

# MULTI DISCIPLINARY TREATMENT FOR GUMMY SMILE CASES.CASE REPORT

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## INTRODUCTION

Gummy smile occurs when 3 mm or more from the gingival band appear during smile or speech above the cemento-enamel junction of teeth. Etiology of gummy smile is always multifactorial, it may result from excessive vertical maxillary grow up, excessive labial contraction, short upper lip, passive eruption of teeth and extrusion of anterior teeth. The treatment is mostly multidisciplinary dependant on the proper diagnosis. Tools like digital smile design and cone beam computed tomography enable proper and complete planning of gummy smile cases. The present case aimed to present a gummy smile case of multiple etiology which has been treated with multidisciplinary approach to achieve predictable and safe treatment. (1,2).

## METHODOLOGY

A 30-year old female patient has attended the clinic of Department of Prosthodontics, Faculty of Dentistry, Alexandria University complaining of gummy smile, disproportion of crown size of incisors and enamel hypocalcification after orthodontic treatment. Gingival excess analysis was done via crown height and width using chu's gauge (Figure .1a), muscle analysis (lip length and anatomical muscle tone), computed tomography to evaluate the crown and biological width and digital smile design were performed (Figure 1b). After proper planning, surgical crown lengthening was done(Figure.2a,b), followed by application of botulinum toxin (Allergen Botox by MEDI SILK), and then the teeth were restored by veneers restorations (IPS e.max ( Ivoclar Vivadent) using CAD-CAM technology (Ceramil mind by Amann Girrbach).(Figure.3a,b).



Figure :1a



Figure :1b

Figure (1a): analysis of crown height and width using chu's gauge  
Figure (1b):2D-smile design

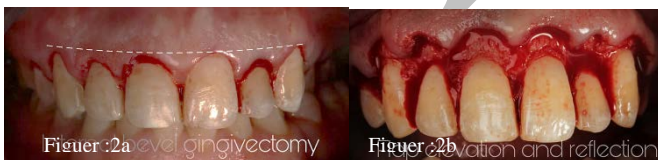


Figure :2a level gingivectomy



Figure :2b

Figure (2a): Gingivectomy  
Figure (2b): Surgical crown lengthening

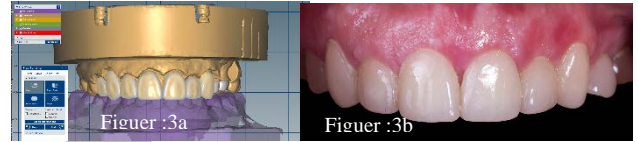


Figure :3a



Figure :3b

Figure (3a): CAD design of veneers  
Figure (3b): Post-operative view of IPS e-max veneers

## RESULTS AND DISCUSSION

After proper clinical & periodontal examination, a predictable and safer multidisciplinary treatment option was performed and the patient has reported satisfaction with her new smile. (Figure.4 a,b)



Figure :4a



Figure :4b

Figure (4a): pre-operative condition.  
Figure (4b): Post-operative condition.

## CONCLUSION

When it comes to gummy smile, proper diagnosis is essential. Digital smile design and cone beam computed tomography are considered as a mandatory method to evaluate gummy smile cases. Multidisciplinary treatment always gives safer, satisfactory and accurate results

## ACKNOWLEDGMENT

I would like to extend my sincere thanks to Dr. Ahmed Ashraf assistant lecturer department of periodontist for performing the crown lengthening surgery.

## REFERENCES

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