Esthetic restoration of missing primary centrals using glass-fibers ribbon and composite

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Missing upper anterior deciduous teeth may be caused by trauma or due to extraction as a result of extensive carious attack. The premature loss of anterior dentition may affect eating, speech development and behavioral problems. The parents' attitude toward restoration of damaged, unaesthetic or missing anterior teeth is very positive and may influence the final treatment. Several attempts to restore missing anterior teeth using polyethylene fibers were published with positive results. The use of glass fibers as a frame for restoration of missing permanent teeth showed success rate of more than 90% after 5-20 years. The use of glass fibers in pediatric dentistry poses several problems to the clinician: 1. the small size of the crowns that reduce the area of bonding. 2. the adhesive procedure which is affected by the thick a-prismatic layer of the deciduous teeth. 3. the length of the chair side procedure that is affected by the child age and tranquility. The aim of the study was to establish the optimal bonding procedure and bonding material for adhesion of glass fibers frame to deciduous teeth and to develop a method of preparing a preformed rigid frame for restoring missing upper anterior deciduous teeth. The presentation will show the results of the laboratory study and the clinical implication of the procedure with long follow-up periods.

Biography

Uri Zilberman received his DMD degree in 1983 from the Dental Faculty, Hebrew University, Jerusalem, and his PhD degree in 2000 in Basic Science, Dental Anthropology. He specialized in Pediatric Dentistry from 1990 and has been treating children and adolescents for the last 30 years. He is the Head of the Pediatric Dental Unit at Barzilai Medical University Center. He is the Senior Lecturer at the Faculty of Health Science, Ben-Gurion University of the Negev, Beersheba and at the Dental Faculty, Hebrew University, Jerusalem. He teaches courses on Dental Morphology for first year Dental students and Pathophysiology of the Oral Cavity for fourth year Pharmacology students. He has published more than 50 research papers and chapters in Pediatric Dentistry and Dental Anthropology. His main interests are new dental procedures and devices for pediatric dentistry, hereditary disorders and their effect on tooth development, and the use of biomimetic materials in pediatric dentistry, like glass-ionomers cements. He has developed new dental procedures and a patented new dental device for pediatric dentistry.

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