Removable Complete Denture Prostheses for the Patient with Ramos-Arroyo Syndrome

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INTRODUCTION

Ramos-Arroyo syndrome is an extremely rare autosomal dominant disorder with a prevalence of less than 1 in 1 million people. It was reported that there are less than 1,000 people in the United States has this syndrome. This disease is characterized by intellectual disability, corneal anesthesia, retinal abnormalities, bilateral hearing loss, unusual facial appearance, and persistent ductus arteriosus. A multidisciplinary approach and long-term care are recommended to ensure quality of life of these patients.

CASE HISTORY

A 20-year-old female with a rare genetic disorder, Ramos-Arroyo syndrome, was presented with the chief complaint of “I want teeth.” The pedodontist previously reported multiple caries and an inability to maintain oral hygiene care, resulting in extraction of all teeth under sedation. The clinical findings were lower complete edentulism, with PDI classification IV and severe gag reflex. Several pediatric behavior management techniques were applied to ensure patient comfort during the denture fabrication process. Stock trays were given for practice before impression-making. The complete denture procedures were done, including border molding using selective-pressure custom trays and making impressions with polyvinylsiloxane (PVS) material. The maxillary record base was made with self-cure acrylic resin, while the processed heat-polymerized acrylic mandibular record base was fabricated with the compression technique to enhance stability during the try-in. The final heat-processed dentures were fabricated with a monoplane occlusion. Laboratory and clinical remounting were performed to eliminate occlusal errors.

CONCLUSION

The removable complete dentures are not limited to only the elderly population but to young individuals with compromised conditions. The processed record base enhances stability as well as helps with intaglio surface adjustment during the fabrication process, resulting in improved patient management and outcome.

RESULTS

Removable complete dentures were delivered to the patient with adequate retention and stability. Post-operative evaluation was done. The patient and her parents were satisfied with the results.

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