Traumatic Neuroma (of Occipital Area) following Hair Restoration Surgery

Traumatic neuroma occurs as a result of surgery or trauma. It is a very rare entity that causes chronic headache. It is noteworthy that there are no previous cases of traumatic neuroma that occurred as one of the complications following hair transplantation surgery. Here, we report our case of traumatic neuroma that occurred at donor sites following hair transplantation surgery with a review of literatures.

A 37-year-old woman visited us with a chief complaint of left occipital pain. On history taking, the patient presented with pain after undergoing follicular unit strip surgery (FUSS) seven years ago. On gross examination, the patient had a white-colored, hairless, small area in the left occipital region. If this area is pressed, a slightly bulging mass is palpated. Then, the patient complained of sharp pain that might have been extended to the vertex. But when there were no stimuli at these sites, the patient did not present with pain.

In this patient, we made a tentative diagnosis of traumatic neuroma and attempted to perform diagnostic tests. But the patient wanted to take additional hair transplantation surgeries. We therefore extracted donor sites including the lesions. The lesion was measured as 5×8 mm in size, and it was placed on the scar tissue. On histopathologic examinations, the patient was diagnosed with post-traumatic neuroma. At a 1-month follow-up, the patient achieved a complete resolution of the occipital pain.

The hair follicle is present in the subdermal layer. It is therefore possible that the nerves between the fat layer and galea layer, which was placed right below the subdermal layer, might be damaged. As described here, if neurons are hyperproliferated while the damaged nerves are restored, this would lead to the occurrence of traumatic neuroma. Its typical symptoms include headache that occurs with the compression and sharp pain that is generated along the pathway of the nerve. Pain may be alleviated with the injection of anesthetics or steroids only on a temporary basis. Therefore, surgical excision can achieve a complete cure of it in this series.