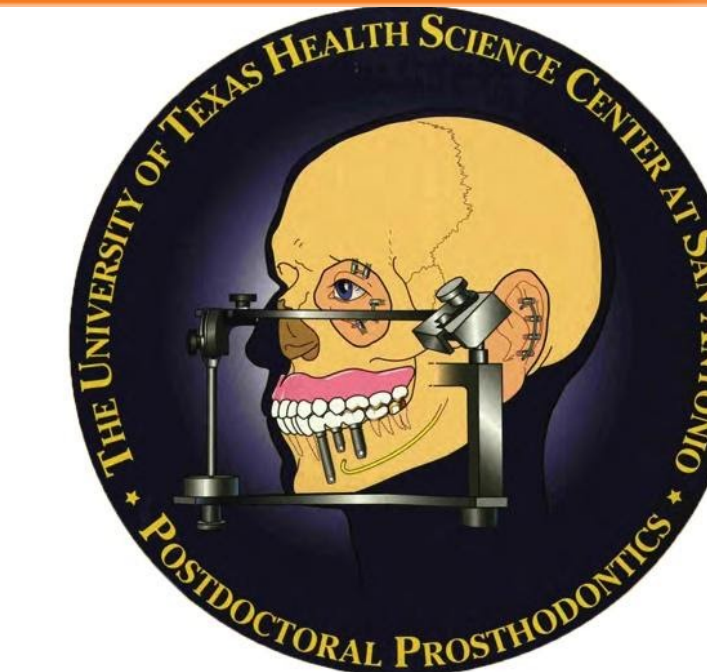


The Marius Bridge: Fixed, yet Detachable

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Background

The complete arch fixed implant-supported prosthesis (CAFIP) is well accepted as a successful treatment option for the edentulous arch. However, the maxillary CAFIP has potential drawbacks, including difficulty performing oral hygiene, limitations in restoring lip support, and difficulty with phonetics. An alternative to the CAFIP is an overdenture. Patient acceptance of an overdenture can be problematic because of palatal extension and movement of the prosthesis during function. The Marius bridge exists as an alternative to both the CAFIP and overdenture, consisting of a bar with an altered path of insertion, and a superstructure with horizontal attachments for prosthesis retention.

Case Presentation

- Chief concern: difficulty eating and due to loss of teeth and pain.
- Severe wear and chipping of anterior teeth.
- Class 3 dental malocclusion anteriorly with an anterior crossbite from #6-11. L
- Inappropriate occlusal vertical dimension.
- #1 and #14 are supraerupted.
- Fair oral hygiene, localized BOP, normal probing depths.
- Favorable periodontal prognosis.
- Anatomic expectations for both maxillary and mandibular complete dentures are poor.

Treatment Plan

- Full-mouth extractions and maxillary/mandibular immediate dentures
- Four months: 6 mandibular implants were placed, interim mandibular CAFIP.
- Left and right open maxillary sinus lifts.
- 6 maxillary implants were placed, interim maxillary CAFIP.
- Maxillary Marius bridge: poor hygiene and phonetics with the interim CAFIP.



Figure 1 Patient at initial presentation



Figure 2 Final prostheses



Figure 3 Intaglio view of prosthesis



Figure 4 Occlusal view of bar



Figure 5 Occlusal view of prosthesis

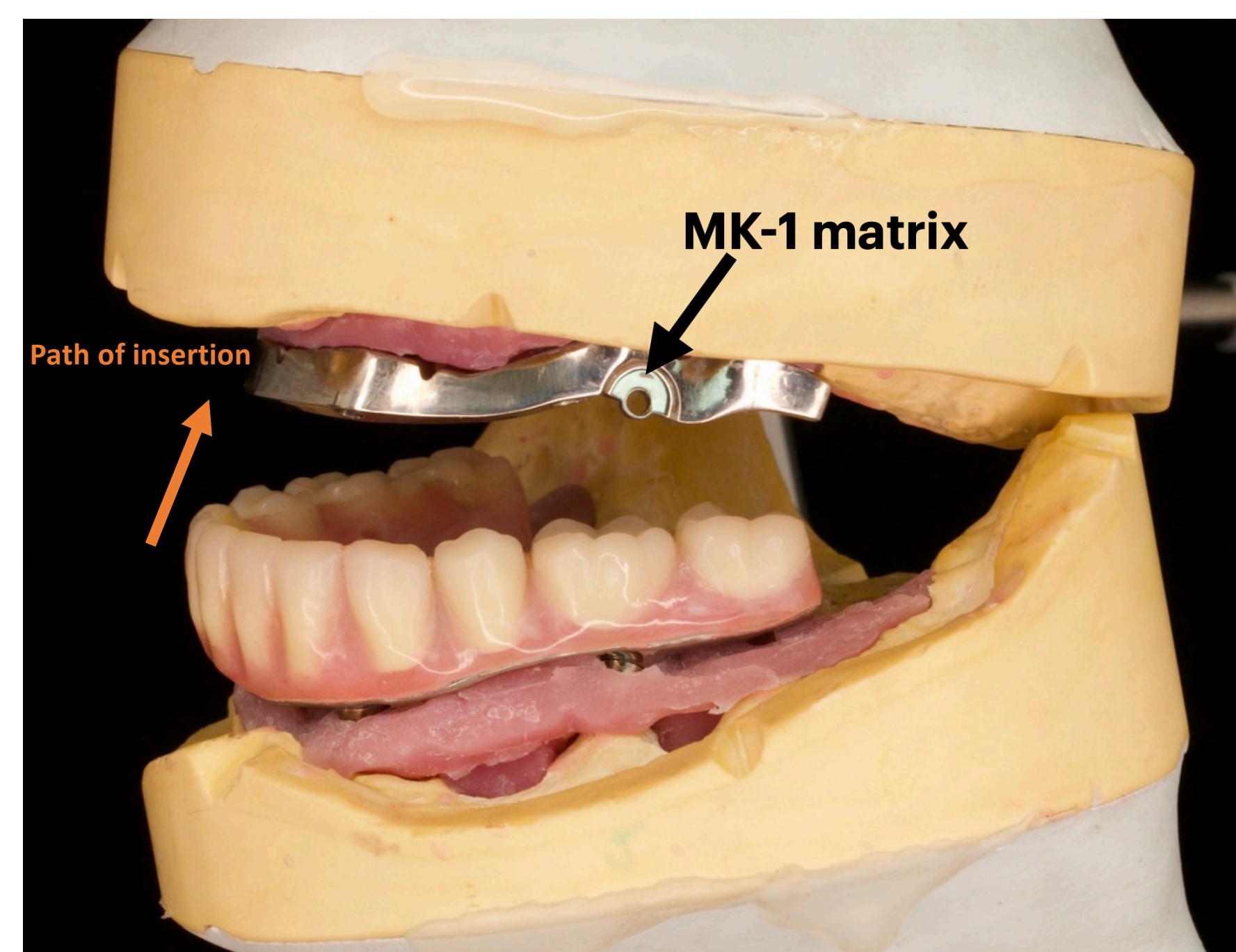


Figure 6 Left lateral view of bar

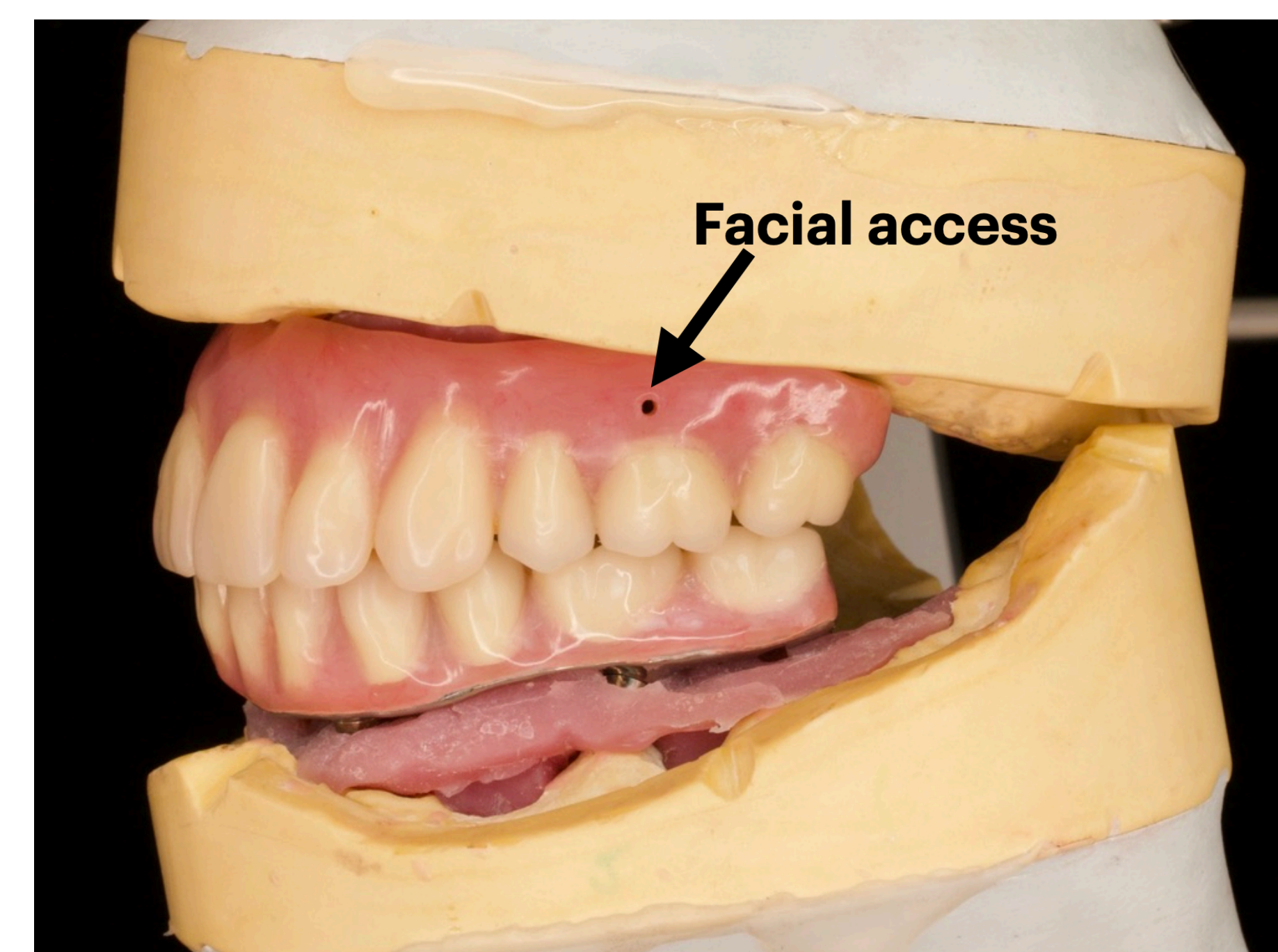


Figure 7 Left lateral view of prosthesis

What is a Marius bridge?

- Named after the first patient treated with this prosthesis
- Implant connector bar-retained
- Entirely implant-supported complete overdenture
- Utilizes an altered path of insertion anteriorly
- Milled titanium meso- and superstructure with approximately 25° angulation (Fig. 6)
- Friction and intimacy between the two structures doesn't allow for movement between them
- MK1 attachments posteriorly that can be disengaged with a small tool via the facial access (Fig. 7)

Conclusion

The Marius bridge is an effective full-arch fixed implant-supported prosthesis for the edentulous maxilla. Although the prosthesis is removable by the patient for hygiene, it is perceived as a fixed, non-resilient restoration, while simultaneously providing the lip support, esthetics, and phonetics of a removable prosthesis.

References

1. Fortin Y, Sullivan RM, Rangert BR. The Marius Implant Bridge: Surgical and Prosthetic Rehabilitation for the Completely Edentulous Upper Jaw with Moderate to Severe Resorption: A 5-Year Retrospective Clinical Study. *Clin Implant Dent R*. 2002;4(2):69-77

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