

An Awrel Case Study:

Using an Angled Screw for Retained Implant Restoration and Leveraging a HIPAA-Compliant Texting Solution to Enhance Referral, Planning, Coordination and Documentation

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This case study demonstrates the planning and execution of a retrievable single restoration in the esthetic zone. Instead of using a cement-retained crown to a custom abutment, we used angled screw access. The case highlights the steps associated with the procedure and its positive outcome. It also identifies benefits of using a HIPAA-compliant texting application to efficiently and securely communicate with the referring dentist, lab and patient.



Fig 1





Fig 1 and 2. A 35-year-old male presented with a chipped incisal edge on tooth #8 and a horizontal fracture of tooth number #9. The patient was referred by his general practitioner dentist for a surgical evaluation for extraction of #9 and possible immediate placement of a dental implant.

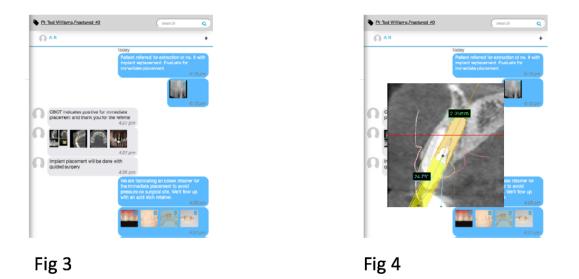


Figure 3. This dentist used the Awrel HIPAA-compliant texting application to make the referral, eliminating the need to place a phone call, send an email or log into a Web portal to refer the patient. He simply opened the Awrel app in his cell phone and texted information about the patient. Within minutes, the team replied via text, acknowledging the referral, initiating the planning process, confirming an implant placement, and thanking the dentist for the referral.

The texting app was also used for case planning, documentation and collaboration with the referring dentist and lab. This helped avoid delays associated with information exchange via traditional modes including phone calls, voice mails, emails and portal-based communication.

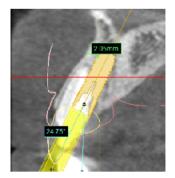


Fig 5

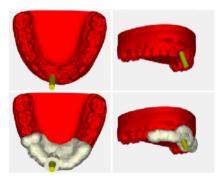




Fig 4, 5 and 6. The CBCT, viewed on Simplant, provided a platform for planning the placement and fabrication of a surgical guide. The CBCT also provided information to plan for an angled-access, screw-retained, implant-supported restoration. Figure 5 illustrates the restoration plan.







Fig 7. A traumatic extraction of #9 was accomplished with the use of periderms and light horizontal rotation with a surgical forcep.

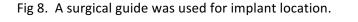




Fig 9



Fig 9. An Essex retainer was placed as an immediate provisional restoration to maintain esthetics, while avoiding contact and pressure on the surgical site.

Fig 10. The implant was exposed and a healing abutment was placed 10 weeks post-surgery.





Fig 11

Fig 12

Fig 12. An open tray impression was made with Dentsply Aquasil Heavy fast set material.



Fig 13

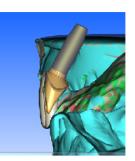


Fig 14

Fig 13 and 14. The Awrel texting app was used to place an order with the dental laboratory for an angled screw-retained abutment and all-ceramic crown. Planning for these materials was also coordinated via text using Awrel.



Fig 15

Fig 16

Fig 15 and 16. We used the Awerl texting application for communication between our office and the dental lab for case design, shade, and a view of work-in-progress for approval. Check-off was also accomplished on the Awrel texting application. Using the app reduced data entry, response time, and the timeline to complete the case.







Fig 17 and 18. Initial placement of the abutment was accomplished with an insertion guide to assure proper orientation to the implant interface.



Fig 19

Figure 19. This shows the abutment and provisional crown in place. In our next newsletter we'll dig deeper into some of the issues associated to this case, including fabrication of the final restoration and assembly of the crown to the abutment.

Key lessons learned:

- A screw-retained restoration can be planned with CBCT
- An angled screw access reduces the risk of fenestration and dehiscence by increasing the distance of the implant from the buccal wall of an osteotomy
- HIPAA-compliant texting can elevate the efficiency, accuracy, security and outcome when used properly to share, collaborate and document patient information
- Information exchanged via text using the Awrel application can be archived not deleted, thereby providing a secure history including digital files, documents and conversations spanning the treatment experience of the patient, clinicians, lab, and, when appropriate, a company representative

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