ABDOMINAL SCULLETS
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9 Claims

ABSTRACT OF THE DISCLOSURE

A postoperative abdominal scultetus for patients who have experienced abdominal surgery. The device includes a back panel of elastic fabric; a seat panel of fabric affixed at its upper edge to the lower edge of the back panel; a first front panel of substantially inextensible fabric affixed at its outer side edge to a second side edge of said back panel; a crotch panel of fabric affixed at its lower edge to the lower edge of the seat panel, the crotch panel and the seat panel being cooperatively shaped to provide a pair of leg openings; hook and pile type fastening means for detachably and adjustably securing the first and second front panels in overlapping relationship so as to define a tubular upper portion for the scultetus to adjustably encircle and embrace the torso of the patient; and hook and pile type fastening means for detachably and adjustably securing the top portion of the crotch panel to the front of the tubular upper portion.

This invention relates to a postoperative abdominal scultetus for patients who have experienced abdominal surgery.

Following an abdominal operation, it is conventional practice to apply a dressing to the abdominal incision and to wrap a binder about the torso of the patient to secure the dressing in place. A number of disadvantages, however, attend this approach. For example, the wrapping of the binder itself is a rather cumbersome procedure and does not enable sufficiently selective adjustment of pressure upon the dressing and abdominal region of the patient compatibly with the shape and sensitivities of the patient. Moreover, access to the operative area normally requires that the binder be substantially unwound which, of course, is difficult if there is more than one wrap and the patient is in bed. There is also frequently a tendency for the binder to ride up on the patient out of its intended position. It is a primary object of the present invention to overcome these and other difficulties encountered in conventional practice.

Briefly described, the postoperative abdominal scultetus of the present invention includes a tubular upper portion comprising a back panel of elastic webbing, a first front panel of substantially inextensible woven material affixed at its outer edge to one side edge of the back panel, a second front panel of substantially inextensible woven material, and a plurality of hook and pile type fastening strips for detachably and adjustably securing the first and second front panels in overlapping relationship so as to encircle and embrace the torso of the patient. The abdominal scultetus further includes a lower portion which comprises a seat panel of absorbent bi-knit fabric affixed at its upper edge to the lower edge of the back panel, a crotch panel also of absorbent bi-knit fabric affixed at its lower edge to the lower edge of said seat panel and cooperative with the seat panel to provide a pair of leg openings, and hook and pile type fastening strips for detachably and adjustably securing the top portion of the crotch panel to the front of the upper tubular portion so as to cover the crotch at buttock regions of the patient and prevent the upper tubular portion from riding up on the patient out of its intended position.

It is an object of the configuration and structure of the present invention to provide several salient features and advantages. The woven inextensible front panels coact with the adjustable strips and the elastic back panel to supplement tape to hold the surgical dressing in place and to provide firm support for the abdomen in the region of the wearer. The plurality of adjustable strips enables stepless selection of the pressure to be applied at particular areas of the abdomen to secure the dressing in place and to allow for the shape and sensitivities of the patient. Adjustment can readily be made if appropriate to accommodate swelling and shrinking of the abdomen caused by gaseous conditions common to patients who have experienced abdominal surgery. The elastic back panel exerts continuous tension on the front panels yet provides flexibility needed for normal body movements. The configuration of the abdominal scultetus thus provides the necessary versatile support and control of the abdomen required during the critical postoperative period to prevent the discomfort of outward pressure on the sensitive area and further prevent the possibility of this outward pressure from bursting the sutures and concomitantly relieve the common psychological anxieties of the patient concerning these problems. Yet, the configuration of the scultetus and the detachable adjustable strips provide the necessary access to the operative area without discomfort to the patient.

It is also important to note that the lower bi-knit cotton crotch and seat panels forming the lower portion of the scultetus provide comfort features of softness and absorbency and coact with the associated fastening strips affixed to the top of the crotch portion to adjustably position and prevent the tubular upper portion from riding up out of position on the patient. Moreover, the bi-knit lower portion and the construction of the garment provide suspensory support for male patients and further provide coverage for both male and female patients with the unique fastening system conveniently permitting the performance of body functions during the postoperative period.

These and other features and objects of the present invention will be better understood by reference to the following detailed description in conjunction with the appended drawings.

In the drawings:

FIGURE 1 is a perspective view of the abdominal scultetus of the present invention.

FIGURE 2 is a front elevational view of the abdominal scultetus of the present invention in fully opened condition.

FIGURE 3 is a front elevational view similar to FIGURE 2 but with one of the front panels folded over.

FIGURE 4 is a front elevational view similar to FIGURE 2 but with both of the front panels folded over and secured together.

FIGURE 5 is a front elevational view of the abdominal scultetus of the present invention with all fastening strips secured.

FIGURE 6 is a rear elevational view of the abdominal scultetus of the present invention.

Referring generally to all of the FIGURES 1 through 6, it should be noted that like reference numbers denote like parts in each of the views.

In the description and claims, the terms "upper," "lower," "transversed," and "longitudinal" will be found. Since various panels of the garment occupy different orientations depending upon whether the scultetus is opened or closed, these terms find their point of reference in the
orientation of the various panels when the scultetus is completely closed and lying flat as in FIGURE 5. Thus, "transverse" refers to the directions transversely of the scultetus as from left to right in FIGURE 5, and "longitudinal" refers to the directions along the length of the scultetus, as from top to bottom in FIGURE 5. The terms "upper" and "lower" are similarly related to the orientation of the scultetus as shown in FIGURE 5.

Considering now the details of structure, the scultetus may be characterized as having an upper portion 11 and a lower portion 12, the respective portions being indicated generally by the brackets in FIGURE 5.

The upper portion 11 comprises a generally rectangular back panel 13 intermediate a pair of front panels 14 and 15 as best illustrated in FIGURE 2. The back panel 13 is a wide band of one-way stretch elastic webbing, that is, the back panel 13 has an elastic stretch characteristic transversely of the scultetus and a non-stretch characteristic longitudinally of the scultetus. It is preferably approximately eight inches in extent from its upper edge to its lower edge.

The front panel 14 is affixed at its side edge to the adjacent side edge of the back panel 13 along a seam 16. The front panel 15 is affixed at its side edge to the adjacent side edge of the back panel 13 along a seam 17. Both front panels 14 and 15 comprise substantially inextensible woven fabric and are configured along their lower portion to cooperate with the lower portion 12 of the scultetus to define a pair of leg openings.

On the exterior surface of the front panel 14, there are affixed four transversely-oriented pile fastening strips 18a through 18d adapted to receive, respectively, four complementary transversely-oriented hook fastening strips 19a through 19d which are compatibly positioned and affixed to the front panel 15 so as to, in part, freely depend from the front edge of the front panel for engagement with the pile strips 18a through 18d. The hook and pile fastening strips 18a through 18d and 19a through 19d are of the type in which the hook strip and the pile strip forming a complementary pair will adhere to one another when pressed together. This type of fastening means is commercially available as Velcro.

The lower portion 12 of the scultetus includes a seat panel 21 and a crotch panel 22, both of which preferably comprise bi-knit cotton fabric arranged with its stretch characteristic transversely of the scultetus. Bi-knit fabric consists of two layers of jersey knit fabric knit simultaneously in tubular form with one tube inside the other and joined together at predetermined intervals by tack stitches obtained by employing both dial and cylinder needles in conjunction. The tack stitches are illustrated somewhat diagrammatically and identified by reference numeral 23.

The seat panel 21 is affixed at its upper edge to the lower edge of the back panel 13 and portions of the lower edges of the front panels 14 and 15 along a seam 24. The crotch panel 22 is affixed to the lower edge of the seat panel 21 along a seam 25. The crotch panel contains a top portion 26 generally defined by an apex 27 and base angle points 28 and 29 and adapted to overlap the front of the upper portion 11 when the scultetus is fully closed as illustrated in FIGURES 1 and 5.

An aspect hook type fastening strip 31 is affixed to and freely depends from the apex 27 of the triangular top portion 27 of the crotch panel for engagement with a pair of complementary pile type fastening strips 32 and 33 which back upon and are affixed to the front panel fastening strips 18a through 18d and 19a through 19d. In addition, a pair of base angle hook type fastening strips 34 and 35 are affixed to the interior of the crotch panel 22 adjacent the base angle points 28 and 29 for engaging complementary pile type fastening strips 36 and 37 which are compatibly positioned and affixed on the front panels 14 and 15, respectively.

To apply the abdominal scultetus to a patient, the back panel 13 is positioned against the back of the patient, and the front panel is brought around and placed on the abdomen of patient to position similar to that in FIGURE 3. The front panel 15 is then brought around to overlap the front panel 14, and the hook type fastening strips 19a through 19d engage with the pairs of complementary pile type fastening strips 18a through 18d so as to engage the front panel 15 of the scultetus into the requisite tubular configuration (best shown in FIGURE 1) enabling the torso of the wearer.

Several hook and pile type fastening strips enable a versatile stepless adjustment of the pressure applied in accordance with the shape and sensitivities of the patient and are readily detachable to provide access to the operative area. The elastic back panel exerts continuing tension upon the front panels to provide firm abdominal support and hold the dressing in place yet permits normal body movements.

To complete closure of the abdominal scultetus, the top portion 26 of the crotch panel is brought into overlapping relationship with the front of the tubular upper portion 11 and adjustably and detachably secured thereto by engagement of the hook type fastening strips 31, 32, and 35 compatibly with the pile type fastening strips 32, 33, 36, and 37. The side edges of the seat panel 21 and the crotch panel 22 form respectively continuous curvilinear side edges 38 and 39 in the lower body portion which provide a pair of leg openings when the scultetus is fully closed as illustrated in FIGURES 1 and 5. The side edges of the seat panel 21 are preferably elasticized to assist in maintaining the peripheries of the leg openings against the legs of the patient. The lower portion 12 of the scultetus provides adjustable means for adjustably positioning and preventing the upper tubular portion of the scultetus from riding up out of position on the patient. The lower portion further provides suspensory support for male patients and coverage for both male and female patients with a convenient detachability arrangement for performance of body functions during the postoperative period.

While a preferred embodiment of the present invention has been illustrated and described, it is to be understood that this is by way of example only and not by way of limitation. It is contemplated that modifications may be made within the scope of the claims without departing from the spirit of the invention.

1. A postoperative abdominal scultetus comprising:
   a back panel having a transverse elastic stretch characteristic;
   a front panel of substantially inextensible woven material affixed to its side edge to one side edge of said back panel;
   a second front panel of substantially inextensible woven material affixed at its side edge to the other side edge of said back panel;
   means for detachably and adjustably securing said first and second front panels in overlapping relationship so as to define a tubular upper portion for said scultetus to adjustably encircle and embrace the torso of the patient with said elastic back panel applying tension on said front panels so as to provide firm support for the abdominal region of the patient and to secure in place an abdominal dressing;
   a seat panel of knit material affixed at its upper edge to the lower edge of said back panel;
   a crotch panel affixed at its lower edge to the lower edge of said seat panel, said crotch panel and said seat panel being shaped to provide a pair of leg openings; and
   means for detachably and adjustably securing the top portion of said crotch panel to the front of said tubular upper portion of said scultetus whereby said crotch panel and said seat panel cover the crotch and buttock regions of the patient and adjustably position and prevent said tubular upper portion of said scultetus from riding up out of its intended position on the patient.
2. The postoperative abdominal scultetus defined in claim 1 wherein said crotch panel and said seat panel each comprises a double layer of jersey knit fabric tack-stitched together at predetermined intervals and with a stretch characteristic in the transverse direction.

3. The postoperative abdominal scultetus defined in claim 1 wherein said means for detachably and adjustably securing said first and second panels to one another comprises a plurality of transversely-oriented, individually adjustable pairs of complementary hook and pile strips which adhere to one another when pressed together, one strip of each pair being affixed to the first front panel and the other complementary strip of each pair being affixed to the second front panel.

4. The postoperative abdominal scultetus defined in claim 1 wherein said means for detachably and adjustably securing the top portion of said crotch panel to the front of said tubular upper portion of said scultetus comprises a plurality of complementary hook and pile strips which adhere to one another when pressed together, strips affixed to the front of said tubular upper garment being with complementary strips affixed to the upper portion of said crotch panel.

5. The postoperative abdominal scultetus defined in claim 4 wherein said top portion of said crotch panel has a substantially triangular configuration and wherein said strips affixed thereto include an apex strip affixed to and longitudinally depending from the apex of said triangular configuration and a base angle strip affixed to said triangular configuration in proximity of each of the base angles of said triangular configuration, said complementary strips affixed to said tubular upper portion being compatibly positioned to adjustably receive said apex strip and said base angle strips.

6. A postoperative abdominal scultetus comprising:
   a back panel of elastic fabric;
   a seat panel of fabric affixed at its upper edge to the lower edge of said back panel;
   a first front panel of substantially inextensible fabric affixed at its side edge to one side edge of said back panel;
   a second front panel of substantially inextensible fabric affixed at its side edge to a second side edge of said back panel;
   a crotch panel of fabric affixed at its lower edge to the lower edge of said seat panel, said crotch panel and said seat panel being cooperatively shaped to provide a pair of leg openings;
   means for detachably and adjustably securing said first and second front panels in overlapping relationship so as to define a tubular upper portion for said scultetus to adjustably encircle and embrace the torso of the patient; and
   means for detachably securing the top portion of said crotch panel to the front of said tubular upper portion of said scultetus.

7. A postoperative abdominal scultetus comprising:
   a generally rectangular upper portion including an intermediate panel having a one-way elastic characteristic oriented transversely of said scultetus and means for detachably and adjustably securing one end of said generally rectangular upper portion to the opposite end such that said generally rectangular upper portion adjustably encircles and embraces the torso of the patient and
   a lower portion for covering the crotch and buttock regions of the patient affixed at one end to said generally rectangular upper portion and including means for detachably and adjustably securing the opposite end of lower portion to said generally rectangular upper portion, said lower body portion being shaped to provide a pair of leg openings.
UNIVERSAL STATES PATENT OFFICE
CERTIFICATE OF CORRECTION


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It is certified that error appears in the above-identified patent and that said Letters Patent are hereby corrected as shown below:

Column 3, lines 41 and 42, "commercially" should read --commercially-. Column 4, line 25, "respectfully" should read --respectively-. Column 4, after line 44, add --In the claims:--. Column 5, claim 7, should read:

--A postoperative abdominal scultetus comprising:
- a tubular upper portion including a back panel, a pair of front panels each affixed to an adjacent side edge of said back panel, a plurality of transversely-oriented, individually adjustable pairs of complementary hook and pile type strips which adhere to one another when pressed together, one strip of each pair being affixed to one front panel and the other complementary strip of each pair being affixed to the other front panel;
- a lower body portion for covering the crotch and buttoc regions of the patient and for preventing said tubular upper portion from riding up on the patient, said lower body portion being shaped to provide a pair of leg openings and affixed at its back end to the lower back edge of said tubular upper portion and including at least one strip of the hook and pile type affixed to the front end of said lower body portion; and
- at least one strip affixed to the front of said tubular upper portion of the hook and pile type and complementary with said strip affixed to the front end of said lower body portion for receiving said strip such that said front end is detachably and adjustably securable to the front of said tubular upper portion.--

Column 6, line 44, claim 8, "back" should read --backed--.

SIGNED AND SEALED
AUG 11 1970

(SEAL)
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