



LETTER TO THE EDITOR

A cosmetic complication after supraorbital/supratrochlear nerve block

Supraorbital/supratrochlear sinir bloğuna bağlı kozmetik komplikasyon

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To the Editor,

Cranial settled pains, neuralgias, and headaches, which are refractory to traditional treatments, are troublesome and devastating conditions. In the treatment of these painful conditions, some regional anesthetic procedures can be helpful. These techniques are usually performed using low-dose local anesthetics with or without corticosteroids with the aim of reducing inflammation, inhibition of nerve compaction, and suppression of abnormal activity in damaged nerves. These procedures are easy to perform and require minimal equipment with low incidence of complications.^[1,2] Besides pain due to postherpetic/trigeminal neuralgia or anesthesia for surgical procedures such as upper eyelid surgery, oculoplastic surgery, debridement, laceration repairs, or stereotactic frames placement, supratrochlear and/or supraorbital nerve blocks may be used for the treatment of ipsilateral frontotemporal headache.^[3,4]

A 47-year-old healthy woman admitted to our algology department with chronic and progressive frontotemporal migraine existing for 10 years. The neurologic examination, imaging, and laboratory examinations did not reveal any pathologic finding; however, the pain was not relieved despite using different analgesic medications. We performed bilateral supraorbital and supratrochlear nerve blocks with 5 mg of bupivacaine and 4 mg of dexamethasone in 2.5 mL solution to each side. In the checkup 1 week



Figure 1. Pit-like cosmetic changes on the patient's forehead secondary to steroid injection.

after the procedure, she stated that there was 80% relief in her pain. 6 months after the steroid injection procedure, she admitted to our clinic with the complaints of cosmetic changes like pitting in both injection sites (Fig. 1). On physical examination, there were slightly pale, nonsensitive defect areas of 3*3 cm and 5*2 cm apparently depressed from the surface of the forehead skin. The patient was informed that these changes might be complications of the procedure, and the plastic surgery department was consulted for the treatment. After there was no satisfactory improvement with the recommendation of massaging with various subcutaneous tissue nourishing and supportive creams for a month, subcutaneous fat tissue filling was applied to the patient.

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Steroid injections are commonly used in the treatment of painful and inflamed soft tissues. These injections may cause some side effects depending on the characteristics of the area where they are performed, such as infection, bleeding, connective tissue atrophy, hypopigmentation, or nerve injury. The risk of connective tissue atrophy is <1% and usually develops within 1–6 months after the injection.^[2,3] There may be spontaneous recovery, but sometimes surgical treatments such as cosmetic laser therapy, fat tissue injection, or grafting can be required. Although all steroid injections can cause subcutaneous atrophy, this effect is more likely with low-resolution and long-acting steroids. Therefore, these steroids are recommended for use in deeper tissues and larger structures.^[1,2] We used dexamethasone and bupivacaine for this superficial blockade of the supraorbital and supratrochlear nerves. 6 months after injection, the patient was readmitted to the clinic with the pitting complaints in the forehead. Since conservative treatments were not beneficial, she was treated with regional fat filling.

Steroid injections are used safely and effectively in the treatment of chronic pain. Although complication rates are low, patients should be informed in detail about the possible risks. Cosmetic complications, especially due to procedures performed in the face, may be significantly more important than in other areas.

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