Single-tooth replacement is frequently considered in most dental practices. Thoughtful diagnostic treatment planning is required when evaluating endodontic vs implant treatment in order to ensure comfort, esthetics, and longevity for the patient.

The American Association of Endodontists position statement on implants states that, apart from survival rates, components such as the restorability of the tooth, quality of bone, esthetic demands, cost-benefit ratio, and systemic factors should be taken into account when deciding whether to treat the tooth endodontically or to place a single implant.1 One study evaluated the 10-year success rate of 1,175 endodontically treated teeth, and the life table analysis reported that 93% of the teeth survived 10 years after endodontic treatment.2 Further, it was shown that the ability to locate second mesiobuccal canals increased from 53% to 93% when evaluated under a surgical operating microscope.3–7

Technologic and technical advances in endodontics continue to enhance a dental treatment regime that has been universally accepted. These advances include the surgical operating microscope, mechanical titanium instrumentation, hydrodynamic irrigation, mineral trioxide aggregate, bioceramics, CBCT, and microsurgical instrumentation.

It must be stated that dental implants are an extraordinary service and have made possible some treatment options that were never before imagined. The science of osseointegrated implants has advanced considerably with the development of new implant designs, surface characteristics, materials, and methods. High success rates have helped make single-tooth implants a viable and accepted option for tooth replacement. However, a healthy, natural dentition is still the best alternative requested by patients.

Assessing whether to rehabilitate a tooth requiring endodontic treatment or to replace it with an implant involves a challenging and complex decision-making process,7 and all treatment decisions must be evidence-based. When comparable criteria are applied to the outcome, survival rates of endodontically treated teeth and single-tooth implants are similar. A compromised tooth should be managed with a multidisciplinary approach (endodontics, periodontics, and prosthetics), and implants should be reserved for the patient with true end-stage tooth failure. Endodontics, periodontics, and implantology should complement each other, not compete. The overall goal is the long-term health of the patient, using the least invasive treatment method possible, and incorporating function, comfort, and esthetics.

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References