Lesion Sterilization and Tissue Repair Use by Pediatric Dental Providers

Ted Rico, DDS

Research mentor and other contributors:

M.K Geneser, DDS; O. Rysavy, MS; M. Matkovich, MS

Objective:

The aim of this study was to assess the frequency of LSTR use among pediatric dentists, explore barriers to its adoption, and identify factors influencing its utilization.

Methods:

A survey consisting of 19 questions was distributed via email to 6,636 members of the AAPD. The survey gathered demographic data, evaluated the current use of LSTR, and examined perceived barriers. Bivariate analyses using chi-squared and Fisher's exact tests examined associations between provider characteristics and LSTR usage.

Results:

A total of 314 pediatric dentists completed the survey, with 26% reporting LSTR use. Bivariate analysis revealed that workplace setting was significantly associated with LSTR adoption (p = 0.010); 50% of academic institution practitioners used LSTR compared to 26% in private practice. LSTR was primarily used for children aged 5–6 years (77%) and most commonly on primary second molars (54%). Clindamycin, metronidazole, and ciprofloxacin was the most frequently used medicament (45%), with 57% using LSTR less than once per month. Among non-users (74%), the main barriers to LSTR adoption were lack of training (69%) and a preference for traditional treatments like pulpectomy or extraction (32%). Majority of the respondents who reported never using LSTR expressed interest in continuing education courses (85%).

Conclusion:

LSTR remains underutilized among pediatric dentists due to lack of training and/or a preference for traditional treatments. The variability in usage highlight the need for targeted training programs, and broader dissemination of evidence-based guidelines to address knowledge gaps and improve confidence in its clinical use for necrotic primary molars.