

Medical Matters.

SKIN GRAFTING.



Dr. Stuart McGuire, Professor of Principles of Surgery and Clinical Surgery, University College of Medicine, Richmond, Virginia, writing in an American medical journal, says:—Skin grafting, when practised on newly-made wounds, is called primary grafting. When practised on granulating surfaces it is called secondary grafting. If the surface be a fresh one care must be taken to perfectly arrest hæmorrhage before applying the grafts; otherwise bleeding will detach them. If the surface be an old one care must be taken to stop supuration before applying the grafts; otherwise pus germs will devitalize them. Skin grafts may be obtained from the patient and then are called autografts, they may be cut from another person and then are called heterografts; or they may be secured from an animal and then are called zoografts.

There are three recognised methods of skin-grafting: Reverdin's, consisting in cutting small particles from the superficial layers of the skin with scissors and planting them at intervals over the surface to be covered. Thiersch's, consisting in cutting broad strips from the superficial layers of the skin with a razor and placing them so as to completely cover the wound area; and Wolfe's, consisting in the dissection of a piece of skin the entire thickness of the structure and fitting it to the defect to be remedied. The dressing after any of the above methods consists of a lattice work of strips of rubber tissue over which is placed a pad of gauze wet with normal salt solution. This should be removed and replaced at the end of the third day. The instruments required for skin grafting are so few, the operation itself so simple, and the results secured so immediate and satisfactory that the surgeon who does not avail himself of it in suitable cases does an injustice both to himself and to his patient.

Primary skin grafting should be employed after the removal of an epithelioma or other superficial growth, provided infection can be prevented, hæmorrhages arrested and ligatures and sutures avoided. Secondary skin grafting should be employed when ligatures are used to arrest bleeding, or sutures to secure partial coaptation, where infection is likely or already exists, or where the excavation is deep and a

large amount of granulation tissue is necessary to fill it.

1. *Reverdin's method* should be employed when the area to be covered is small, and where the administration of a general anæsthetic is contra-indicated. The surface to be grafted and the site from which the grafts are to be taken should both be properly prepared. The skin is then elevated into a cone by means of a sharp tenaculum and a small piece snipped from its superficial layer by means of a pair of curved scissors. The fragment is at once transferred to the area to be grafted and carefully seated on the granulations, care being taken to prevent the edges from curling inward, thus preventing apposition of raw surfaces. This is repeated until a sufficient number of grafts have been planted to thickly stud the bare area. The operation of cutting the grafts can be made painless by the use of the chloride of ethyl spray. The above method is very satisfactory, especially in weak nervous patients, where a more formidable operation would have had a bad effect. The space between the grafts is rapidly covered and the resulting scar is good.

2. *Thiersch's method* should be used when the surface to be covered is large, and when the patient is either under an anæsthetic or its administration will be compensated for by the more rapid recovery it promises. The grafts are obtained by making the skin tense and flat either manually or by special hooks, and cutting off the superficial layers by a "to-and-fro" sawing motion of a sharp razor. The larger the size of the grafts the better. Usually they are an inch in width and four or five inches in length. Care should be taken to remove only the upper layer of the skin, otherwise the wound inflicted may prove as difficult to cure as the wound the surgeon is endeavouring to remedy. As the grafts are cut they are dropped into a basin of warm saline solution. Afterward they are carefully placed on the area to be grafted, the edge of one layer overlapping that of the adjacent one. Thiersch's method of grafting is the one most frequently practised, and the one that gives the most brilliant results. The objections to it are that it necessitates the use of an anæsthetic and the site from which the grafts are cut is painful and takes some days to heal.

3. *Wolfe's method* should only be employed in exceptional cases. The surface of the area to be grafted should be thoroughly revived and the margins made fresh and vertical. All bleeding should be completely arrested. The new skin to be used as a graft must be dissected from some other site. The entire thickness of the skin should be removed but

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