Oral cavity onlay grafting using foam impregnated with honey: — A case report

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Summary

The often difficult problem of graft immobilisation in the oral cavity may be surmounted by use of a material which is cheap and readily available. A case in which honey impregnated foam material was used as a stent in oral grafting is described. Foam constitutes an ideal material which is highly recommended.

Résumé

Le problème souvent difficile d'immobilisation de greffe dans la cavité bucale pourrait être surmounté par l'emploi du matériel à bon marché et disponible. Le cas où on avait employé une écume trempée en miel comme un élargisseur lors d'une greffe bucale est décrit. L'écume constitue un matériel idéal hautement recommandé.

Case Report

Master A.M. UCH D.C. 54602 was a 2-year-old boy who presented at the Dental Centre of the University College Hospital, Ibadan on 19 January 1994 having been unable to open his mouth for one month, two months after he had taken caustic soda. However, he had not swallowed the caustic soda which had been cleared from the mouth, and palm oil had been given and emesis induced.

Examination revealed a healthy looking boy who had a gingivolabial and gingivobuccal stricture, both upper and lower sulci being considerably shallowed. The intercommisural distance (mouth width) was also reduced.

Under endotracheal general anaesthesia on 7 February 1994, the mouth width was increased by incisions through the fibrous stricture and other fibrotic attachments in the oral cavity were excised. A thick split skin graft taken from the left thigh was applied to line the raw surface on gingiva, lips, and cheek. This was overlaid with sofratulle, partially quilted and edges stitched in place. Two measured-to-fit foam materials impregnated with honey were rolled up to pack into the upper and lower vestibules over the graft. They were secured by a few stitches through mucosa.

The packs were removed 72 hours post-operatively. Graft take was 100% and a review 14 weeks after, revealed satisfactory sulcus depth in both upper and lower vestibules.

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Discussion

Esser [1] devised a procedure which he termed inlay grafting for reconstructing the oral cavity following obliteration. He first created an epithelial lined cavity by introducing through an external incision, a mould of dental stent surrounded by a partial thickness skin graft with raw surface outwards. At a second operation, he opened this cavity into the mouth and removed the mould. A year later, Pickerill [2] showed that a skin graft held by a mould could be applied successfully to a defect in the buccal cavity thus obviating the need for an external incision.

A mould of stent is commonly used to hold a graft in contact with a cavity. McIndoe [3] (1950) reported 63 cases in which an acrylic mould was used for the treatment of congenital and acquired gynaetresia. Six of these cases who had normal uteri subsequently became pregnant. Although other substances like silastic foam have also been used to maintain skin grafts in cavities, they are not easily available in the developing world. Using foam, a material available commonly in the local market, which causes minimal or no local tissue reaction, and which can be autoclaved easily, is a cheap alternative to these substances. It can be trimmed to size, rolled up, and moulded by applying stitches to fit into the cavity in question. Impregnating the foam stent with honey which has been analyzed to contain antiseptic [4] makes it possible for it to be retained in the oral cavity for at least 3 days, without getting infected. In cavities that are less contaminated and less potentially infected, it can last longer.

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