

Optimizing Outcome with Palatally placed Implant in the esthetic zone: A Clinical Case

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Introduction

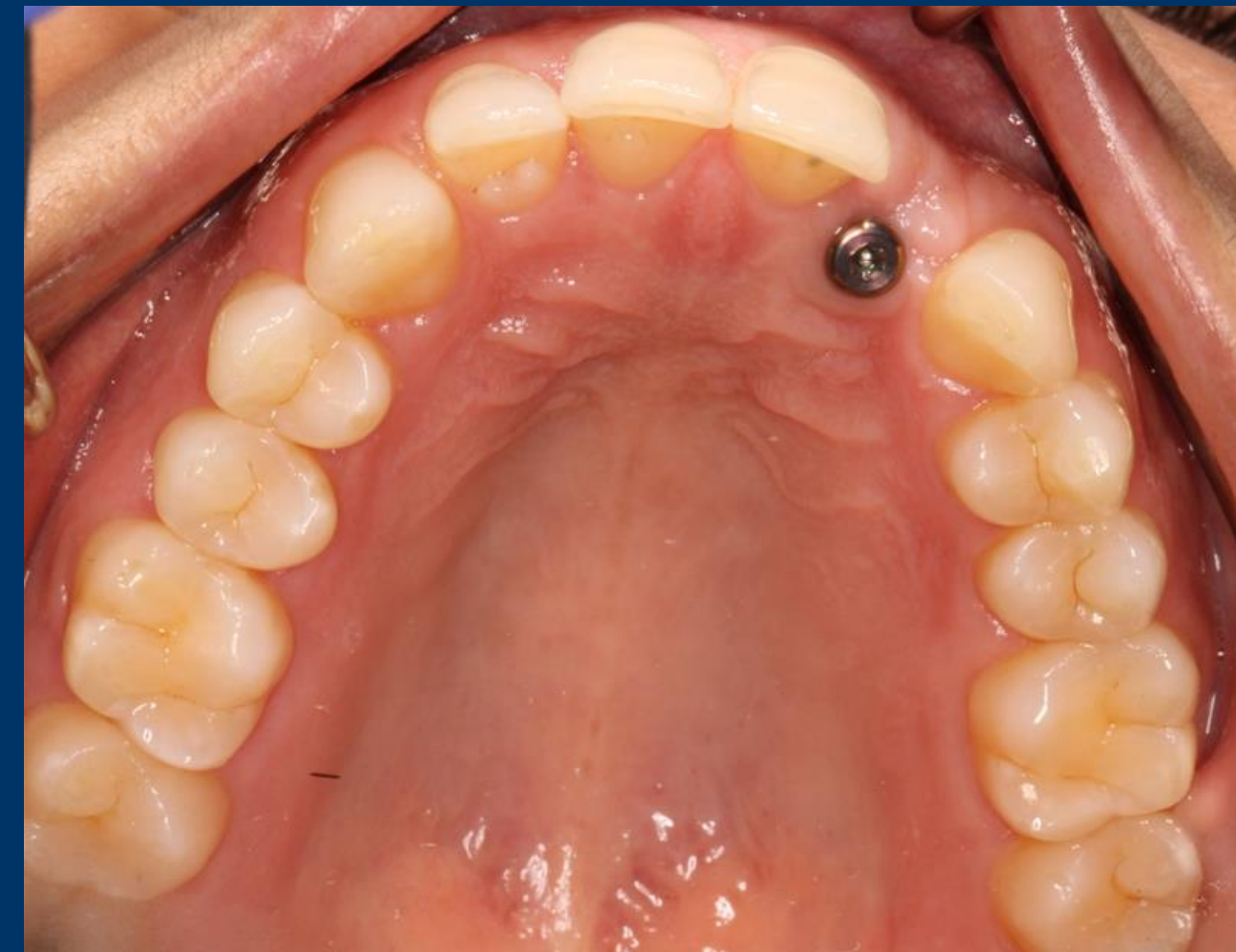
Proper implant placement in the esthetic zone is essential for achieving optimal functional and esthetic results. Implants positioned too palatal can lead to esthetic concerns such as poor buccal contour or functional deficits.

Aim

To address the challenges and solutions involved in restoring a dental implant placed too palatal in the esthetic zone.

Case Presentation

A 41-year-old female patient presented with a dental implant replacing maxillary left lateral incisor that was placed too palatal, potentially affecting the esthetic and functional outcome. The treatment plan included soft tissue management, emergence profile development with provisional crown fabrication, and a customized final impression approach. The soft tissues were relieved and moved around the implant with a surgical blade. A chair-side screw-retained provisional crown was fabricated to train and develop the restoration's emergence profile and improve the esthetic outcome. The final prosthesis consisted of a screw-retained porcelain-fused-to-metal crown that replicated natural tooth morphology and achieved a more balanced esthetic result.



Pre-operative clinical photo with the 2.2 implant healing abutment shows the palatal position



Mesial and distal small relief incisions around 2.2 implant while preserving the papilla



PMMA screw-retained provisional crown



2.2 Provisional implant-supported crown immediately after insertion



2.2 Provisional implant-supported crown after 8 weeks of insertion and adjustments



soft tissue emergence profile after 8 weeks around provisional crown



open-tray impression coping with composite material capturing the emergence profile



6-week follow up after insertion of 2.2 PFM implant-supported crown

Discussion

The restorative approach successfully improved the implant site's esthetics. The emergence profile was optimized, leading to a more natural appearance. The patient expressed high satisfaction with the outcome, and there were no significant complications during follow-up.

Conclusion

Correcting a palatally positioned implant in the esthetic zone requires a comprehensive approach involving soft tissue management and emergence profile development. This case demonstrates that with appropriate techniques, effective esthetic outcomes can be achieved even when initial implant placement is suboptimal.

References

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