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May 8th, 2:15 PM - 5:00 PM

Mesializing Teeth to Prevent Restorative Spance using BENEfit System and Orthodontic Microimplants

Ava Vakili University of the Pacific

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OKU Sutro Excellence Day Project Cover Sheet

Project Title

Mesializing Teeth to Prevent Restorative Space using BENEfit System and orthodontic microimplants

Full name(s) and class year(s) of all project collaborators

Example: Jane Smith, DDS 2022; John Smith, DDS 2022

Ortho Residency 2024

Project Category

Residents - Orthodontics

Enter your abstract text here (max 300 words)

Miqueas, a 22 year old male, patient reported to the orthodontic clinic with a chief concern of malalignment. He is missing four maxillary teeth and two mandibular teeth, all lost due to caries in his teens with no space maintenance. His general dentist recommended different restorative options such as removable partial denture, implants or bridges to replace the space or alternately get an orthodontic consult to discuss possibilities of closing the spaces.

A bone-anchored mesializer appliance called the PSM BENEfit system was delivered to mesialize and reduce the amount of restorative space from four to two future implants in the maxillary arch. Two microimplants were placed in the midpalatal suture and the appliance was custom bent chairside and is activated at each visit. The goal of the mesializer is to protract tooth #1 to create one molar tooth width for a future restoration and by protracting #15 and #16 to create one premolar tooth width restorative space for a future restoration. In the mandibular arch, two indirect anchorage microimplants were placed in keratinized tissue between tooth #28 and 29 and #21 and 22. The goal of the microimplants in the lower arch are to provide indirect anchorage to the anterior teeth to help with space cloursure in the lower arch and prevent any anchorage loss. The goal in the lower arch is with assistance from the microimplants to close all remaining and prevent any future implants.

I would like to thank Dr. Bryan Payne for her diligent supervision with this case and helping deliver the appliance and microimplants. Lastly, I would like to thank my patient, Miquas, for being incredibly compliant with his treatment and appointments – it has been a pleasure to be his treating resident.

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Mesializing Teeth to Prevent Restorative Space using BENEfit System and Orthodontic Microimplants

Orthodontic Resident: Ava Vakili DDS; Faculty: Dr. Brian Payne DDS, MS

Initial Intraoral Photos & Panoramic Radiograph from 04/29/2022

















- 22 year old male
- Chief Complaint: Patient would like to align teeth and close spaces for future restorations

Treatment Plan:

- Use the PSM BENEfit System to mesialize and reduce the amount of restorative space from four to two future implants in the maxillary arch
- Place microimplants in the mandibular arch to close all edentulous spaces
- Work with restorative dentist for the future implant placement and restoration

MAXILLARY ARCH:

- Two microimplants were placed in the midpalatal suture and the appliance was custom bent chairside and activated at each visit
- Protract tooth #1 to create one molar tooth width for a future restoration and protract #15 and #16 to create one premolar tooth width restorative space for a future restoration.

MANDIUBULAR ARCH:

 Two indirect anchorage microimplants were placed in keratinized tissue between tooth #28 and 29 and #21 and 22 to close all posterior edentulous space



BENEfit System (mesializer)

Progress Photos 02/2024













