Drains, Drainage and Suctions in a Surgical Ward

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SURGERY and Surgical Ward are very closely related with drains, drainage and suctions. In other words, surgical treatment is depending on these apparatuses. It is very interesting to know about all. Ward Sisters, Staff Nurses and students should know how to use and handle these.

I. DRAIN

It is a way out for the fluid, blood, serum and pus from the body cavity or wound. The drain is prepared from certain material.

Purposes of the Drain

1. To drain out collected fluid from the wound. 2. To minimize infection of the wound. 3. To promote healing of the wound. 4. To prevent a haemotoma in the operated area. 5. To reduce inflammation of the wound.

Tpye of the Drains

1. Corrugated rubber drain. 2. Rubber tubings—This is a plain rubber tube in various sizes or rubber plain catheters. 3. Cigarette drain—A piece of gauze is rolled in rubber of gloves like a cigarette. 4. Polythine tube—Mostly used to push drugs into the wound., 5. Foley's catheters.

Important Points of Nursing Care

1. One end of drain is always in the wound, other end (outer) is fastened with safety pin. So it will not go into the wound. It is kept in the place as per doctor's instructions for atleast 72 hours.

2. When there is less drainage or no drainage, it is shortened daily an inch and removed.

3. Healing process takes place from inward to outwards.

4. Daily recording of output for quantity, colour and smell.

5. Use sterile technique of dressings.

6. Drain should not come out mistakenly.

7. Remove it when there is a word from doctor or let doctor do it.

8. Make note on the chart that drain is out.

II. DRAINAGE TUBING

(*a*) Rubber tubing or plastic tube is attached with electrical pump. It works on the low vacuum pressure; for example, operation on the Hemimandiblectomy with nect dissection, inguinal block dissection, operation on the chest and abdomen.

(b) Water Seal Drainage : Tube from the chest is attached to the airtight cork. The cork has got two glass rods. One is long enough and dipped in the sterile water of the bottle. One is short and above the water level. Drainage tube is attached to the long glass rod. Change the bottle when it is full. While changing bottle, keep sterile bottle at hand. Clamp the tubing carefully so that air will not enter into the lungs. Follow the sterile procedure. Milk the tubing and check for potency. Measure whole output and deduct the value of previous water from it. We will get exact output of drainage.

(c) Urinary Drainage : For operation on kidneys, ureters, urinary bladder, urethera and Neuroganic bladder drainage tubings, are used regularly. There are different types of plastic drainage bags available in the market. We can prepare bottles with rubber tubing also.

1. Chang the bottle when it is full. 2. Keep exact record of output of urine in 24 hours. 3. Use sterile technique while changing the bottle. Clamp the tubing. 4. Avoid contamination of the floor with urine. 5. Avoid back pressure and ascending infection.

(d) External Catheter Drainage : This is used for male patient only. This drainage is useful for paraplegic and unconscious patient. Care should be taken that condom is not tight to the penis. Longer use may cause paraphymosis. Drainage tubing should be fixed with adhesive to the thigh. So there won't be pull to the penis.

(e) Tidal Drainage : This is an old-fashion drainage system. It is useful in Neurogenic bladder but now it is not seen in practice. So it is not necessary to describe.

III. SUCTIONS

Gastric contained, blood, fluid, and saliva is sucked by negative pressure or siphon method. There are three types of suctions : (1) Siphon method, (2) Electrical Motor Suction, (3) Hand pump or foot pump suction (Manpower).

1. Siphon Method Suction : There are three bottles or two bottles. This is called Wangesteen Suction. It is always used in abdomen surgery. But now this is also gradually going out of use. Frequent aspiration by the syringe or self-siphon in the polythine bag is more suitable. Thermotic electric suction is also useful in abdomen surgery.

2. Electrical Motor Suction : This suction is used for immediate purpose, such as vomiting, post-operative saliva secretion and trachiostomy care. There are different types of makes. Important to know that sterile catheters should be used always. Bottle should not be full more than level. Fluid may enter into the motor and will damage it.

3. Hand Pump or Foot Pump Suction : If electricity is not available or has failed, above suction can be used. It is very useful when patient is to be transferred by ambulance to the city hospital. Cleanliness, sterile catheters and regular oiling are very essential. Pumping is done by the foot or hand, vacuum is created and suction takes place. Nurse must know how to handle things carefully. Practical knowledge needs to acquire skill. With this care patient can get rid of infection, distention and suffocation. All this is for the comfort of the patient and fast recovery.

References

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