Full Thickness Pedicled Skin Graft in Baha Implantation

David Kaylie, MD, David Nolen MD
Duke University Medical Center Department of Surgery, Division of Otolaryngology

ABSTRACT

Objective: To describe a new technique of using a full thickness skin graft in Baha Implantation.

Methods: A retrospective review of patients that underwent a full thickness pedicled skin graft for Baha was performed. Patients were included if the pedicled skin graft was placed with the device. Patients that underwent a pedicled flap technique were included. No flap complication rate was collected. Patients were followed up for a minimum of 6 months. No flap failures occurred.

Results: Fifteen patients were enrolled in this study. There were no complications or flap failures. No flap complications were recorded.

Conclusions: A full thickness skin graft technique can be used in Baha Implantation. This technique results in a cosmetic improvement that eliminates alopecia and skin overgrowth.

INTRODUCTION

Baha is a system that allows direct conduction of sound from the bone to the cochlea (3). This technology has been used successfully for over 20 years in the treatment of hearing loss and is indicated for patients with mixed hearing loss and unilateral hearing loss. ABA is the most popular hearing aid implant system used in North America (4). It has been used to treat hearing loss and hearing loss for over 20 years with excellent hearing results. Skin overgrowth and alopecia are two concerns with Baha implantation. Skin complications occur in up to 39% of patients (1). This prevents the device use while being managed, and skin complications and alopecia increase in older age (5) and in overweight patients (6). Skin overgrowth is thought to occur most often in patients with partial loss of the split thickness graft (2). Some medical studies have shown promising results with the use of clobetasol, but it is not without added time and cost to the patient. Skin overgrowth is a failure of the tissue to fully integrate and to become a normal skin layer (7). A common concern that patients have with Baha’s is alopecia, especially those with short hair (5) and has often been taken into serious consideration by patients deciding to undergo the procedure. Only 50% or less of patients report that they were satisfied with the cosmetic result after direct trauma to the post 3 weeks after surgery. Two patients had self-limited bleeding. One of these patients anticipated complications but has not undergone a surgical correction (2).

METHODS

A retrospective review of patients that underwent a full thickness skin graft for Baha was performed. Patients were included if the pedicled skin graft was placed with the device. Patients that underwent a pedicled flap technique were included. No flap complication rate was collected. Patients were followed up for a minimum of 6 months. No flap failures occurred.

RESULTS

Fifteen patients were enrolled in this study. There were no complications or flap failures. No flap complications were recorded. A common concern that patients have with Baha’s is alopecia, especially those with short hair (5) and has often been taken into serious consideration by patients deciding to undergo the procedure. Only 50% or less of patients report that they were satisfied with the cosmetic result after direct trauma to the post 3 weeks after surgery. Two patients had self-limited bleeding. One of these patients anticipated complications but has not undergone a surgical correction (2).

REFERENCES


CONCLUSIONS

The aim of this study is to show that a thinned, full thickness pedicled skin graft technique can be performed in Baha Implantation. This technique results in a cosmetic improvement that eliminates alopecia and skin overgrowth. In our study, we had no incidence of skin overgrowth or alopecia. Secondary goals are to demonstrate the cosmetic result of the overgrowth of skin over the device shorter, in this procedure, there has been a demonstrated and no dressing/salves are needed. Skin complications and alopecia are the major concerns. This procedure has been used as a treatment of some of these complications, but it is not without added time and cost to the patient. Skin overgrowth is a failure of the tissue to fully integrate and to become a normal skin layer (7). A common concern that patients have with Baha’s is alopecia, especially those with short hair (5) and has often been taken into serious consideration by patients deciding to undergo the procedure. Only 50% or less of patients report that they were satisfied with the cosmetic result after direct trauma to the post 3 weeks after surgery. Two patients had self-limited bleeding. One of these patients anticipated complications but has not undergone a surgical correction (2).

CONTACT

David Kaylie, MD
Duke University Division of Otolaryngology
David.kaylie@duke.edu
919-668-4909
http://ehms.duke.edu/