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SEAL-CAP CATHETER CONNECTOR

DESCRIPTION

1. The process of bladder catheterization entails introducing the Nelaton catheter into the urethra and advancing the tip of the catheter into the bladder. The urine drains through the eyes of the catheter, which are located just proximal to the tip of the catheter. After drainage is complete, the catheter is pulled out and immediately discarded, as it cannot be reused. If for some reason the doctor wishes to inject a dye into the bladder for urography, he will have to reintroduce a Foley's self-retaining catheter, inject the diagnostic dye into the bladder and then prevent backflow by using a spigot to close the open end of the catheter.

2. The thumb-control Suction Catheter is conventionally designed with two openings. One opening is connected to the negative-pressure suction pump to create the negative pressure necessary for sucking any fluid from the upper respiratory passage. The negative-pressure being constant, variation of the catheter intraluminal pressure is achieved by sealing the other opening with the thumb. The purpose of incorporating a stopper to the suction catheter is to free the user's hand from the work of controlling this opening so that negative pressure may be maintained continuously for suction.

Brief Description of Drawings

Figure 2

3. Connector of Nelaton Catheter:

The smaller opening (a) is for the catheter tubing, which will be permanently fixed to the lumen. The wider opening (b) will be left open. The stopper (c) is attached to the margin of (b) by a fine strap that is thinned at the point of attachment (d) of the strap. The thin section allows for easy detachment of the strap when the user wishes to work without the stopper. The stopper is intended for plugging the wider opening if the user does not want the bladder contents to leak out of the outlet.

Figure 4

4. Connector of Suction Catheter:

The smaller opening (a) is intended to fit into the lumen of the connector end of the tube that is used on the suction machine. The opposite end of the connector (b) has two openings. The smaller of these two openings (x) is meant for the permanent attachment of the suction catheter. The larger one (y) is meant for placement of the thumb whenever the user wishes to regulate the suction pressure of the catheter. The purpose of the stopper (c) is to plug the opening (y) whenever the user wants the maximum suction pressure for aspirating mucus or other fluid within the upper respiratory tract or wound cavity. The stopper is attached to the margin of the larger opening (y). The point of attachment is thinned down so that in the event that the user does not want the use of the stopper, the strap can be easily detached from the connector with the slightest tug.

CLAIMS

Field of Invention:

(a) Disposable Nelaton Catheters (including those intended for female catheterization) and Thumb-control Suction Catheters are used for draining the bladder and aspirating the upper respiratory tract respectively. Although a Nelaton catheter is designed for the specified purpose of bladder drainage, it is not used specifically for this purpose alone but is very often employed for aspirating mucous secretions from the nasal passage and back of the pharynx. The connectors of both catheters are open and their outlet openings are blocked partially or fully by the thumb to control drainage or suction.

What is claimed for?

Claim 1:

i. The Claim is on the application of the Seal-cap device of polyvinyl chloride material to the **Nelaton Catheters** in relation to the use of Nelaton Catheters specifically for the purposes of trans-urethral drainage of the urinary bladder.

ii. The attachment of the seal-cap device on the Nelaton Catheter is detachable by a fine strap that is thinned at a point of attachment to the Nelaton Catheter (See: (d) of Figure 1).

iii. The attachment of the seal-cap device is fixated with a stopper that is intended for closing the wider opening of the Nelaton Catheter so as to prevent the leaking of the bladder contents during the trans-urethral drainage (See: (c) of Figure 1).

Claim 2:

i. The Claim is on the application of the Seal-plug device of polyvinyl chloride material to the **Suction Catheter Connector Finger Control** in relation to the use of the Suction Catheter Connector Finger Control specifically for the purposes of trans-nasal and trans-oral aspiration of fluid (mucus, blood and vomitus) that accumulates in the nasopharygeal space.

ii. The attachment of the seal-plug device on the Suction Catheter Connector Finger Control is detachable by a fine strap that is thinned at a point of attachment to the Suction Catheter Connector Finger Control (See: (d) of Figure 3).

iii. The attachment of the seal-plug device is fixated with a stopper that is intended for closing the wider opening of the vent so as to maximise suction (See: (c) of Figure 3).

(b) The purpose of the device is to provide an attached stopper to the connector ends, which can be used to fit tightly over the catheter openings so that drainage or suction can be triggered or stopped instantly.