

**CORRECTION OF A FLAT CHEEK AFTER AN INADEQUATE
REDUCTION OF ZYGOMATICO-MAXILLARY
COMPLEX FRACTURE USING A HIGH-DENSITY
POLYETHYLENE MALAR IMPLANT
– A CASE REPORT**

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A case of inadequate reduction of zygomatico-maxillary complex fracture presented a right flat cheek. The facial deformity was restored with a high-density polyethylene (HDPE) malar implant. The operation was easy to perform and a good cosmetic result was achieved due to fair malleability and easy accessibility of the implant. In a follow-up of 76 months, no complication of erosion of wrapping tissue or implant extrusion was noted, which proves the good biocompatibility of the material.

Key words: HDPE implant, ZMC fracture

INTRODUCTION

Inadequate reduction of zygomatico-maxillary complex (ZMC) fracture results in a flat cheek. To restore this cosmetic deformity, operators can either choose to refracture the healed bones and reduce the dislocated bones or put in an implant to restore the appearance of the depressed cheek. The first method requires more surgical procedures and a longer period of recovery. The second method requires less complicated procedures and a shorter period of recovery. However, a proper implant material is a prerequisite for long-term success. The various implants include poly (D, L) lactide (PDLA)¹, high-density polyethylene (HDPE) implants², bioceramics³, polydioxanone⁴,

silastics⁵, teflon⁶, and proplast⁶.

With our previous successful experiences with HDPE implants to reconstruct large orbital floor fracture⁷, a patient with a flat cheek after an inadequate ZMC fracture was reconstructed with an HDPE malar implant.

CASE REPORT

This 52 year-old man was injured in a traffic accident, resulted in a right depressed cheek with ZMC and orbital fractures. His ipsilateral canaliculus was lacerated. The patient was primarily treated surgically in the department of plastic to correct both fractures with open reduction internal fixation (ORIF). Eight months after the primary repair for the fractures, the

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