



DERMATOLOGICAL SURGERY

# HUMAN ACELLULAR AMNIOTIC MEMBRANE IMPLANTATION FOR LOWER THIRD NASAL RECONSTRUCTION: A PRELIMINARY STUDY

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**Background:** The lower third of the nose is one of the most important cosmetic units of the face and its reconstructive techniques remain a big challenge. As an alternative approach to repair or regenerate the nasal tissue, the biomaterial-based strategy has been extensively investigated.

**Methods:** To determine the safety and efficacy of human acellular amniotic membrane (HAAM) to repair the full-thickness defects in the lower third of the nose in humans, 180 patients who underwent excision of skin lesions of the lower third of the nose were included; of the patients, 92 received HAAM and Vaseline gauze treatments, and the other 88 patients received Vaseline gauze treatment only.

**Results:** Immediately after the HAAM implantation, a reduction in the haemostasis time and an accelerated disappearance of pain were observed. Compared with the control group, the formation and detachment of scab in patients who received the HAAM implantation were notably accelerated, postoperatively. When the diameter of the lesion exceeded 5 mm, the HAAM implantation was found to enhance the wound healing, although this enhancement was not seen when the diameter was less than 5 mm. Additionally, the HAAM implantation significantly reduced bleeding, wound infection and scar formation, postoperatively.

**Conclusions:** HAAM-assisted healing is a promising therapy for lower third nasal reconstruction leading to rapid wound healing and fewer complications, and thus has considerable potential for extensive clinical application in repairing skin wounds.

