

Transcutaneous approach for orbital augmentation with alloplastic implants in acquired anophthalmia.

Abstract

Purpose: To report the outcomes of a transcutaneous surgical technique for orbital volume augmentation with secondary alloplastic implants in acquired anophthalmia.

Methods: Retrospective case note review of patients who underwent secondary orbital implant insertion through a subciliary incision between January 2006 and December 2017. Collected data included age, gender, type and cause of primary surgery, time interval before secondary implantation, and details of secondary implantation surgery. The main outcome parameters included postoperative appearance, grade of superior sulcus deformity (SSD), implant centration, and prosthesis function.

Results: Thirty-eight patients ranging from 2 to 54 years had undergone secondary alloplastic orbital implant placement through the subciliary approach. The mean follow-up was 5.3 years (range: 1–10 years). All the patients showed satisfactory orbital volume with the average SSD was grade 0.74. There were no cases with implant exposure or extrusion. Implant migration occurred in six cases (15.8%). Fitting a prosthesis was possible in all cases.

Conclusion: Subciliary secondary orbital implantation is proved to be effective in correcting volume deficiency in acquired anophthalmia with rapid rehabilitation while avoiding anterior surface breakdown and implant exposure.