

USE OF STOCK HIGH DENSITY POROUS POLYETHYLENE IMPLANT (MEDPORE^R) FOR CORRECTION OF SECONDARY FACIAL DEFORMITY-A CASE REPORT

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INTRODUCTION

Temporo-mandibular joint ankylosis is a common cause of acquired mandibular deformity in children and adults¹. The most frequent causes of condylar damage are trauma to the joint and infections². The damage to the condyle in early childhood period may result in facial asymmetry due to alteration in mandibular growth. In general, younger the patient at the time of condylar damage and longer the period of ankylosis before treatment, the more severe will be the degree of deformity. The deformity is the result of both the condylar destruction and the lack of stimulus to the growth induced by mandibular function and movements. There are various techniques available to release the ankylosis but the correction of the resulting facial deformity in these cases is still a challenge. Here we report a case of chin asymmetry and deformity corrected with medpore chin implant with a long term follow up.

CASE DESCRIPTION

A 26 year old female patient came to Department of Oral and Maxillofacial Surgery with a chief complaint of facial asymmetry (Fig 1). Patient desired esthetic correction as she was getting married. She was operated elsewhere for unilateral TMJ ankylosis of the left side with interpositional gap arthroplasty 6-7 years ago. On examination it was seen that she had a well demarcated facial deformity in the chin region extending upto the angle on the right side. The patient's main area of concern was the chin deformity. Medpore

implants (Stryker , USA) were decided to be used for the chin augmentation and asymmetry correction.

After adequate planning and evaluation, the implant was chosen. The patient was then taken under general anesthesia and a degloving incision was given. The genum was exposed and minimal decortication was done after which the selected medpore implants were placed and stabilized with 14 mm long screws, one each on either sides (Fig 3). Post-operatively patient got a satisfactory esthetic result (Fig 2). A five year follow up was uneventful.



Figure1 : Preop frontal and profile



Figure 2: Post op frontal and three fourth view



Figure 3; Intra-op Med pore placement

DISCUSSION

The mandibular contour plays a significant role in the beautiful and youthful look, thus making the management of mandibular secondary deformities challenging. Various surgical treatment modalities have been used for correction of mandibular secondary deformities which range from orthognathic, distraction osteogenesis, orthomorphic surgeries and use of alloplastic materials. Alloplastic materials have the advantage of being less invasive. However, they are not very cost effective. Use of individualized high density porous polyethylene after 3D planning is the best treatment option. However, as our patient had limited resources, a stock implant was chosen which gave acceptable results.

REFERENCES

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