and the seventh cut portion 753. Accordingly, it is possible to prevent the patient’s genital organs from being visible and freely placed the Foley catheter at any place regardless of the patients’ sex, i.e. regardless of the difference in the position of the genital organs of the patients.

[0060] Other elements and operations are the same as in the first embodiment, except for the above-mentioned elements and operations.

[0061] The pants can be made of unwoven fabric, paper, or cotton fabrics.

[0062] For female patients, it is preferable that disposable brassieres and the pants according to the invention be used together in order to prevent the patients from being embarrassed.

[0063] According to the above-embodiments, the invention provides pants having various shapes of cut portions at the location where the Foley catheter is to be connected to the patient’s genital organs. By the use of the pants according to the invention, it is convention to connect a tube of the Foley catheter to the patient’s genital organs, and the pants can be easily changed during an operation, and thus it is possible to prevent patients from being embarrassed or feeling shame.

[0064] The above-mentioned embodiment of the present invention has been described for illustrative purposes, and those skilled in the art will appreciate that various modifications, additions and substitutions are possible, without departing from the scope and spirit of the invention as disclosed in the accompanying claims.

What is claimed is:

1. Pants for a surgery patient, comprising:
   a body, including a front part, a rear part, and a crotch part; and
   waist fixing members provided to the front part and the rear part, respectively, the waist fixing members fixing the body to a patient’s body, wherein the crotch part has a cut portion having a reversed “L” shape and including a first cut portion extending in a direction from the front part to the rear part and a second cut portion extending in a direction from a side to a center portion thereof.

2. The pants for a surgery patient according to claim 1, further comprising a first detachable member which can be attached to and detached from the body and is provided near the second cut portion of the cut portion having a reversed “L” shape, and a second detachable member which can be coupled to the first detachable member and is provided near the second cut portion.

3. The pants for a surgery patient according to claim 1, wherein the first and second detachable members are a hoop and a loop tape, respectively.

4. The pants for a surgery patient according to claim 1, wherein the first and second detachable members are a button and a button-hole, respectively.

5. The pants for a surgery patient according to claim 1, wherein the first and second detachable members are a hook and a hook eye, respectively.

6. Pants for a surgery patient, comprising:
   a body, including a front part, a rear part, and a crotch part; and
   a waist fixing member for fixing the body to a patient’s waist, wherein the crotch part has a cut portion having a “U” shape and including a fifth cut portion extending in a direction from the front part to the rear part and a sixth
cut portion and a seventh cut portion extending from a side to a center portion thereof.

12. The pants for a surgery patient according to claim 11, further comprising a sixth detachable member and a seventh detachable member which can be attached to and detached from the crotch part near the sixth cut portion and the seventh cut portion, respectively, and an eighth detachable member and a ninth detachable member coupled to the sixth detachable member and the seventh detachable member, respectively.

13. The pants for a surgery patient according to claim 11, wherein the seventh detachable member, the eighth detachable member, and the ninth detachable member are in a form of a combination of hook and loop tapes.

14. The pants for a surgery patient according to claim 11, wherein the seventh detachable member, the eighth detachable member, and the ninth detachable member are in a form of a combination of buttons and button-holes.

15. The pants for a surgery patient according to claim 11, wherein the seventh detachable member, the eighth detachable member, and the ninth detachable member are in a form of a combination of hooks and hook eyes.