The combining of art, science and technology in Implant Dentistry has led to ideal patient care with a welcomed increase in practice productivity. While we have the ability to obtain long term implant success rates both surgically and prosthetically with great confidence, being able to reduce the number and complexity of surgeries, healing time and load time has changed the nature of my practice. The ability to achieve high primary stability with minimal volume and density of bone allows for reduced surgery, number of visits and time to teeth. The introduction of the Straumann BLX Implant has allowed me to provide this to my patients with an unexpected significant increase in confidence and practice productivity.

Providing Immediate Implant placement at the time of tooth extraction is not new, but the ability to achieve high primary stability in only 3-4mm of bone with minimal compression at the crest has changed how we provide care to our patients.

In this example: a 68-year-old male with well controlled hypertension presented with his maxillary right central incisor fractured subosseous. (1) Following a CBCT (2) it was determined (by my surgical colleague Dr. Jeffery Ganeles) there was adequate buccal plate and apical bone to provide an immediate implant. A 4.5 x 10mm BLX implant (3) was placed without need to raise a flap and high primary stability was achieved by both tactile and ISQ testing (4,5). The restorative challenge to avoid a removable provisional, provide for "Provisional Guided Tissue Conditioning" and allow the patient to return to life with a fixed restoration must not be taken lightly. These are things that will make or break the long-term result and present restorative doctors with significant concern. Managing provisionalisation of anterior implants is paramount to a successful implant practice. The outcome of extraction and immediate implant placement with ideal primary stability simplified the long-term goal by allowing for placement of an immediate screw retained provisional (6a,b,c,d). After meticulous evaluation to eliminate all centric, excursive, protrusive and possible para-functional occlusion, the patient was sent home with a tooth in place. From a practice management standpoint: from the time the patient was evaluated, referred to the surgical office and returned home with a fixed provisional was under 5 hours and necessitated only one surgery.
At just under 2 months the provisional was removed, digital impression made with an intra-oral scanner (although conventional impressions are certainly acceptable) capturing the soft tissue emergence profile and implant position (7a-e). Digital Impressions were transmitted electronically to the laboratory minimizing the need to fabricate stone models, distortion and cross contamination for the final restoration to be designed.

Due to slight buccal inclination of the screw access in an attempt to minimize encroachment on the buccal plate at time of surgery, a Straumann Variobase Angled Screw Channel was used (8a-e). This abutment provides for ideal alignment of the screw access up to 25 degrees and allow for a screw retained final restoration (9a-c). The selection of this prosthetic component provides ideal biomechanical connection with the BLX implant, ideal biocompatibility of zirconia emerging through the transition zone and high esthetics with porcelain applied facially to the zirconia core.

This treatment allows my practice for culmination of Biomechanics, Biocompatibility and Esthetics with ideal Precision, Productivity and Patient Care. Thank you to Dr. J. Ganeles for the surgical phase of this patient.