

Immediate installation with gingival flap

Immediate placement of a Fixture 4.5 ST after longitudinal root fracture of right central incisor (11). Two-stage surgery performed due to lack of initial stability. At the abutment surgery, a buccal flap elevation with mucosal reposition is made to improve the esthetic result.



1. Buccal root fracture diagnosed with an excessive pocket depth.



2. X-ray showing apical destruction and indicating a longitudinal root fracture.



3. A buccal flap is raised before careful extraction and immediate implant installation.



4. The correct direction for the implant insertion is outlined with a Guide Drill.



5. The drilling procedure is continued and the insertion path is widened with the use of Tiger Drill.



6. Correct depth is verified with Depth Gauge.



7. Ready for implant installation of a Fixture 4.5. Saline at hand for irrigation.



8. Implant installation with Fixture Adapter, Long, attached to the contra angle. Maximum speed 20 rpm and heavy irrigation.



9. Buccal view of the installed fixture showing the neck situated at the marginal bone level.



10. Occlusal view demonstrates a small gap surrounding the fixture. The primary stability is dubious.



11. Due to the unstable situation, a stage protocol is chosen. Tight suturing for full cover of the fixture site.



12. X-ray after immediate installation surgery.



13. After a healing period of four months, a gray shadow is visible through the thin buccal mucosa. A decision is taken to improve this situation in conjunction with abutment installation.



14. Buccal view after flap elevation and Healing Abutment installation.



15. The flap is gingivally repositioned and sutured tightly to improve the buccal mucosal thickness.



16. Final result after cementation of a porcelain fused to metal crown.



17. X-ray of 2-year follow-up.