Vision Loss Caused by Displacement of a Malar Implant

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ABSTRACT:

A 65 year old female with a history significant for bilateral malar implantation with midsixtyten 10 years prior presented with a month history of seeing flashes of light and having diplopia while chewing. The patient had no history of ocular injury or disease and had not had a normal recent ophthalmologic exam. The patient also noted discomfort and rhinorrhea, but denied maxillary tooth pain. All symptoms denied any paresthesiae or anesthesis in the V2 distribution.

On physical exam there were no gross dysmorphic facial features. Both malar prominences were non-enerythematous and soft. Tenderness was noted bilaterally, with her right malar prominence more tender than her left. Her left cheek implant was palpable, but her right implant was non-detectable. Extraocular movements were grossly intact.

Computed tomography and magnetic resonance imaging confirmed the right cheek implant had eroded through the lateral zygomatic-maxillary buttress and through the orbital floor, abutting the optic nerve. The right inferior rectus muscle was displaced and edematous. In addition, the right maxillary sinus was filled with fluid and had diffuse mucosal thickening. There was a calcified foreign body in the left subcutaneous tissue consistent with her malar implant. The specified object on the right side indicates the implant likely eroded through the maxilla and zygomatic bone into the maxillary sinus and penetrated through the inferior border of the orbit, abutting the optic nerve. The patient underwent a Caldwell-Luc procedure to approach the inferior aspect of the posterior orbit to remove the right malar implant.

The removal of bilateral malar implants was completed without complication and pathological assessment of the right cheek implant presented with dense fibrous tissue and mineralization.

CASE REPORT:

The patient underwent a Caldwell-Luc procedure to approach the inferior aspect of the posterior orbit to remove the right malar implant.

DISCUSSION:

Alloplastic augmentation using silicone was first described by Hinderer in 1975[1]. While other materials such as polytetrafluoro-ethylene and calcium hydroxylapatite have also been used, silicone has remained the most popular choice because of its many benefits with a low incidence of complications[2-4]. The benefits of silicone include its biocompatibility without osteointegration, infection resistance, and easy subperiosteal placement and contouring[5]. After placement, a dense fibrous capsule forms around the implant making it stable and generally easy to remove. Complications of silicone malar implants include displacement, trigeminal hypesthesia, external ophthalmoplegia, hemiatrophia facialis, nerve damage, connective tissue disorders, extrusions, and bone resorption. Roughly eleven percent of malar implants are removed or replaced because of improper implant size, shape, or position[6]. Bone resorption is an uncommon complication of malar implants. In Metzinger’s series of 60 patients with silicone malar implants, there was no evidence of bone resorption with a minimum of 2 year follow-up[7]. In a murine model, thicker silicone implants were associated with a greater degree of bone resorption and thinning than thinner implants[8]. It is not possible to definitively state why the patient in this report had such extensive bone resorption from two separate bony edges of the orbit abutting the optic nerve.

REFERENCES: