SUMMARY

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Congenital malformations, systemic disease processes, and trauma can all result in alteration of the nasal structural framework, causing functional nasal obstruction and altered facial cosmoses. Current methods for nasal reconstruction include autogenous cartilage and bone grafts and synthetic alloplastic materials.

Synthetic materials play an important role in reconstruction of saddle nose deformity due to their advantages over the biological grafts. Hydroxyl apatite is the material most widely utilized as it has the best results among all synthetic materials regarding to its bioactivity and composition which resemble bone tissue.

A comparative study of Bioglass® to hydroxyl apatite concluded that the Bioglass® was superior to hydroxyl apatite.

The objective of this study is to determine the efficacy of Bioglass® as an implant reconstruction of saddle nose deformity in human being.

Augmentation of the nasal dorsum was performed in 20 patients (14 were male and 6 were female) that were followed up for 6 months post operatively. Their ages ranged from (19 to 42 Ys) the deformities were in the from of saddle nasal nose due to trauma in all cases.

The cases were classified into 2 groups according to approach:-

Group (A):- six cases with augmentation of saddle nose deformity by Bioglass® particles through unilateral inter-cartilaginous incision (endo nasal approach).

Group (B):- fourteen cases with augmentation of saddle nose deformity by Bioglass® particles through external approach.

Irregularity and incomplete correction were accord only in Group (A).

Bone formation was occurred for all cases in both Group (A) & (B).

In conclusion, nasal reconstruction remains a challenging area of facial plastic surgery. In the present study, bioglass was shown to dramatically enhance the repair of a major dorsonasal bone defect.