

MICROGRAFTING - REVIVAL OF AN OLD TECHNIQUE

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SUMMARY. The technique of micrografting was largely abandoned when the mesh-graft technique was developed. The old technique does however still present some advantages, and it is recommended in extensively burned patients with little possibilities for autograft. The technique is described and its advantages listed. Associated use of the sandwich technique further improves the micrograft technique.

Introduction

In 1958 Meek and Wall described a micrograft technique for the large expansion of autografts. Although very few colleagues have used this procedure, thirty years ago we were very happy with it and we have used it on many patients very successfully. When the mesh-graft technique was presented, the manufacturer of the Meek machine in the early sixties unfortunately stopped production of the prefolded bandages that were used, and we had to stop using these micrografts. As micrografts have many advantages over meshing, we looked around for another firm that might produce the bandages required and in the end found a company capable of manufacturing the necessary equipment. Large expansions of autografts are necessary in patients with extensive burns as not enough autografts are available to cover large excised wounds.

Technique

The autografts are placed on pieces of cork measuring approximately 3 by 3 cm. One great advantage of this method is that any small piece of skin can be used, while for meshing one needs real sheets. The cork pieces are run through the machine twice, producing islands measuring 3 x 3 cm. The machine cuts through the skin but not through the cork. The islands are then glued on to a prefolded bandage. When the bandage is expanded the islands separate regularly, resulting in a real expansion of 1 to 9. The nylon bandage can be removed after four or five days, by which time the islands have grown on to the wounds. Then, as is our custom, the wounds are covered with glycerolized homografts (i.e., the sandwich technique). In our experience this delay in overlaying with homografts does not hamper wound healing. Most of the excised wounds are usually fully covered with epithelium by the fourth or fifth week.

Advantages of micrografting

- Far greater real expansion: 1 to 9
- Any small piece of autograft can be used
- The distance between islands is smaller than with meshing 1 to 6, resulting in faster epithelialization. Micrografts can be successfully used on only partially debrided wounds.

Conclusion

Micrografting is a superior technique for the expansion of autografts in cases where insufficient autografts are available, especially if used in conjunction with sandwich procedures.

RESUME. La technique de la microgreffe a été presque abandonnée avec l'affirmation de la technique de la greffe en filet. La vieille technique possède néanmoins des avantages, et les Auteurs, qui la recommandent dans les cas des grands brûlés qui offrent seulement de faibles possibilités pour l'autogreffe, la décrivent avec ses avantages. L'emploi associé de la technique "sandwich" améliore encore la validité de la technique de la microgreffe.

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