Herpes Zoster Ophthalmicus Complicating Nasal Forehead Flap Reconstruction

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INTRODUCTION: There have been three reports (a total of eight cases) of Herpes Zoster (HZ) complicating plastic surgery procedures of the head and neck.1-3 None of these cases had significant ophthalmologic complications. This is the first report of HZ Ophthalmicus associated with ocular complications developing during the course of a staged nasal reconstruction with a paramedian forehead flap.

RESULTS: A 62 year-old woman with a medical history significant for idiopathic thrombocytic purpura was seen for a post-Mohs defect of her nose after resection of a basal cell carcinoma. After obtaining medical clearance from her hematologist, a left-sided paramedian nasal forehead flap was performed. One week after an intermediate-stage thinning of the flap, the patient presented with erythema of the flap, the pedicle and the adjacent upper eyelid. Cellulitis was diagnosed and the patient initially treated with oral antibiotics. Her optometrist added antibiotic eye drops. When her condition did not improve, she was referred to an ophthalmologist who continued treatment for pre-septal cellulitis.

As her eye irritation and headaches worsened, vesicles appeared on her flap and forehead, while the adjacent nasal skin was spared (V1 involved-V2 uninvolved). The diagnosis of Herpes Zoster Ophthalmicus was made. The patient proceeded to develop HZ keratoconjunctivitis, uveitis, and optic neuritis. Her visual acuity deteriorated. Emergent hospitalization and treatment with intravenous acyclovir prevented significant permanent visual impairment. Resolution of her ophthalmic problems took several months requiring delay of the division of the flap pedicle. She ultimately required replacement of her ocular lens. She was last seen 3 years after her surgery with a well-healed flap, slight eyelid ptosis, and mild epiphora.

CONCLUSION: Among cases of Herpes Zoster, involvement of the eye is uncommon, occurring in only 2.5% percent of cases in a large cohort.4 Plastic surgeons need to be aware of the possibility of the onset of shingles when a patient develops worsening post-operative erythema and edema that does not respond to antibiotics. Herpes Zoster Ophthalmicus can precipitate significant visual complications.

REFERENCES:

1. Parikh, PM and Davison, SP. Herpes Zoster after Reconstruction for Head and Neck Cancer. Plast Reconstr Surg. 2008; 122: 211e-213e.
2. Bailey, MH. and McKinney, P. Herpes Zoster as a Complication of a Face Lift. Aesthetic Plast Surg. 1988; 12: 23-4.
3. Choi, HJ, Kim, JH, Lee, YM. Herpes Zoster Developing within Recent Subciliary Incision Scar. J Craniofac Surg. 2012; 23: 930-1.
4. Yawn, BP, Woian, PC., St Sauver, JL., Butterfield, LC. Herpes Zoster Eye Complications: Rates and Trends. Mayo Clin Proc. 2013; 88: 562-70.