International Journal Dental and Medical Sciences Research
Volume 7, Issue 6, Nov – Dec 2025 pp 240-249 www.ijdmsrjournal.com ISSN: 2582-6018

Clinical Comparison of Glass Ionomer Strip Crowns, Composite Strip Crowns, and Edelweiss Crowns in Primary Maxillary Incisors: 9-Month Prospective Randomized Trial

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Date of Submission: 15-12-2025 Date of Acceptance: 25-12-2025

ABSTRACT
Purpose: The purpose of this study was to clinically compare the performance of three types of esthetic crowns in primary maxillary anterior teeth: glass ionomer strip crowns (GISC), composite strip crowns (CSC), and Edelweiss crowns. **Methods**: Sixty-six children (aged 3-5 years) with early childhood caries (ECC) requiring full-coronal restorations in anterior maxillary primary teeth were included. In a randomized controlled design, 22 subjects were assigned to each of the three groups (n=66): GISC, CSC, and Edelweiss. Clinical parameters were evaluated using modified FDI criteria at baseline, 3, 6, and 9 months. Parameters included biological (secondary caries, hypersensitivity), functional (fracture, marginal adaptation), and esthetic (color match, surface lustre) domains. Parental satisfaction was recorded via a 5-point Likert scale. Data were statistically analyzed using Friedman test (intragroup) and Kruskal-Wallis test (intergroup). **Results**: Edelweiss crowns showed significantly better color stability and surface lustre than GISC and CSC at 6 and 9 months ($P<0.05$). GISC demonstrated higher marginal breakdown and wear. No significant difference in hypersensitivity or secondary caries was noted between groups. Parental satisfaction was highest in Edelweiss group. **Conclusions**: Edelweiss crowns exhibited superior clinical performance in terms of esthetics and parental satisfaction over a 9-month period. Composite strip crowns offered comparable biological results, while GIC strip crowns had inferior outcomes functionally and esthetically.
KEYWORDS: Early Childhood Caries; Esthetic Crowns; Strip Crowns; Edelweiss; Primary Incisors

I. INTRODUCTION

Early childhood caries (ECC) (2014) is the presence of one or more decayed (non-cavitated or cavitated), missing (due to caries), or filled tooth surfaces in any primary tooth in a child under six years of age (AAPD, 2014). ECC continues to be a significant public health issue due to its multifactorial etiology and its effect on the child's well-being, including pain, nutritional issues, speech problems, and psychosocial development[1].

When anterior maxillary primary teeth are affected by ECC, restoration becomes challenging. Esthetic full-coronal restorations are often indicated when multiple surfaces are involved or after pulp therapy. Glass ionomer strip crowns (GISC), composite strip crowns (CSC), and the more recent Edelweiss prefabricated crowns are among the available options. These restorations vary in handling characteristics, esthetic outcomes, cost, and durability[2–5]. However, clinical evidence comparing their performance is limited.

This prospective, randomized clinical trial aimed to compare the biological, functional, and esthetic performance of GISC, CSC, and Edelweiss crowns over 9 months using modified FDI criteria and to assess parental satisfaction using 5-point Likert scale.

II. METHODS

Selection of participants. Patients visiting the Department of Pediatric & Preventive Dentistry for routine treatment were recruited. The main criteria for inclusion were: three- to five-year-old healthy and cooperative children with maxillary incisors requiring complete coronal restoration due to multiple carious surfaces; at least 50% remaining coronal structure; minimum 1 mm of sound dentin after caries removal. They were evaluated on the basis of modified FDI Criteria, 2010, that is functional, biological, esthetic parameters. Criteria for exclusion were: teeth with clinical signs of pathology or mobility; lack of informed consent.

Sample size estimation was done by using GPower software (version 3.0). Sample size was estimated for t test. The initial sample size of 73 was found to be sufficient for an alpha of 0.05, power of 80%, 0.40 as effect size (large effect size). F tests - ANOVA: Fixed effects, omnibus, one-way; Analysis: A priori: Compute required sample size; Input: Effect size f = 0.40; α err prob =

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Volume 7, Issue 6, Nov – Dec 2025 pp 240-249 www.ijdmsrjournal.com ISSN: 2582-6018

0.05Power (1-β err prob) = 0.80; Number of groups = 3; Output: Noncentrality parameter λ = 10.5600000; Critical F = 3.1428085; Numerator df = 2; Denominator df = 63;Total sample size = 66; Actual power = 0.8180744.

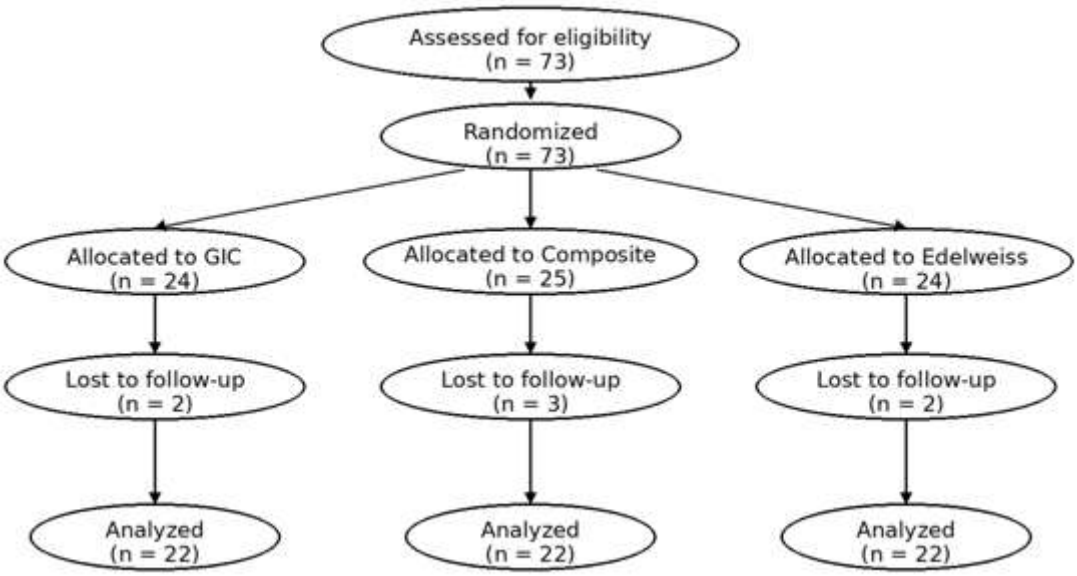

Figure 1: Flow diagram of patient recruitment

Study design. A total of 73 children, aged 3–5 years, requiring full-coverage restorations in the maxillary incisors were included in the study. The subjects were randomly divided into three groups. 7 children were lost to follow-up, thus reducing the final sample size to 66. This study was conducted as a prospective, randomized clinical trial over a period of nine months to evaluate and compare the functional, esthetic, and biological performance of three different types of esthetic crowns in primary maxillary anterior teeth of pediatric patients:Group A: Glass ionomer cement (GIC) strip crowns, Group B: Composite resin strip crowns, Group C: Edelweiss prefabricated composite crowns.

Randomisation. A simple randomized sampling method was used for participant allocation in the study. Color-coded envelopes were prepared and shuffled thoroughly, and each child was assigned to a treatment group by selecting an envelope at random. This approach ensured unbiased distribution and minimized selection bias throughout the sampling process.

Clinical procedures. Group A (GISC): Tooth preparation included incisal and proximal reduction. A celluloid crown form was selected and vented. GIC was inserted and the crown was seated. After setting, the celluloid form was removed and the restoration polished. Group B (CSC): Following similar preparation, etching (37% phosphoric acid) and bonding agent application were done. The celluloid crown was filled with composite, seated, and cured. The crown was peeled off, followed by finishing and polishing. Group C (Edelweiss): Conservative caries removal was followed by crown selection. The inside surface was roughened and bonded. Tooth was etched, bonded, and composite placed inside the crown. The crown was seated and cured as per manufacturer's instructions.

Clinical assessment. All restorations were evaluated using modified FDI criteria at four time points: baseline, 3, 6, and 9 months. Functional (fracture of restoration, marginal adaptation, proximal contact, form and contour, occlusion and wear), biological (caries at restoration margin, dental hard tissue defects, hypersensitivity) and esthetic (marginal staining, color match, surface lusture) parameters were assessed. Parental satisfaction was also recorded using a 5 point Likert scale questionnaire.

Statistical analysis. The Friedman test was used to assess changes within each crown group over time because the same children were evaluated at baseline, 3, 6, and 9 months. Since these repeated measurements were related and did not require a normal distribution, the Friedman test was

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appropriate for detecting whether the clinical performance of GIC, composite, and Edelweiss crowns changed significantly across the follow-up period. For comparisons between the three crown types at each time point, the Kruskal–Wallis test was applied. This test is suitable for independent groups and non-normal data, and works by ranking all scores together to determine whether the differences between groups are statistically meaningful. Together, these non-parametric tests allowed accurate evaluation of both changes within each group over time and differences between the three crown types at each stage of the study.

III. RESULTS

		GIC strip Crown (n=22)					Composite strip crown (n=22)					Edelweiss crown (n=22)					P value
Scores		1	2	3	4	5	1	2	3	4	5	1	2	3	4	5	
FUNCTIONAL (percentage of crowns)																	
Fracture of restoration	3rd month	45.45	36.36	18.18	0	0	100	0	0	0	0	100	0	0	0	0	<0.001
	6th month	18.18	45.45	36.36	0	0	50	50	0	0	0	72.72	27.28	0	0	0	
	9th month	0	9.09	90.90	0	0	0	100	0	0	0	45.45	54.54	0	0	0	
Marginal adaptation	3rd month	59.09	40.90	0	0	0	81.82	18.18	0	0	0	90.90	9.10	0	0	0	<0.001
	6th month	45.45	54.55	0	0	0	59.09	40.90	0	0	0	72.72	27.28	0	0	0	
	9th month	36.36	45.45	18.18	0	0	54.55	45.45	0	0	0	62.62	36.36	0	0	0	
Proximal contact	3rd month	45.45	45.45	9.10	0	0	50	50	0	0	0	90.90	9.10	0	0	0	<0.001
	6th month	27.28	54.55	18.18	0	0	36.36	63.64	0	0	0	72.72	27.28	0	0	0	
	9th month	0	45.45	54.55	0	0	0	100	0	0	0	45.45	54.54	0	0	0	
Form and contour	3rd month	45.45	54.55	0	0	0	18.18	81.82	0	0	0	90.90	9.10	0	0	0	<0.001
	6th month	27.27	54.55	18.18	0	0	18.18	81.82	0	0	0	72.73	27.27	0	0	0	

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	9th month	0	63.64	36.36	0	0	0	100	0	0	0	50	50	0	0	0	
Occlusion and wear	3rd month	62.64	36.36	0	0	0	72.72	27.28	0	0	0	100	0	0	0	0	<0.001
	6th month	27.28	72.72	0	0	0	18.18	54.55	27.	0	0	62.64	54.55	0	0	0	
	9th month	0	22.72	77.28	0	0	0	72.72	27.	0	0	45.45	54.54	0	0	0	

Table 1: Comparison of functional properties between GIC strip crowns, Composite strip crowns, edelweiss crowns

		GIC strip Crown (n=22)					**Composite strip crown (n=22)**					**Edelweiss crown (n=22)**					**P value**
Scores		1	2	3	4	5	1	2	3	4	5	1	2	3	4	5	
BIOLOGICAL (percentage of crowns)																	
Caries at restoration margin	3rd month	100	0	0	0	0	100	0	0	0	0	100	0	0	0	0	1.000
	6th month	100	0	0	0	0	100	0	0	0	0	100	0	0	0	0	
	9th month	100	0	0	0	0	100	0	0	0	0	100	0	0	0	0	
Dental hard tissue defect	3rd month	100	0	0	0	0	100	0	0	0	0	100	0	0	0	0	1.000
	6th month	100	0	0	0	0	100	0	0	0	0	100	0	0	0	0	
	9th month	100	0	0	0	0	100	0	0	0	0	100	0	0	0	0	
Hypersensitivity	3rd month	100	0	0	0	0	100	0	0	0	0	100	0	0	0	0	1.000
	6th month	100	0	0	0	0	100	0	0	0	0	100	0	0	0	0	
	9th month	100	0	0	0	0	100	0	0	0	0	100	0	0	0	0	

Table 2: Comparison of biological properties between GIC strip crowns, Composite strip crowns, edelweiss crowns

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		GIC strip Crown (n=22)					Composite strip crown (n=22)					Edelweiss crown (n=22)					P value
Scores		1	2	3	4	5	1	2	3	4	5	1	2	3	4	5	
ESTHETIC (percentage of crowns)																	
Marginal staining	3rd month	62.64	36.36	0	0	0	100	0	0	0	0	22.28	77.72	0	0	0	<0.001
	6th month	27.28	72.72	0	0	0	50	50	0	0	0	0	100	0	0	0	
	9th month	0	100	0	0	0	50	50	0	0	0	0	100	0	0	0	
Color match	3rd month	100	0	0	0	0	100		0	0	0	81.82	18.18	0	0	0	<0.001
	6th month	100	0	0	0	0	81.82	18.18	0	0	0	27.27	54.55	18.18	0	0	
	9th month	100	0	0	0	0	81.82	81.18	0	0	0	0	63.64	34.36	0	0	
Surface lusture	3rd month	59.09	40.90	0	0	0	81.82	18.18	0	0	0	90.90	9.10	0	0	0	<0.001
	6th month	45.45	54.54	0	0	0	59.09	40.90	0	0	0	72.72	27.28	0	0	0	
	9th month	36.36	45.45	18.18	0	0	54.54	45.45	0	0	0	63.64	36.36	0	0	0	

Table 3: Comparison of esthetic properties between GIC strip crowns, Composite strip crowns, edelweiss crowns

		Very Unsatisfied	Unsatisfied	Neutral	Satisfied	Very Satisfied	P value	Significance
Appearance	Edelweiss	0 (0%)	0 (0%)	01 (4.55%)	10 (45.45%)	11 (50.00%)		

	Composite	0 (0%)	0 (0%)	05 (22.72%)	12 (54.45%)	05 (22.72%)	0.001	Significant
	GIC	02 (9.10%)	04 (18.18%)	10 (45.45%)	06 (27.27%)	0 (0%)		
Color	Composite	0 (0%)	0 (0%)	0 (0%)	10 (45.45%)	12 (54.55%)	0.001	Significant
	Edelweiss	0 (0%)	0 (0%)	0 (0%)	15 (68.18%)	7 (31.82%)		
	GIC	0 (0%)	05 (22.72%)	08 (36.36%)	07 (31.82%)	2 (9.10%)		
Size	Composite	0 (0%)	0 (0%)	02 (9.10%)	10 (45.45%)	10 (45.45%)	0.001	Significant
	Edelweiss	0 (0%)	0 (0%)	10 (45.45%)	10 (45.45%)	02 (9.10%)		
	GIC	0 (0%)	05 (22.72%)	05 (22.72%)	12 (54.45%)	0 (0%)		
Restoration Failure	Edelweiss	0 (0%)	0 (0%)	0 (0%)	3 (13.64%)	19 (86.36%)	0.001	Significant
	Composite	0 (0%)	0 (0%)	02 (9.10%)	10 (45.45%)	10 (45.45%)		
	GIC	0 (0%)	3 (13.64%)	06 (27.27%)	09 (40.91%)	04 (18.18%)		
Overall Satisfaction	Edelweiss	0 (0%)	0 (0%)	3 (13.64%)	12 (54.54%)	7 (31.82%)	0.001	Significant
	Composite	0 (0%)	0 (0%)	10 (45.45%)	10 (45.45%)	02 (9.10%)		
	GIC	0 (0%)	06 (27.27%)	10 (45.45%)	06 (27.27%)	0 (0%)		

Table 4: Comparison from parental satisfaction

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IV. RESULTS

At baseline, all three crown types—GIC strip crowns, composite strip crowns, and Edelweiss crowns—received a score of 1 (excellent) for all functional, biological, and esthetic FDI criteria.

During follow-up, functional (Table 1) deterioration was most pronounced in the GIC group. A marked decline was seen in fracture resistance, marginal adaptation, proximal contact, form/contour, and occlusal wear, with no restorations maintaining score 1 by the 9-month recall. Composite strip crowns showed moderate functional stability, with good performance until 3 months but a steady decrease thereafter. Edelweiss crowns demonstrated the best functional retention at all intervals, with higher proportions of score 1 for fracture resistance, marginal adaptation, occlusion and wear, and overall anatomical integrity.

Biological (Table 2) parameters remained stable for all three groups throughout the study. No secondary caries, hypersensitivity, or hard-tissue defects were noted at any time point, and intergroup differences were statistically non-significant.

Esthetically (Table 3), marginal staining increased in GIC crowns over time and was moderate in composite crowns. Edelweiss crowns showed initial staining at 3 months but improved thereafter with all cases scoring 1 by the 9-month recall. Color match remained stable only in GIC crowns; both composite and Edelweiss crowns showed reduced score 1 ratings for color match at later intervals. Surface lustre was best retained in the Edelweiss group, followed by composite, with GIC crowns showing the greatest decline.

Parental satisfaction (Table 4) ratings were highest in the Edelweiss group across categories including appearance, color, size, longevity, and overall satisfaction. Composite crowns received moderate acceptance, whereas GIC crowns were rated lowest, with a higher proportion of dissatisfaction or neutral responses.

V. DISCUSSION

The restoration of maxillary primary incisors is crucial, particularly when affected by early childhood caries or trauma. This study compared the nine-month clinical performance of GIC strip crowns (Group A), composite strip crowns (Group B), and Edelweiss crowns (Group C) using the modified FDI criteria (2010)[6], assessing functional, biological, and esthetic properties at baseline, 3, 6, and 9 months. Functionally, GIC strip crowns deteriorated the fastest, especially in fracture resistance. Although initially satisfactory, their brittle nature led to progressive breakdown, consistent with findings by **Ram and Fuks (2006)**[7] and others describing the limited strength of GIC despite benefits like fluoride release8.

Composite strip crowns held up well until the third month, followed by gradual wear by nine months. Earlier studies, including **Waggoner (2002)**[2] and **Kupietzky et al. (2005)**[9], similarly noted that composites begin strong and esthetic but may show wear and discoloration with time. Edelweiss crowns demonstrated the highest fracture resistance throughout, attributable to their nano-hybrid composite structure, supported by **Almajed O.S. et al. (2024)**[10] and **Chisini et al. (2018)**[11].

Marginal adaptation showed a comparable pattern: GIC crowns deteriorated the most, likely due to poor flexural strength and wear resistance; composites performed more consistently; Edelweiss crowns remained the most stable, aided by their pre-polymerized, laser-sintered surface, as reported by **Lampl S. et al. (2024)**[12]. In proximal contact, GIC crowns frequently lost contact, increasing risks of food impaction. Composite crowns maintained excellent contact due to superior adaptability and bonding. Edelweiss crowns started well but showed some decline, possibly related to their rigid prefabricated form.

In form and contour, GIC crowns showed major loss of anatomy by nine months. Composites retained contour initially with mild later wear. Edelweiss crowns maintained anatomical shape best, supported by their strong composite matrix, aligning with **Lampl S. et al. (2024)**[12]. Intergroup comparisons showed Edelweiss crowns performed best, followed by composites, with GIC the weakest. Occlusion and wear assessments also favored Edelweiss crowns, which preserved occlusal form in almost half the cases at nine months. Composites were moderately durable, while GIC crowns wore rapidly, paralleling observations by **Mount and Hume (1998)**[13] and **Peng et al. (2023)**[14].

Biologically, all three crown types performed excellently, with no secondary caries, hard-tissue defects, or hypersensitivity. This reinforces that each material, when correctly placed, provides an effective seal and is biocompatible. The fluoride release of GIC, micromechanical bonding of composites, and dense composite structure of Edelweiss crowns all contributed to these outcomes, consistent with **Randall et al. (1999)**[15], **Casagrande et al. (2005)**[16], and **Donly and Garcia-Godoy (2015)**[17].

Esthetically, GIC crowns showed early marginal staining but maintained good color match, though surface lustre decreased—similar to **Miličević et al. (2018)**[18]. Composite crowns provided excellent initial esthetics but developed marginal staining and reduced gloss by nine months, aligning with **Cinelli et al. (2022)**[19] and **Kupietzky and Waggoner (2004)**[20]. Edelweiss crowns showed transient marginal staining but recovered well by nine months; however, some shade mismatch occurred due to their uniform prefabricated shade, as described by **Chenchugopal et al. (2016)**[21]. They retained the best surface lustre overall, with slight gloss reduction in line with **Ardu et al. (2022)**[22].

Parental satisfaction closely mirrored clinical outcomes. Edelweiss crowns received the highest approval for contour, durability, and retention, with occasional comments on shade mismatch. Composite crowns were appreciated for their natural appearance despite minor staining or dullness. GIC crowns scored lowest due to wear and declining esthetics, although fluoride release and easy placement were noted positively. These patterns align with **Verma et al. (2023)**[23] and **Kupietzky and Waggoner (2004)**[20].

Overall, all three crown types are biologically safe and effective for restoring primary incisors. Edelweiss crowns provided the best balance of durability, marginal adaptation, occlusal stability, and esthetics. Composite crowns delivered good short-term performance but may require more maintenance. GIC crowns remain easy to use and beneficial for caries prevention but presented substantial wear and esthetic decline over time, supporting the need for thoughtful material selection based on clinical demands and parental expectations.

VI. CONCLUSION

All three crown types were evaluated using the modified FDI criteria over 9 months. Edelweiss crowns demonstrated superior functional and esthetic scores, with better marginal adaptation, surface quality, and color stability. Composite strip crowns showed good initial esthetic outcomes, though minor deterioration in functional parameters was observed over time. GIC strip crowns exhibited favorable biological performance but comparatively lower functional scores, particularly for fracture resistance and marginal integrity. Overall, Edelweiss crowns provided the most consistent clinical outcomes, while composite and GIC strip crowns remain suitable alternatives in carefully selected cases.

Limitations The study was limited by its 9-month duration, which may not reflect long-term performance. Operator differences and child-specific oral habits could have influenced the results, and a larger sample size would provide stronger evidence.

REFERENCES

[1]. Al-Jewair TS, Leake JL. The prevalence and risks of early childhood caries (ECC) in Toronto, Canada. J Contemp Dent Pract. 2010;11(5):1–8.
[2]. Waggoner WF. Restoring primary anterior teeth. Pediatr Dent. 2002;24(5):511–6.
[3]. Motisuki C, Santos-Pinto L, Giro EM. Restoration of severely decayed primary incisors using indirect composite resin restoration technique. Int J Paediatr Dent. 2005;15(4):282– 6.
[4]. Holsinger DM, Wells MH, Scarbecz M, Donaldson M, Kessler R. Clinical evaluation and parental satisfaction with pediatric crowns. Pediatr Dent. 2016;38(3):192–7.
[5]. Roberts C, Lee JY, Wright JT. Clinical evaluation of and parental satisfaction with anterior preveneered stainless steel crowns. Pediatr Dent. 2001;23(1):28–31.
[6]. Hickel R, Peschke A, Tyas M, Mjör I, Bayne S, Peters M, et al. FDI World Dental Federation – Clinical criteria for the evaluation of direct and indirect restorations – update and clinical examples. J Adhes Dent. 2010;12(4):259–72.
[7]. Ram D. Clinical performance of resin-bonded composite strip crowns in primary maxillary incisors. Pediatr Dent. 2006;28(3):243–8.
[8]. Forsten L. Short- and long-term fluoride release from glass ionomers and other fluoride- containing filling materials in vitro. Scand J Dent Res. 1990;98(2):179–85.
[9]. Kupietzky A, Waggoner WF, Galea J. Long-term photographic and radiographic assessment of bonded resin composite strip crowns for primary incisors: results after 3 years. Pediatr Dent. 2005;27(3):221–5.
[10]. Almajed OS. Shaping smiles: a narrative review of crown advancements in pediatric dentistry. Cureus. 2024;16(1):e52997.
[11]. Chisini LA, Collares K, Cademartori MG, de Oliveira LJC, Conde MCM, Demarco

FF, Corrêa MB. Restorations in primary teeth: a systematic review on survival and reasons for failures. Int J Paediatr Dent. 2018;28(2):123–39.
[12]. Lampl S, Gurunathan D, Mehta D, Krithikadatta J, Moodley D. Effective management of a fractured tooth in a child using an aesthetic pediatric crown: a case report and review of literature. Case Rep Dent. 2024;2024:6888443.
[13]. Mount GJ, Hume WR. Preservation and restoration of tooth structure. 1st ed. St. Louis: Mosby; 1998.
[14]. Peng JK, Chen JW, Savignano R, Goodacre B. Wear resistance of pediatric crown materials: A 3D tomography study. J Dent. 2023;128:104357.
[15]. Randall RC, Wilson NH. Glass-ionomer restoratives: a systematic review of a secondary caries treatment effect. J Dent Res. 1999;78(2):628–37.
[16]. Casagrande L, Brayner R, Barata JS, de Araujo FB. Cervical microleakage in composite restorations of primary teeth--in vitro study. J Dent. 2005;33(8):627–32.
[17]. Donly KJ, García-Godoy F. The use of resin-based composite in children: an update. Pediatr Dent. 2015;37(2):136–43.
[18]. Miličević A, Goršeta K, van Duinen RN, Glavina D. Surface roughness of glass ionomer cements after application of different polishing techniques. Acta Stomatol Croat. 2018;52(4):314–21.
[19]. Cinelli F, Scaminaci Russo D, Nieri M, Giachetti L. Stain susceptibility of composite resins: pigment penetration analysis. Materials (Basel). 2022;15(14):4874.
[20]. Kupietzky A, Waggoner WF. Parental satisfaction with bonded resin composite strip crowns for primary incisors. Pediatr Dent. 2004;26(3):231–5.
[21]. Chenchugopal M, Venumbaka NR, Vijayakumar P, Selvaraju G, Rajendran S, Elangovan, A Shade selection of primary maxillary anterior teeth in children using Vitapan classical shade guide. Indian J Dent Res. 2016;27(6):657–60.
[22]. Ardu S, Duc O, Krejci I, Bétrisey E, Di Bella E, Daher R. Gloss retention of direct composites and corresponding CAD/CAM composite blocks. Clin Exp Dent Res. 2022;8(1):282–6.
[23]. Verma RK, Srilatha V, Patel S, Dithi C, Somaraj V, Vallabhaneni SK. Assessment of parental satisfaction with various aesthetic crowns among children of various age groups: an original research. J Pharm Bioallied Sci. 2023;15(Suppl 1):S196–200.

Fig 1: GIC strip crowns

Fig 1a: Pre-treatment

Fig 1b: Post-treatment

Fig 2: Composite strip

Fig 2a: Pre-treatment

Fig 2b: Post-treatment

International Journal Dental and Medical Sciences Research
Volume 7, Issue 6, Nov – Dec 2025 pp 240-249 www.ijdmsrjournal.com ISSN: 2582-6018

Fig 3: Edelweiss crowns

Fig 3a: Pre-treatment

Fig 3b: Post-treatment