Nursing Aspects in Reconstructive Surgery

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Plastic surgery is a specialized branch of surgery which deals with the treatment of deformities of the face and other parts of the body. It is the science of moulding different tissues in the human body which are either defective since birth or have become deformed or mutilated through injury or diseases by transplanting healthy tissue in the affected sites.

It is mainly concerned with form as is implied in the term ‘Plastic’ but it also helps to restore function to a part. For example—removal of a scar on a burnt hand improves not only the appearance but also the function. Despite the popular belief that this branch of surgery deals only with skin grafts and helps to alter the shape of noses, plastic surgery however, embraces a number of regions in the body.

Of all the branches of surgery, plastic surgery demands the minutest attention to detail as well as patience on the part of both surgeon and the patient.

Apart from the general preparation of an individual for any other operation, the individual has to be prepared specially in undergoing any form of plastic surgery.

The specific pre-operative preparation:

Cleft lip and plate

Cleft lips and palates should be repaired before the child goes to school. Cleft lips are repaired at three months and palates at 18 months. Nose are of two types unilateral and bilateral. In case of bilateral cleft lip and palate one side is repaired at a time to minimize the tension on the suture line which may predispose to a breakdown of a repaired lip or palate in the post operative period.

Usually the individuals having the defect, mostly children are admitted one week prior to the operation. This is to improve them of their general condition, to rule out and treat any upper respiratory infection to train and to get them used to special type of sterile spoon feeding and restraining of the hands which may help the child to co-operate post operatively. Remove the restraint every four hour and exercise the hands and then reapply.

Skin grafting

Skin grafts are most often used in ‘Burns’ to minimize scar formation. Skin grafting is also used to cover up the defects left by large abscess and chronic wounds.

A healthy region of the body which yields tissue, to repair a defect in another part of the same individual, is the donor, area, the areas commonly chosen are the post auricular region, neck and the groin.

The recipient area is simply the region to which tissue in the form of free graft or flap is transferred.

The preoperative preparation starts three days prior to the operation. The selected donor’s site is cleaned by scrubbing and, washing for three consecutive days preferably with Cynthyol soap. The recipient area is kept clean and without any infection by sterile dressings.

The donor’s site is shaved on the morning of the day of the operation to prevent infection, because any cuts made are considered clean for the first six hours. Then the site is cleaned with soap and water, spirit and ether and spirit again. Finally the prepared site is wrapped with sterile towels and bandaged. The dressing to the recipient area is done before sending the patient to the theatre.

Tube raising or Flap raising

Tubes and flaps are raised in order to correct a larger defect or to replace the larger defect caused by worn out tissue and to a certain extent to give shape to the defect ed area. For example in cases of cancer cheek after hemimandibulec tomy and radial neck resection the common site chosen to raise a
flap is the anterior abdomen. Skin preparation is the same as that mentioned in skin grafting.

Filarial leg

In cases of filarial leg the skin preparation starts from the day of admission to the day of operation. The affected leg is thoroughly washed with synthol soap preferably and scrubbed with a brush. On the morning of the day of operation the leg is shaved and washed with soap and water, cleaned with spirit, ether and spirit again.

Synthol soap is used most commonly and preferred in all skin preparations, in reconstructive surgery, though it is costly and some of our patients have difficulty in purchasing it; because it is said to contain a substance known as GII which has an antiseptic action.

Now let us discuss the specific post operative care in each of the above mentioned conditions apart from the general post operative care.

Postoperative care of—

Repair the cleft lip:

In case of children who had undergone repair of cleft lip, hands are kept restrained. The restraint is removed every four hourly and exercised and reapplied to prevent damage to the suture line. Sterile feeding is given with special type of sterile spoon to prevent infection. The feeding articles such as the spoon, a tumbler, a medicine glass, and a bowl with a lid are kept sterile by boiling them after each feed.

The baby is fed 6 hours after operation. First two feedings are with sterile water and then the baby can have sterile milk formula. After each milk feed wash off the milk particles sticking in the mouth of the baby with sterile water. This will help to keep the suture line clean. Bubble baby after feeding.

Suture line care

Suture line care for these patients starts six hours after operation and is given every four hourly, after each feeding. The importance of it is to keep the wound clean and dry and to aid in quick healing.

The solutions used in cleaning are hydrogen peroxide and saline one in four dilution. Hydrogen peroxide is an oxidising agent and thus helps in loosening and easy removal of the crust.

The suture line is cleaned first with hydrogen peroxide and then with saline by using sterile swab sticks and is dried with sterile dry swab sticks. The movements are always towards the sutures and not away. This is to help in good union of the suture line. After cleaning, fixing of cream which is an antibiotic, is applied and a band aid is fixed. Fixing of band aid absorbs the oozing from the suture line and thus keeps it clean.

The sutures are removed on the fourth or fifth day after operation and they are discharged on the eighth day. On discharge advice the mothers to keep the wound clean.

Cleft palate

As in case of cleft lip here also the hands are restrained in children. The restants are removed four hourly for exercise and reapplied to prevent damage to the suture line. Sterile feeding is also continued to prevent infection. For the first forty eight hours the feeding is only with sterile water. Then for the first week after two days only clear fluids are given but can add milk also. For the first two weeks the person will be on fluid diet. Soft solids are started during the third week and from the fourth week onwards the person can have normal diet. After each feeding rinse the mouth with sterile water.

This type of feeding helps in keeping the sutures clean and prevents infections as the food particles have less chance to get accumulated at the suture line. In this case the sutures are not removed as they are catgut sutures which get dissolved.

These patients are discharged after eight days. Advice them regarding their diet and to keep the suture line clean.

In both, cleft lip and palate the temperature, pulse and respiration are checked half hourly until it touches normal and then hourly for first twenty four hours and any sudden rise in temperature should be reported; because the rise in temperature indicates infection and this should be taken care of.

Skin grafting

In case of skin grafts, the donor’s site is kept exposed after forty eight hours and sometimes after fourteen days. The wound is cleaned with saline and a vaseline gauze is applied. A bed cradle is applied over the area to prevent the contact of linen over it, which may be more irritating. When the donors site heals the dressing falls off by itself.

The dressing from the recipient area is opened for the first time eight days after operation and sometimes earlier when infection is suspected, which is detected by the bad odour and rise in temperature. Before removing the dressing soak the grafted area with saline for one hour and then remove. This is to prevent damaging the graft taking place and to minimise the pain. Dressings are done on every alternate day. While dressing a strict aseptic technique should be carried out like in any other surgical dressings and in these cases especially observe for any sloughing which indicates infection and poor graft taking place. This should be informed immediately and necessary steps should be taken. Advice these people to keep the areas clean always by minimising the meddling of the wound with hands.

Tube raising

In case of tube raising be careful and follow the aseptic technique in dressing, to prevent infection.

Ice Compress

Ice compresses are applied in cases where the tubes are raised over the lip to cover a smaller defect. This ice compress minimises the circulation to the raised tube which will lessen the oedema produced and keeps the person comfortable by lessening the pain.

Filarial leg

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