

## IADR Abstract Archives

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> > > Vitalion and CBCT Use in Restorative Dental Practice

### Vitalion and CBCT Use in Restorative Dental Practice

**Objectives:** This study evaluates the usage, perception, and effectiveness of classical and modern diagnostic methods in restorative dentistry in North Macedonia, focusing on the Vitalion electric pulp tester and CBCT technology.

**Methods:** A cross-sectional survey was conducted using an anonymous online questionnaire among 60 practicing dentists in Macedonia. The questionnaire assessed frequency of use, satisfaction, and challenges related to diagnostic tools such as visual examination, radiography, Vitalion, DIAGNOdent, and CBCT.

**Results:** Visual examination and radiographic diagnostics were most frequently used (90.5%). Vitalion was used by 52.4%, mostly occasionally (66.7%). DIAGNOdent and CBCT were less commonly used due to cost and limited availability. Satisfaction scores were highest for visual exam (5.0) and radiography (4.0), while Vitalion and DIAGNOdent scored lower, indicating a need for additional training. Vitalion was primarily used in pre-endodontic assessments and suspected pulp necrosis or trauma. Dentists reported occasional false positives/negatives, particularly in restored teeth, young patients, and impacted teeth. Most participants (71.4%) expressed a need for further education and reported using some form of digital technology in practice. Diagnostic challenges included limited visibility (66.7%) and restricted equipment access (33.3%).

**Conclusions:** Integrating classical and modern diagnostic methods, including CBCT, enhances accuracy in restorative dental diagnostics. Digital tools like CBCT and digital radiography improve decision-making while reducing radiation exposure. Continued professional development and improved access to advanced diagnostic technologies are crucial for advancing dental care quality in Macedonia.

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#### SESSION INFORMATION

Poster Session

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