

Clinical Research

Surgical

The Impact of Orthognathic Surgery on Quality of Life

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INTRODUCTION

Orthognathic surgery is undertaken to correct jaw size discrepancy, improve function and produce a more aesthetic facial skeletal appearance.

OBJECTIVE

In this study the aim was to evaluate the impact of orthognathic surgery on quality of life for patients with dentofacial deformity.

METHODOLOGY

In this prospective study, patients with dentofacial deformity were recruited in Cork and Limerick Oral and Maxillofacial Surgery units. Data was collected using the Orthognathic Quality of Life measure. There were two data collection points, namely, prior to treatment and three months postoperatively. Pre/post treatment comparison was made on four domains, namely, social aspects of deformity, appearance, oral function and social awareness of dentofacial deformity. Patients also rated their satisfaction with appearance on a visual analogue scale before and after treatment.

RESULTS

The study population included 62 patients (27 male, 35 female), with a mean age of 21 years (18-36 years). The majority of patients had bimaxillary surgery (n=26) with the remaining patients having mandibular setback (n=13), mandibular advancement (n=15) and Le Fort 1 osteotomy (n=8). Significant improvement was reported in all four domains:

1. Social Functioning - Mean Pre 11.2 (8.97), Mean Post 7.19 (8.32), p=0.006
2. Aesthetics - Pre 12.4 (6.06), Post 5.72 (4.22), p=0.001
3. Oral Function - Pre 7.75 (5.84), Post 5.72 (5.84), p=0.03
4. Awareness of Deformities- Pre 6.91 (4.91) Post 5.72 (4.22), p=0.015

The one sample t-test was applied and the mean difference was found to be statistically significant in all four domains.

CONCLUSION

This research reaffirms that orthognathic surgery is a safe and reliable treatment modality with significant positive effects. This research will help us to educate patients and clinicians on the advice and support required by patients prior to embarking on lengthy treatment plans.