Surgical Reconstructive Skin Flap after Open Wound Management with Sugar Therapy

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Introduction: When used as a dressing for open wounds, especially those wound that are contaminated, the use of sugar to manage wounds enhances healing and eliminates invading bacteria. When sugar therapyreduced the contamination and edema in the wound, skin flap may be necessary for closure.

Materials and methods: A-5 month-old female miniature schnauzer was referred to the Konkuk University veterinary teaching hospital; the animal had a traumatic injury of left front limb from a motor vehicle accident. The skin defect was large and contaminated. Sugar was applied liberally to the wound. The bandages required daily changes until the exudate was minimal. Everyday bandage changes were performed and application of sugar continued until granulation tissue covered the wound. When the granulation tissue was healthy and stable, the skin was closed surgically using the thoracodorsal sliding skin flap.

Results: Sugar therapy was continued for a total of 20 days, at which time a healthy granulation bed had formed over the front limb. The wound was closed surgically using skin flap. 10 days post surgery, the cosmetic appearance of the recipient area differs from that of the surrounding skin. However, surgically the wound was cleaned without complications.

Clinical relevance: Open wound management with sugar therapy reduced contamination and edema in the wound. Because of the sugar therapy, the result of skin flap was good and there were fewer complications after surgery.

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