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## CATHETERIZATION PACKAGE

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1 Claim. (Cl. 206—63.2)

This invention relates to a ready to-use-package containing components for a catheterization procedure. The package is adapted to be opened at the patient's bedside to make available such components in their preferred order of use. The components are maintained sterile until the package is opened and include items which assure that a sterile field may be maintained as the components are removed from the package and used. In one embodiment, all the essential equipment, including preparation items, catheter, and drainage bottle, for a complete the catheterization procedure are included in the package. In using this package, the nurse or physician is assured that it will not be necessary to interrupt the procedure to search for missing items necessary to complete the job or to question the sterility of the items being used. Everything is available in the proper order of use and in a sterile condition.

It is an object of this invention to provide a compact package containing sterile components for catheterization, packaged in their order of use, and arranged to assure that a sterile field may be maintained as the components are removed from the package and used.

Another object is to provide a catheterization package which reduces the incidence of infection, reduces labor costs, and which provides the convenience of having all the components arranged in logical step-by-step order to facilitate the nurse's or physician's task.

A further object is to provide certain improvements in the form, construction, arrangement and material of the several elements whereby the above named and other objects may effectively be attained.

A practical embodiment of the invention is shown in the accompanying drawings wherein:

FIG. 1 is a perspective view of a package, constructed according to this invention, showing the outer envelope on the package partially separated preparatory to removing the inner box therefrom.

FIG. 2 is a perspective view showing the box and the envelope from which it was removed.

FIG. 2a is a plane view, on a reduced scale, of the box and wrap before the latter is folded around the former.

FIG. 3 is a perspective view showing the box resting on the wrap which was previously folded around the box.

FIG. 4 is a partial section, on a larger scale, looking along the line IV—IV of FIG. 3.

FIG. 5 is an exploded view of the box of FIG. 3 showing the relationship of various components included herewith.

FIG. 6 is a perspective view showing the tray after it has been lifted off of the box.

FIG. 7 is a perspective view of the bottom of the tray.

Referring to the drawings, a box 10 having an open top with a tray 12 mounted thereon is enclosed within a wrap 14, the entire assembly being encased within an envelope 16. The envelope 16 seals the contents to maintain the sterility of the contents, the latter, of course, having been sterilized before or after enclosure in the envelope. The envelope 16, preferably made of a transparent and flexible plastic film, has a heat seal 17 which is adapted to be separated as shown in FIG. 1 to facilitate removal of the contents while maintaining the integrity of the remainder of the envelope so that it may be cuffed as shown in FIG. 2 to serve as a waste receptacle.

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The wrap 14, which may be a piece of sterile absorbent paper, is folded around the box 10 in such a way that a slight tug on the corner 18 will release the folds so that the wrap may thereafter be readily spread out on the flat surface on which the box rests. To provide for this release, the wrap 14 is folded around the box 10 by initially resting the box on the flat wrap 14 with the respective corners offset as shown in FIG. 2a. The corner 18b is then pulled over the top of the box followed by the corners 18a and 18c which overlap the corner 18b and each other. Thereafter, the corner 18 is pulled over the overlapping corners 18a, 18c on top of the box and tucked thereunder. Simultaneously the corner 18 is folded as at 18d in a manner so that the extreme end of corner 18 protrudes to form a pull tab as shown in FIG. 2. While the portion thereof under the overlapping corners 18a, 18c holds the wrap in place around the box. The wrap, when removed from around the box as described above and flattened out thereunder, serves as a sterile field and work area for the remaining operations to be described.

Upon removal of the wrap 14, there is exposed a water-proof underpad 20 which is folded flat and rests on top of the tray 12. The underpad 20, which may be made of paper with a plastic water-proof coating on one side, is adapted to be placed under the patient. Prepowdered plastic gloves 22 are arranged in a flat condition beneath the underpad 20 and are exposed when the latter is removed. The gloves 22 are put on by the nurse or physician and used thereafter. A fenestrated drape 24 folded flat underneath the gloves, is removed, unfolded, and placed in position on the patient, all the above being accomplished while maintaining a sterile field.

The tray 12 is then lifted from the box 10 and placed within easy reach. Handle tabs 26 may be provided to facilitate lifting of the tray. As best shown in FIG. 4, the tray has an inverted groove 27 adjacent its peripheral edge in which is accommodate the upper edge of the box 10.

The tray 12 has compartments or depressions therein to suitably accommodate components for catheterization. The depression 28 accommodating a bottle 30 of cleansing solution has in its lower depths a section 28a to receive the neck and cap of the bottle and a section 28b to receive the main portion of the bottle, the latter section being deeper than the former. These two sections 28a and 28b are approximately the same width as the respective diameters of the neck and main portion of the bottle to hold the latter in place in the tray. In order to provide ready access to the bottle 30, the upper reaches of the depression 28 are made wider than the diameter of the bottle, said wider section being indicated at 28c in FIG. 7. As a further aid to facilitate access to the bottle 30, finger depressions 28d may be provided along the side of section 28b so that the bottle may be easily grasped for removal from the tray.

The tray also has a depression 32 for balls 34 of cleansing material, e.g. rayon, which are used to prepare the patient for catheterization. Conventionally, the balls of cleansing material are unsaturated with a cleansing solution before they are used. This is readily accomplished in the present invention, by removing the bottle 30 of cleansing solution from the compartment 28, as previously described, and pouring it over the rayon balls 34 in their stored position in the depression 32. The balls are handled by forceps 36, conveniently stored above the balls and held in place by the indentations 34a at both ends of the depression 34. The forceps 36 are removed from their stored position before the cleansing fluid is applied to the balls. Used balls may be conveniently discarded in the depression 28 which originally contained the bottle of cleaning fluid.