

# 1 Introduction

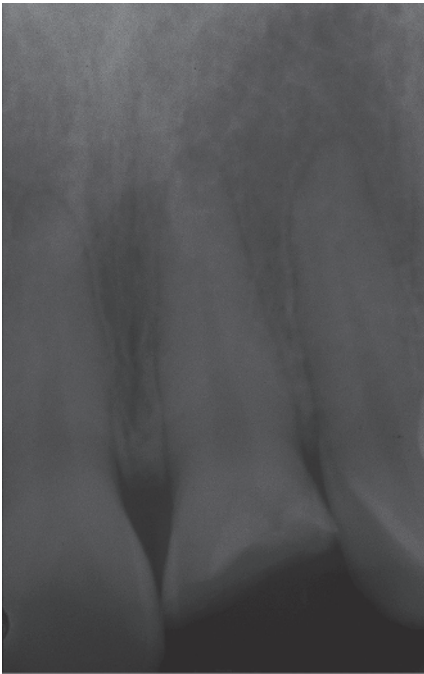
The initial report in the literature regarding the placement of an implant immediately following tooth extraction was published by Schulte in 1976 (Schulte and Heimke 1976). It was not until the early 1990s that the concept was reintroduced in the English-language literature by Lazzara, who illustrated this method of treatment with three case reports (Lazzara 1989). Lazzara's landmark paper provided insight into the future of surgical implant dentistry, with technical aspects that remain critical today. The immediate placement treatment protocol was validated in the literature several years later by Gelb, who reported on a series of fifty consecutive cases followed over a 3-year period, providing a survival rate of 98% (Gelb 1993). Since then, numerous animal studies, human case reports, and several randomized controlled studies have furthered the science of this treatment modality (Figures 1.1–1.3) (Chen, Wilson, et al. 2004; Chen, Beagle, et al. 2009).

An understanding of the clinical and histologic realities of bone resorption that naturally

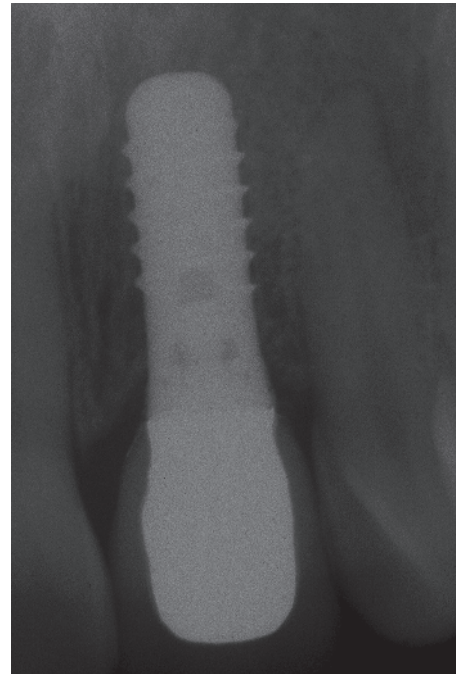
occur following tooth extraction originally led to the concept of placing implants into sockets immediately following tooth extraction. This concept attempted, and still attempts today, to take advantage of the pre-treatment alveolar ridge contours (Chen, Wilson, et al. 2004). Many have noted additional advantages of this technique including reduced treatment visits and costs, simplified restorative care, and improved patient psychological outlook for treatment (Lazzara 1989; Parel and Triplett 1990; Shanaman 1992; Werbitt and Goldberg 1992; Denissen, Kalk, et al. 1993; Schultz 1993; Watzek, Haider, et al. 1995; Missika, Abbou, et al. 1997).

Numerous published works now indicate that outcomes of immediate placement procedures can be equally successful as a delayed approach when initial primary stability is achieved (Barzilay 1993; Schwartz-Arad and Chaushu 1997; Mayfield 1999; Chen, Wilson, et al. 2004; Chen, Beagle, et al. 2009).

The intent of this book is to provide clinicians with essential evidence-based information



**Figure 1.1** Pre-op radiograph of fractured tooth #9.



**Figure 1.3** Final radiograph of immediate implant replacing tooth #9.



**Figure 1.2** Final restoration of immediate implant replacing tooth #9.

necessary to incorporate immediate implant placement into their modality of patient care. Certainly not exhaustive in terms of literature, this text references the classic and contemporary scientific articles that provide the foundation for the art and science of this important

clinical topic. For some, these pages will begin their journey into a fascinating area of implant dentistry, while for others these written words will serve to reinforce and challenge their clinical expertise.

## References

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