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Case report

COMPLEX AESTHETIC MANAGEMENT OF FOUR UPPER ANTERIOR TEETH AS AN OPTIMIZATION OF CONFIDENCE

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ABSTRACT

Background : An aesthetic smile is a major factor in gaining self-confidence. The anterior teeth are the main teeth visible when a person smiles, and they are often damaged by bacteria or trauma. Damage to the anterior teeth can lead to a loss of self-confidence, requiring comprehensive treatment through complex aesthetic management to restore aesthetic, masticatory, and phonetic functions. **Objective:** Complex aesthetic management is the optimal treatment for multiple anterior tooth damage in order to restore self-confidence. **Case Report:** A 39-year-old man came to Soelastri Dental Hospital complaining of cavities in several of his front teeth, which caused loss of crown structure, pain, and loss of self-confidence. The diagnosis was irreversible pulpitis in tooth 12, dentin caries reaching the pulp chamber roof of tooth 11, and dentin caries in teeth 21 and 22. **Case Management:** Complex aesthetic management was performed for the treatment of four upper anterior teeth involving direct restoration, pulp capping, root canal treatment, and jacket crowns. **Conclusion:** Complex aesthetic management in this case effectively restored masticatory and phonetic functions and aesthetic, while also boosting the patient's self-confidence.
Keywords: Complex aesthetic management , anterior teeth, self-confidence.

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INTRODUCTION

An aesthetic smile is an important factor in achieving quality of life. The presence of an aesthetic smile plays an important role in facilitating effective social communication and improving individual self-confidence. Aesthetic in dentistry is a major aspect that can influence a person's satisfaction and initiative to seek treatment[1]. The demand for comprehensive and aesthetic dental treatments has increased significantly with

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the growing public awareness and understanding of the importance of physical appearance[2].

Anterior teeth are the most visible during smiling and therefore require special clinical attention. Anterior teeth are often susceptible to damage due caused by traumatic injury or bacterial infection[1]. Bacterial affecting anterior teeth may result in discoloration, structural deterioration, and persistent pain[3]. Damage to anterior teeth can involve several teeth, making complex aesthetic treatment an effective treatment option[1].

Complex aesthetics is a treatment for anterior dental treatment methods that involve multiple dental problem. Complex aesthetic treatment is an effective treatment performed to restore aesthetic, masticatory, and phonetic function[4]. Special skills are required in treating caries in anterior teeth due to complex anatomical conditions and limited accessibility and visibility, in order to achieve optimal result[5].

This case report discusses case management and treatment of patients with complex aesthetic problems involving multiple dental tissues, resulting in treatment that included direct restoration, pulp capping, root canal treatment, and crown restoration.

CASE

A 39-year-old man came to Soelastri Dental Hospital complaining of cavities in several of his front teeth, which had caused him to lose confidence. He had been experiencing pain in one of his teeth for about four months. A general health examination revealed no history of systemic illness and no regular medication use.

The objective examination revealed a deep cavity on the mesial surface of tooth 12 with probing (+) indicating pain, percussion test (-), vitality (+), and EPT (32) . Tooth 11 has mesial and distal cavities reaching the dentin with probing test (–), percussion (-), vitality (+), and EPT (20). Meanwhile, tooth 21 shows blackening on the mesiolabial part and a cavity on the mesiopalatal part with probing test (-), percussion (-), vitality (+), and EPT (9). Examination of tooth 21 shows a cavity on the distal side reaching the dentin with probing test (-) and percussion test (-), vitality (+), and EPT (7). Radiographic examination was performed as a supporting examination to aid in diagnosis. The clinical diagnosis was established as irreversible pulpitis of tooth 12, dentin caries reaching the pulp chamber roof of tooth 11, and dentin caries of teeth 21 and 22. The patient was educated about their

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dental condition, then agreed to a treatment plan consisting of root canal treatment with final restoration of a jacket crown, pulp cap, and direct composite resin restoration, and the patient signed an informed consent form.

(a) (b)

Figure 1.(a) the condition of the initial teeth of the labial aspect (b) the condition of the patient's initial teeth in the palatal aspect.

Figure 2. Periapical photo of 12 before the tratment.

CASE MANAGEMENT

The first treatment performed in this case was direct restoration of tooth 11. A rubber dam was used to isolate the working field, and the cavity was cleaned with a round metal bur until all infected carious tissue has been completely eliminated. The principle of preparation was upheld in order to preserve the original tooth structure and produce an aesthetic and durable filling. The preparation results showed that the caries lesion was very deep, leaving only a thin layer of dentin, so indirect pulp capping was performed. A calcium hydroxide (Dycal, Dentsply Caulk, Milford USA) was applied to the base of the cavity to stimulate reparative dentin formation and maintain pulp vitality. The cavity was temporarily filled with temporary restorative material, and pulp capping evaluation was performed after 7 days to assess success and detect signs of pulp capping failure.

Figure 3. Application of pulp caping material.

The 7-days post-treatment evaluation showed that the patient did not complain of pain. Objective examination of tooth 11 revealed no leakage of the temporary filling, percussion test (-), palpation (-), vitality test (+), and did not experience spontaneous pain, so permanent restoration could be performed.

Further treatment was carried out with direct restoration on teeth 11, 21, and 22, beginning with the selection of composite resin color using a shade guide to match the color of the filling with the surrounding teeth. Preparation of teeth 21 and 22 in the area of caries was carried out using the same preparation principles as for tooth 11. Cavity cleanser was applied to the entire prepared cavity surface to eliminate

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debris and fluid contamination. Subsequently, the cavity was etched with 35% phosphoric acid (DX. ETCH 37, Sino-dentex, Beijing) for 15 seconds, rinsed with a water syringe, and then dried. A bonding agent (Ambar, FGM Dental Group, Joinville, Brazil) is applied in a thin layer to the cavity area using a micro-brush, left for 10 seconds, and then irradiated for 20 seconds to create a bond between the filling material and the tooth structure.

The composite application on the cavity was formed using a matrix and wood wedge on the interdental area. Composite resin (Filtek Z250, 3M Espe, St. Paul, USA) was applied using the layering technique, starting with the formation of walls on the palatal and proximal areas. Each layer of filling was cured using a light curing unit for 15 seconds. The matrix strip was adapted to the anatomical contour of the tooth and pressed using constant pressure. Excess material around the cavity was removed before drying. The final stage of restoration was performed by finishing with a yellow diamond bur until the surface was smooth and there were no undercuts, then polishing was performed using an enhance bur.

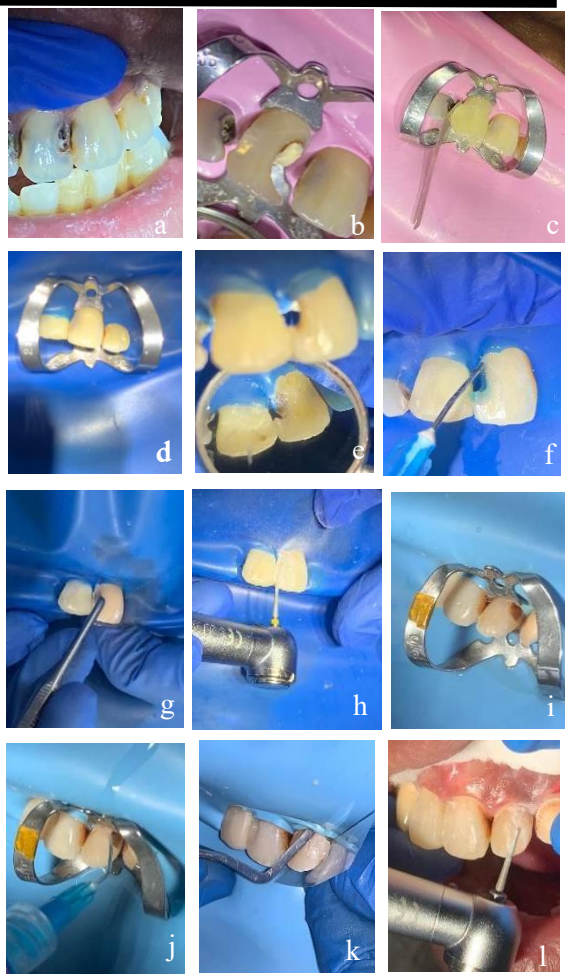

Figure 4. a) Early condition tooth 11, b) Evaluation of 7 days of pulp caping tooth 11 c) Restoration results of tooth 11 d) Early condition of tooth 21, e) Cleaning of dental caries tooth 21, f) Application of etching on tooth 21, g) Application of dental composite resin of tooth 21, h) Finishing of tooth 21, i) Cleaning of dental cavities tooth 22, j) Application of dental etching tooth 22, k) Application of dental composite resin tooth 22, l) Finishing of tooth 22

The subsequent management of this case involved root canal treatment of tooth 12. Root canal treatment is performed by adhering to three principal stages known as the endodontic triad, which includes biomechanical preparation, disinfection, and hermetic obturation of the root canal system. These three stages play a critical

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role in the overall success of root canal therapy[13].

During the first visit, open access and root canal preparation were performed. The procedure began with infiltration anesthesia of the labial and lingual mucosa of tooth 12 at a depth of 0.5 mm using a pehacain anesthetic solution. Tooth 12 was isolated using a rubber dam, followed by open access using an endo access bur until it penetrated the pulp chamber. The entire pulp chamber was cleaned using an excavator or endo bur, then the pulp chamber walls were shaped convergently towards the occlusal until a clear view of the orifice was obtained and the endodontic instruments could move in and out freely.

Pulp extirpation from the pulpal chamber was performed using a #15 barbed broach (Dentsply Maillefer Ballaigues, Switzerland) to a depth of 2/3 of the root canal length with a 180° clockwise rotation, then pulled out. The pulp tissue was ensured to be completely removed, then irrigation was performed using 2 ml of NaOCL with an irrigation syringe. Working length measurement was performed using the direct observation method through periapical radiography, which showed a working length of 24 mm.

The preparation technique used was the step-back technique using K-File Nitiflex (Dentsply Maillefer Ballaigues, Switzerland) for tolerance in the apical canal section that curved distally. Apical canal preparation began with the Initian Apical File (IAF) until white dentin was obtained. Each file change was followed by irrigation using 2 cc of NaOCL and saline. NaOCL has good ability to dissolve necrotic pulp tissue and has good antibacterial activity[6]. Coronal third of the root canal preparation was performed using a watch winding and pull stroke motion until white dentin was obtained. Each file increment is accompanied by a 1 mm reduction in working length.

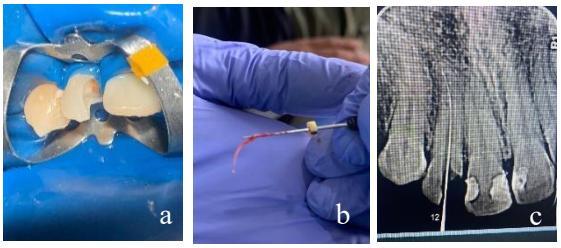

Figure 5 a) *Open access of* the root canal tooth of 12 b. Results of root extirpation c) Measurement of length of work using direct observation method.

At the subsequent visit, the temporary restoration was removed and the root canal was irrigated with saline solution followed by a perhydrol test to ensure that the root canal was free of bacterial contamination. A gutta-percha test using (Meta Biomed, Cheongju, South Korea) was performed by inserting gutta-percha according to the size of the Master Apical

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Cone (MAC) #35 and ensuring that there was a tug back.

Root canal obturation began by inserting endomethasone and eugenol sealer (Septodont, Saint-Maur-des-Fosses, France), followed by slowly inserting gutta-percha into the root canal. The Master Apical Cone (MAC) was pressed using a spreader in a lateral direction, then accessory gutta-percha (Meta Biomed, Cheongju, South Korea) was inserted until the smallest spreader #15 could not be inserted. Radiographic examination was performed again and the result was hermetic obturation of the root canal.

Figure 6. The result of the root canal obturation looks hermetic.

The subsequent visit, seven days after root canal obturation, was for control and evaluation. Subjective examination of the patient showed no complaints of pain or discomfort. Objective examination showed negative percussion and palpation tests, indicating successful root canal treatment. The final stage of restoration treatment was a Porcelain Fused to Metal (PFM) crown restoration with a fiber post (RelyX Fiber Post 3M ESPE, St.Paul, USA).

Root canal gutta percha reduction was performed using peeso reamers numbered 1-3 with a working length of 18.5 mm, leaving 5 mm of gutta percha. Root canal preparation was performed using a precision drill (RelyX Fiber Post 3M ESPE, St. Paul, USA) with a post size (No. 2) until a smooth root canal was obtained and the fiber post could be inserted without obstruction. The fiber post is cemented using resin cement (RelyX U200 3M ESPE, St. Paul, USA) according to the post length (11.8 mm), followed by light curing. Next, a core build-up is performed, and the remaining unnecessary crown is prepared in a shape resembling a jacket crown post. After the jacket crown preparation process, a double impression is taken.

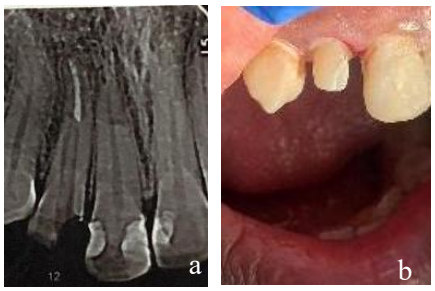

Figure 7. a. Periapical photo of tooth 12 (remaining gutta percha 5mm) b. Results of post and core preparation TOOTH OF 12.

Figure 8. Final treatment results of 4 upper anterior teeth (12,11,21,22)

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DISCUSSION

Complex aesthetic treatment planning is important to achieve maximum treatment results. Dentists must consider several of aesthetic analyses, including smile, tooth size proportions, color, occlusion, and tooth inclination [2]. In this case, the patient had multiple caries on the four upper anterior teeth with varying depths of caries. Comprehensive removal of carious tissue in the anterior teeth was essential to prevent subsequent discoloration in the final restoration and to prevent the risk of secondary caries [7].

Caries in tooth 12 reached the pulp, requiring root canal treatment. Root canal treatment is intended to eliminate infected pulpal tissue, microorganisms, and debris, followed by chemo-mechanical preparation of the root canal system to facilitate three-dimensional obturation, thereby achieving a hermetic seal that prevents communication between the periodontal tissues and the oral cavity[8]. The long root canal and laceration presented challenges in applying the principles of root canal treatment, namely biomechanical preparation, sterilization, and obturation[9]. Root canal obturation that did not reach the full length of the root canal may have been caused by inadequate preparation, requiring the selection of appropriate instruments and techniques. The use of appropriate instruments in curved root canal conditions is done to avoid the risk of instrument breakage inside the root canal.

In this case, NiTi (Nickel Titanium) files (Dentsply Maillefer Ballaigues, Switzerland) were used. NiTi files have the advantage of high flexibility and can maintain the shape of the canal, especially in curved root canals, compared to stainless steel, which has higher rigidity[10]. After root canal preparation and sterilization, obturation was performed using endomethasone and eugenol sealer material with the lateral condensation technique according to the working length.

Endomethasone sealer material (Zinc Oxide-Eugenol) exhibits high antimicrobial activity compared to other sealer materials. The eugenol formulation is a factor that provides a bactericidal effect and inhibits microbial growth [11]. The lateral condensation technique has the advantage of a hermetic final result, can control the filling length during obturation, thereby preventing overfilling, and the final gutta-percha result can be fused into a cone shape [12]. Periapical radiographic evaluation was performed to evaluate the filling results. The radiograph showed a hermetic filling result to the apical tip.

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Tooth 11 has caries that almost reaches the pulp roof, so pulp capping is required. Pulp capping is a procedure to prevent the pulp chamber roof from opening during the removal of dentin infected with caries[13]. This treatment uses calcium hydroxide (Dycal, Dentsply Caulk, Milford USA). Calcium hydroxide as a pulp capping material has the advantage of creating a high pH environment, making it antibacterial, and stimulating pulp cells and odontoblasts to form reparative dentin[14]. The formation of a dentin bridge on the surface of the new pulp roof is considered an indication of successful pulp capping treatment. Calcium hydroxide material can stimulate the differentiation of new odontoblast cells [15].

Pulp capping evaluation was performed one week after treatment, beginning with the removal of the temporary filling. The success of pulp capping was demonstrated by subjective and objective examinations[16]. The results of the subjective examination showed that the patient did not complain of spontaneous pain. The objective examination was performed using a vitality test with CE (chlor ethyl), with no sensitivity response.

The selection of restoration techniques is a key consideration in achieving adequate, durable, and aesthetic restoration results. Indirect restoration was chosen as the final restoration for tooth 12, as root canal treatment resulted in loss of coronal structure, requiring restoration to restore function and aesthetics[17]. In this case, a jacket crown restoration was performed using PFM reinforced with fiber posts. Fiber posts (RelyX Fiber Post 3M ESPE, St. Paul, USA) have mechanical properties such as an elastic modulus similar to dentin, providing resistance to fracture, and a translucent color that does not cause dark shadows like titanium posts[18].

Porcelain Fused to Metal (PFM) restorations remain the restoration of choice due to their metal strength and the aesthetic properties of porcelain, which produce a natural-looking appearance. Full porcelain is recommended for teeth that require full aesthetics, but it is contraindicated for patients who have a habit of bruxism[19]. Shade selection is a critical step in achieving optimal aesthetic outcomes and fulfilling patient expectations. Shade selection is determined by comparing a shade guide with the patient's natural dentition teeth under natural lighting. Patients are asked to consider the selected shade to avoid differences in perception of the final restoration results[20].

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Restoration of teeth 11, 21, and 22 was performed using the direct restoration method with composite resin (Filtek Z250, 3M Espe, St. Paul, USA) due to aesthetic considerations and visit time. Composite restoration was chosen for cases with enamel and dentin damage without pulp involvement[2]. Anterior tooth restoration requires not only a functional approach but also consideration of aesthetic factors to restore the patient's self-confidence. Anterior tooth restoration techniques use layering to achieve restoration results that resemble natural teeth. The layering restoration technique for anterior teeth provides a final restoration with good translucency and demonstrates high durability[21]. The selection of enamel color is very important to achieve optimal aesthetic results. Finishing and polishing procedures are performed using an enhance bur and rubber cup to produce a smooth restoration surface and maintain long-term aesthetics.

The evaluation of the results of the treatment of the four upper anterior teeth was carried out at the final stage of the control visit with subjective and objective examinations. Subjectively, the patient reported no complaints regarding the four teeth that had undergone treatment, no sharp or obstructive surfaces, and stated that they felt more confident after the treatment of their four teeth. Objective examination was performed using USPHS criteria.

Table 1. result USPHS assesment treatment tooth 12,11,21,22.

Evaluation Criteria	Tooth 11	Tooth 12	Tooth 21	Tooth 22
Marginal Adaptation	alpha	alpha	alpha	alpha
Anatomical form	bravo	alpha	alpha	alpha
Surface structure	alpha	alpha	alpha	alpha
Color Match	alpha	bravo	alpha	alpha
Marginal disclorotion	alpha	alpha	alpha	alpha
Secondary caries	alpha	alpha	alpha	alpha
Retention	alpha	alpha	alpha	alpha

All aspects of the evaluation showed good and satisfactory results.

REFERENCES

1. Jurnal I, Gigi K, Putri R, Yudistian I, Agraha AK, Syahriel D. Aesthetic Complex Management of Four Upper Anterior Teeth. Interdental Jurnal Kedokteran Gigi. 2025;21(1), 179-183. doi: 10. 468 62/interdental. v21i1.11440
2. Juniarti DE, Yuanita T, Pribadi N, Marbun T, Pramesti NS. Complex Aesthetic Treatment of Patients with Multiple Caries. Conservative Dentistry Journal. 2022;12(1), 38-44.
3. Aini NQ, Putri DC, Ismiyatin K, Saraswati W. Aesthetic Rehabilitation of Maxillary Anterior Teeth with High Caries Risk and Poor Oral Hygiene: A Case Report. World Journal of Advanced

Research and Reviews. 2025;27(01), 740-745. doi: /10.30574/ wjarr.2025.27.1.2513
4. Andisa M. Interdisciplinary Managem ent of Aesthetic and Functional Rehabilitation Treatment in Anterior Teeth With Dental Anxiety: A Case Report. Journal of Iternational Dental and Medical Research. 2021;14(2).
5. Alam M.D, Ningsih J.R..Restorasi Resin Komposit pada Gigi Gigi Anterior. Solo, Indonesia: Universitas Muhammadiyah Surakarta Collaborati ve Dentistry 2025.p.7.
6. Dianiawati P, Anisa N, Prisinda D. Laporan Kasus Perawatan Saluran Akar Ulang Non-Bedah Gigi Insisivus Lateral Kanan Rahang Atas Pada Pasien Geriatri. Jurnal Kedokteran Gigi Universitas Padjajaran. 2020;32(3): 232-243. doi: 10.24198/jkg.v32i 3.29548.
7. Elgezawi M, Haridy R, Abdalla MA, Heck K, Draenert M, Kaisarly D. Current Strategies to Control Recurrent and Residual Caries with Resin Composite Restorations: Operator- and Material-Related Factors. 2022;11, 6591. 5-8. doi: 10.3390/jcm11216591
8. Kartinawanti, A, Asy'ari, A. Penyakit Pulpa dan Perawatan Saluran Akar Satu Kali Kunjungan. JIKG (Jurnal Ilmu Kedokteran Gigi), 2021 *4*(2), 64-72.
9. Cai C, Chen X, Li Y, Jiang Q. Review Article Advances in the Role of Sodium Hypochlorite Irrigant in Chemical Preparation of Root Canal Treatment. Biomed Research International 2023, 2-5. doi: /10.1155/2023/8858283
10. Sambhajinagar C. Retrieval of Separated Endodontic Instrument. International Journal of Innovative Science and Research. 2024;9(7), 3437-3443.doi: 10.38124/ijisrt/IJISRT24JUL 1533
11. Ajisha R, Neetu J, Aggarwal R, Kaur A, Monika C. Comparing and Evaluating the Antimicrobial Efficacy of Endodontic Root Canal Sealers against Enterococcus faecalis , Staphylococcus aureus , and Candida albicans at 24 , 48 and 72 h: An in vitro study. Indian Journal of Dental Sciences. 2023, 125-129. doi: 10.4103/ijds.ijds_124_22.
12. Kapoor.K, Endodontic obturation techni ques: A review. International Journal of Health Sciences, 8(S1), 1033–1040. 2024;8(July):1033-1040. doi:10.53730 /ijhs.v8nS1.14995
13. Izzati, A.F,Fatriadi,F.Indirect Pulp Capping with Calcium Hydroxide in Permanent Molars. Jurnal Riset Kesehatan 2023;15(2):541-547.
14. Peskersoy C, Lukarcanin J, Turkun M. ScienceDirect Efficacy of Different Calcium Silicate Materials as Pulp-Capping Agents : .08.016
15. Cahyani, C. Pembentukan Dentinal Bridge Sebagai Respon Penyembuhan Pasca Direct Pulp Caping Menggunakan Medikamen MTA dan Resin Komposit Bioaktif. JIKG (Jurnal Ilmu Kedokteran Gigi), 5(1), 20-27.
16. Fajriyani, R. (2021). Evaluasi Klinis Keberhasilan Indirect Pulp Capping dengan Kalsium Hidroksida Tipe Hard-setting pada RSGM Universitas Muhammadiyah Yogyakarta. *B-Dent:* Jurnal Kedokteran Gigi Universitas Baiturrahmah, 8(1), 64-70.
17. Widyastuti NH, Ningsih JR, Faza MA, et al. Restorasi Mahkota Jaket Dengan Pasak Fiber Pasca Perawatan Saluran Akar pada Kasus Nekrosis Pulpa Gigi Insisivus Lateral Maksila. 2025, 38-46. Solo,

Indonesia: Universitas Muhamma diyah Surakarta Collaborative Dentistry 2025.p.7.

18. Ariyanti AT, Cevanti TA, Razak A, et al. Laporan Penelitian Perbedaan Kekuatan Impak Mahkota Pasak Prefabricated Logam dengan Mahkota Pasak Prefabricated Non Logam. Jurnal Kedokteran Gigi Unpad. 2017, 45-50. doi: 10.24198/jkg.v30i1.18183
19. Gunawan J, Takarini V, Hasratiningsih Z. Performance of Metal Fusion and Pure Porcelain. Jurnal Kedokteran Gigi Unpad. 2017:1-4. doi: 10.24198/jkg.v29 i3.159 52
20. Duseja S, Patel V, Parmar V, Shah M, Patel H, Shaikh A. Comparative Evaluation of Shade Matching Accuracy : Smartphone Application Vs Conventional Visual Method. Internati onal Journal of Environmental Sciences. 2025;11(6), 1616-1622. Doi: 10.64252 x2rctp33
21. Buduru S. Composite Layering Techniq ues in Direct Anterior Restorat ions: a Scpoing Review on Longevity Outcom es. Journal of Oral Rehabilitation. 2025; 17(2), 52-64. doi: 10.62610/RJOR.2025 .2.17.4.