

Reconstruction of Large Defect of Lower Lip and Commissure using Karapandzic Flap: Case Report

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Summary

Xeroderma Pigmentosum (XP) is a photosensitive skin disease with a high risk for developing skin malignancy. We present an 18-years old boy with XP and recurrent basal and squamous cell carcinoma of lower lip. Because of scars from earlier resections Karapandzic circumoral advancement-rotation flap was performed. The method is suitable for defects covering 1/3 to 4/5 of the lower lip with possible involvement of commisura. 70% of the lip was resected and reconstruction was made with bilateral flaps. This reconstruction resulted in good oral muscular and sensory function. The scars followed natural folds of the face and despite a slight microstomia gave an acceptable esthetic appearance. The Karapandzic flap is simple and safe method for reconstruction of large defects of lower lip.

Keywords: Xeroderma Pigmentosum, squamous cell cancer, basal cell cancer, Karapandzic flap

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Introduction

Xeroderma Pigmentosum is a rare autosomal recessive photosensitive disorder mostly localized to the face, head and neck with an increased risk for developing skin malignancy. Excision and reconstruction of large tumors of oral lips is a challenging task. Preservation of the oral muscular function and lip sensitivity are essential goals in the reconstructive procedure. Burns described in 1857 a method using circumoral advancement-rotation flap. Karapandzic described a significant modification of this circumoral advancement rotation flap in 1974, which provides an excellent result with good motor and sensory functions^{1-2,3,7,13-15}.

Methods

Eighteen years old boy with XP and histological verified recurrence of basal- and squamous cell carcinoma of lower lip was treated at the Dept. of Reconstructive and

Plastic Surgery, University Hospital of Pristine, Kosovo. He was referred to us because of tumor recurrence after three previous resections. Due to the size of the tumor and scars from earlier operations we used the Karapandzic circumoral advancement-rotation bilateral flap for reconstruction of the lip¹. The tumor was excised with 10 mm free margins. The incisions for the repair were placed bilaterally along the mental crease continuing around the oral commissures and extending along the lateral side of the nasolabial fold. The width the circumoral incision was made equal to the height of the defect. The flap of the contra lateral lower lip was made longer in order to rotate an equal amount of tissue around the oral commissure. The labial arteries and nerves were identified and preserved. This allows patients to maintain optimal motor and sensory functions and decreases the risk for microstomia.

Results

Two weeks after reconstruction the patient presented good oral muscular and sensory function. The circumoral scars are well concealed into the natural facial folds. The patient has adequate opening size of his mouth despite some degree of microstomia. The overall esthetic result will further improve along with the decrease of edema and maturation of the scars. Histologically the resection was radical.

Conclusion

Patients with XP have an increased risk for developing skin cancer.

Extensive tumor of lower lip can successively be excised and reconstructed with circumoral-advancement-rotation flap described by Karapandzic. The flap preserves the circumoral muscular and sensory function and gives a cosmetically acceptable appearance.

Regular follow-ups are essential because of the XP and earlier recurrences.

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