Complete Oral Rehabilitation on a patient with Amyotrophic Lateral Sclerosis (ALS).A Case report:

G. Ortiz-Bernard, Y. Encarnacion, U. Uzcategui, V. Acevedo.
University of Puerto Rico, School of Dental Medicine, General Practice Residency

INTRODUCTION

Amyotrophic lateral sclerosis (ALS), also known as Lou Gehrig's Disease, is a rare neurological disease that affects motor neurons, those nerve cells in the brain and spinal cord that control voluntary muscle movement. Voluntary muscles are those we choose to move to produce movements like chewing, walking, and talking. The disease is progressive, meaning the symptoms get worse over time.

ALS has no cure and there is no effective treatment to reverse its progression. ALS is a type of motor neuron disease. As motor neurons degenerate and die, they stop sending messages to the muscles, which causes the muscles to weaken, start to twitch (fasciculation), and waste away (atrophy). Eventually, the brain loses its ability to initiate and control voluntary movements.

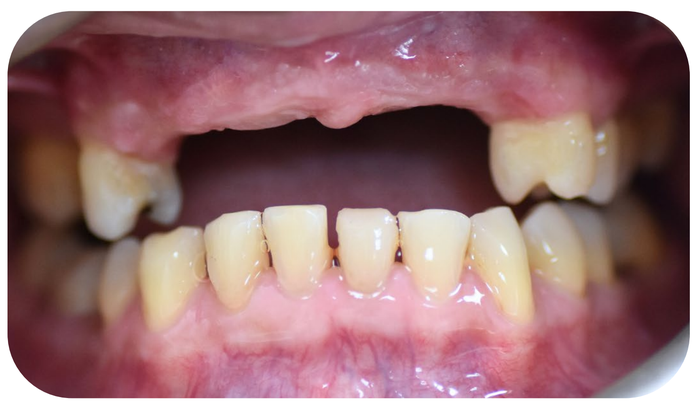
METHODS & MATERIAL

The dental care of the patient with ALS and connected to a portable ventilator via a tracheostomy since ALS affected his lungs the most, represent a challenge for the dentist due the limited collaboration and the airway of the patient. These patients will require alternatives in order to carry out a successful dental treatment. Management of these type of patients under local anesthesia and in a regular dental chair is a challenge for the dentist.

We present a case of a 55-year-old male patient with (ALS), that symptoms started after COVID- 19 exposure, patient is connected to a portable ventilator via tracheotomy able to walk. This patient is using Riluzole, such medication is used to delay the onset of ventilator dependence. Patient present with fracture temporary bridge.

During our dental evaluation assessment, our first concern is to manage patient's airway and follow precautions. Patient was treated with one dentist and two dental assistant in order to receive dental treatment in dental office HUPR, Hospital Federico Trilla.

RESULTS



The treatment plan included Oral Prophylaxis, fluoride varnish, and impression for study model. During dental assessment and prophylaxis, the patient did present alterations in his respiratory rate, lowering to 94% of saturation. Dental treatment was paused several times due to his airway ventilation, Prophylaxis and oral evaluation took hours.. Patient was discharge during his first appointment due to lack of oxygenation in his ventilator. Patient will continue treatment in following appointments for extractions and immediate denture.

CONCLUSION

This population requires a unique and precaution management because of their limited airway ventilation and lack of time of life, for this reason the appropriate clinical skills are needed in order to provide the required dental care. The protocol for work must include the respective interconsultations, and several dental appointments in order to complete oral rehabilitation of the patient. Full-mouth rehabilitation under regular dental chair is a safe and effective way of providing dental care for medically complex patients. As a recommendation for patients with ALS is to have oxygen storage tanks and attempt to place the dental chair in an upright position to prevent them from choking.

Presented at the 99th Annual Session of the Greater New York Dental Meeting in 2023.