## Reflecting on a Functional and Aesthetic Lip Prosthesis Restoring Oral Continence

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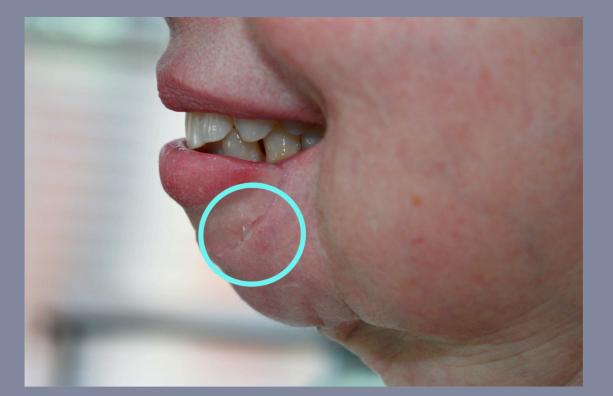
















Temporary bridge fabricated by Dr. Jorge Gonzalez, DDS





## Design adaptations

In the first version of the lip prosthesis, the patient's range of soft tissue movement along the lateral margins posed some challenges. I attempted to bridge the two edges of the remaining vermillion line together which resulted in a wider prosthesis. While stationary, the device blended well with the patient's remaining lip and restored fullness across the entirety of the lower lip. However, when the patient attempted to make more extreme facial expressions or pronounce words that required pursing the lips, the magnets detached. In the second version the lateral margins were kept much shorter and remained attached with all facial movements.

## Dental materials as a solution for oral incontinence

Patient previously wore what she called a "chin diaper" to absorb saliva that was unable to be diverted and swallowed. Originally, the patient was given waterproof adhesive to apply along the inferior margin to aid in controlling the saliva. However, after about an hour, the adhesive had little to no effect. The need for a saliva-proof barrier led to a deeper look into easily accessible dental adhesives like Poligrip and Fixodent. It was discovered that Poligrip had a more desirable texture and thickness that would serve our purposes. It was used to fill small openings under the temporary bridge to close the space between the dental appliance and oral mucosa. The patient reported comfortably using the Poligrip for about six hours. Additionally, Orthosil—a silicon orthodontic wax—was tested to see if the same results could be achieved with a product that was easier for the patient to clean at the end of the day. The orthodontic silicone wax was able to divert the saliva as effectively as the Poligrip and the patient preferred the

maintenance regimen of the silicone wax to the denture adhesive. The use of additional waterproof adhesive was no longer needed to prevent leaking around the margins of the external lip prosthesis.

## Night prosthesis

The patient reported wearing the prosthesis at night. When the prosthesis was worn overnight, the patient noticed a significant improvement in dryness of mouth and comfort. A prosthesis was then made to be worn solely during the night to better preserve the definitive one.