
Editorial



The importance of research in endodontics

Research plays a vital role in advancing the field of endodontics, directly impacting the quality of care patients receive. As a branch of dentistry that focuses on diagnosing and treating diseases of the dental pulp and periradicular tissues, endodontics relies heavily on scientific evidence to guide clinical decision-making and improve treatment outcomes.

One key contribution of research in endodontics is developing and refining techniques and materials. Innovations like rotary and reciprocating instrumentation systems, biocompatible sealers, and regenerative endodontic procedures are all products of rigorous scientific investigation. These advancements have increased the success rates of root canal therapy, improved patient comfort, and reduced treatment times.

Research also plays a critical role in understanding the biological mechanisms of pulp and periapical diseases. By exploring microbial activity, host immune responses, and healing processes, researchers can design more effective protocols for disinfection and tissue regeneration. This knowledge is essential for shifting from traditional to biologically driven approaches in treatment planning.

Furthermore, clinical studies help identify factors that influence treatment outcomes, such as the impact of operator experience, anatomical variations, and patient-specific considerations. Evidence-based guidelines, informed by high-quality research, support clinicians in making sound decisions, leading to more predictable and successful results. Recently, the ESE (European Society of Endodontics) published in *iEJ* evidence-based guidelines for endodontic treatment and many position statements about different topics based on clinical expertise and systematic reviews.

In conclusion, research in endodontics is indispensable for the continuous improvement of clinical practice. It fosters innovation, deepens our understanding of disease processes, and ensures that treatment approaches remain effective, safe, and patient-centered. Without ongoing research, the field would stagnate, and patients would be deprived of the best possible care.

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