

Tabelul 1.
Rezultatele colocviului diferențiat pe stagiul clinic practic

Stagiul clinic practic la Stomatologie terapeutică al studenților din anii III și IV de studii la facultatea de stomatologie USMF „N. Testemițanu”	Atestați cu notă pozitivă	Nu s-au prezentat la colocviu	Total
Studenți anul 3	168	14	182
Studenți anul 4	125	13	138
Total	293	27	320

Discuții și concluzii:

Stagiul practic permite îmbinarea optimă a activității practice de sine stătător a studentului cu asimilarea datelor teoretice, implicându-l în procesul de soluționare a problemelor și sarcinilor, și activizându-i gândirea, logica și curajul.

Seriozitatea abordării problemelor de organizare și de efectuare a stagiului practic, verificarea riguroasă a rezultatelor acestuia, conturarea strictă și fermă a caracterului, volumului și calității cunoștințelor solicitate studentului și a realizării de către acesta a minimumului practic influențează direct și enorm asupra calității asimilării informațiilor în următorii ani de studii și perfecționarea de mai departe a manoperelor practice.

Inițiativa din acest an a catedrei de *Stomatologie terapeutică* de a delega drept conducător de stagiul practic a unui doctor în științe medicale o considerăm corectă și oportună, deoarece metodologia pedagogică trebuie îmbinată profesional și științific argumen-

tat cu predarea manoperelor practice. Prin aceasta studenții sunt real stimulați în vederea învățării aprofundate și minuțioase a tehnicilor uzuale, folosite în restaurare estetică a dinților, endodonție și alte compartimente ale stomatologiei practice moderne.

Toate cele enumerate mai sus stimulează înrădăcinarea unei abordări creative și entuziasmate a învățării profesiei alese pentru întreaga viață.

Variatele explicații referitor la faptul că în unele țări stagiul clinic nu este prevăzut, și că acesta ar prezenta o pierdere inutilă de timp și de mijloace financiare, considerăm a fi eronate și nefondate.

Regretăm că în urma problemelor economice importante din țara noastră un număr destul de mare al studenților remarcă: a) *lipsa frecventă pe parcursul stagiului clinic practic a locului de muncă /unitului disponibil/*, și b) *fluxul sărac de pacienți*. Adeseori medicul curant nu numai că nu repartizează pacienți studentului aflat la practică, ba chiar nu oferă posibilitatea de a lucra la fotoliu, invocând drept argument forte planul financiar, impus de instituția respectivă. Este necesar de a trage concluzii și de a găsi soluții reale, eficiente pentru a nu se mai repeta asemenea situații descurajatoare. Mai ales că majoritatea studenților chiar își doresc acest stagiul practic.

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ONECOAT 7.0 / SYNERGY® D6

Dr. Ralph Schönemann
Germany

Rezumat:

Produsul ideal ar trebui să fie un sistem de lipire de încredere, care economisește timp și totodată, este mai puțin predispus la eroare în timpul aplicării. One Coat 7.0 și Synergy D6 garantează o legătură durabilă. Într-un singur pas, ei pătrund în același timp, se dizolvă și includ dentina în stratul de adeziv hibrid. În cazul clinic se demonstrează utilitatea și eficiența produsului prin imagini și procedee convingătoare.

There are numerous self-etchbonding systems on the market that sometimes differ very much from one another with regards to their chemical composition. It is of great importance for the practicing dentist to understand their effectiveness; and whether these systems can guarantee a permanently sealed bond between the dentin and enamel tooth structure and the restorative material. There is a need to improve the bonding technique and simplify the application procedure. The ideal product should be a reliable bonding system that saves time; and at the same time, is less susceptible to error during application. Self-etching adhesives simultaneously condition the enamel and dentin. In one single step, they simultaneously penetrate, dissolve and incorporate the den-

tin smear layer into the adhesive hybrid layer. The previously required step of infiltrating monomers into the demineralised zone is no longer necessary. Consequently, the potential collapse of the collagen network after dentin conditioning is avoided, since its removal via rinsing and subsequent drying is no longer required.

A very positive side effect from this method is a significant reduction in postoperative pulp sensitivity. Since this adhesive can be clinically applied to both prepared and unprepared enamel, good bonding to both of these enamel surfaces is therefore an additional requirement. Exposed dentin can appear to be, to a greater extent, related to the combined abrasive, erosive or functional surface changes. In several instances, no abrasive preparation is required. The same requirement for good adhesion also applies for these different dentin substrate surfaces as well. This is precisely where an obvious difference in efficiency exists among newer systems. Some of these adhesive systems show good results on dentin, but fail to perform well on enamel. Unprepared enamel appears to represent the highest requirements, since the lowest adhesive values are often measured here. The extent as to how much the different chemical composition and differences between the micromorphology of the prepared or unprepared enamel and dentin substrates influence the non-uniform adhesion values is of great interest. The different pH values among self-etching adhesives (pH 1-3) have great significance compared to the pH value of phosphoric acid, since this determines how much and how deep the enamel surface will be demineralised.

In comparison, phosphoric acid for dental medical uses has a pH value between 0.7 (35 %) and 0.9 (15 %) depending on its concentration. Recent studies demonstrate no relevant statistical differences between the adhesion values for prepared and unprepared enamel surfaces with self-etching adhesives. The requirements for the different scientific examination methods (in vitro) are very high, and should provide good predictability regarding the clinical probability of success.

There is great interest as to whether or not a correlation exists between the ultramorphology of the interfaces and the improved adhesion values.

In the following clinical case, One Coat 7.0 self-etching adhesive was used, in which no initial etching of the enamel and dentin using phosphoric acid was required (Fig. A). Synergy D6 was used as the restorative composite material together with One Coat 7.0 from Coltene/Whaledent. The consistency of this composite is very well suited for modelling complex anatomical occlusal surfaces. The sculpted contours are retained due to its nonslumping, non-sticky consistency until light curing has been performed. This restorative material adapts itself very well against the margins of the cavity.

One Coat 7.0 guarantees a durable bond. Shade

selection is very easy thanks to Duo Shades which enable accurate self-blending visualization for very esthetic, undetectable results. The self-blending Synergy D6 Duo Shades were created by grouping Vita™ shades with similar properties such as colour, saturation and intensity. The Duo Shades were then perfected to enhance both the translucency and colour. For example, Synergy D6 Dentin A2/B2 corresponds to the natural dentin layers with colour shades that lie between the colour spectra A2 and B2. This results in a product with an innovative shade concept which clearly simplifies shade selection.



In most situations, only one Synergy D6 dentin duo shade is required to create esthetic and undetectable restorations.

Fig. A: Technique sensitive steps such as rinsing and subsequent drying which may lead to postoperative sensitivity, are not required. Etch with phosphoric acid or clean using pumice stone only in cases with unprepared enamel.

Restorations with marginal discolorations do not always require new treatment in areas that can be well controlled.

In the following case, the reason for restorative intervention was due to occlusal pain on an existing composite restoration on tooth 45 which was approximately 8 years old. The shade was selected before placing the rubber dam. The old inadequate restoration was then removed completely under the rubber dam. The secondary caries close to the pulp in the distal region with irregular dentin structure was carefully excavated to avoid opening of the pulp cavity.

Figures 7 and 8 show the application of two customised non-elastic partial matrix bands.

The matrix bands were reduced in height using a scissors. The wooden wedges were also reduced in height using a scalpel to form a larger spherical approximal contact point. Since the band width is 7 mm, the wooden wedges must be inserted deeply to achieve a sufficient space between teeth 44 to 46. The easily adaptable band was simultaneously contoured externally using one of the anatomical placement instruments from Coltene/Whaledent. A spherical condenser was used to shape the inner contour of the contact point by thinning out the wall thickness of the very soft metal foil. It is advantageous to work with both instruments by leveraging them against each other, and to repeatedly insert the wooden wedges accordingly.



Fig.1 Inadequate restoration for tooth 45.



Fig.2 Selection of the enamel transparency



Fig.10 Application of One Coat 7.0 in 20 s.



Fig.3 Roeko Flexidam and rubber dam clamps were applied with Hygenic Wedjets.



Fig.4 Partial removal of the old restoration.



Fig.5 View of secondary caries.



Fig.6 Removal of caries using the Diatech FG 081 016 ML.



Fig.7 Cavity after excavation of caries.

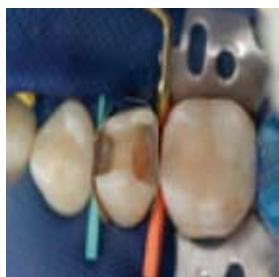


Fig.8 Application of customized non-elastic matrix bands from roeko using the anatomical placement instrument from Coltene/Whaledent.



Fig.9 Forming the approximal contact using the spherical condenser from Coltene/Whaledent



Fig.11 Modelling of the mesial wall.

With traditional phosphoric acid etching, the collagen network can collapse upon longer applications or due to intensive drying after rinsing. The penetration of the monomers into the network of collagen fibres that occurs during this sensitive technique, is a point of weakness. Incomplete penetration can lead to clinically detectable postoperative complications. The existing marginal gaps can lead to the development of secondary caries. Using a self-etching adhesive such as One Coat 7.0, the monomer and etchant reach the deepest point of demineralisation. Too little penetration of the monomer due to collapsed collagen fibres can therefore be excluded. In addition to the benefit of saving time, there is the additional security of reducing postoperative sensitivity. The occurrence of microleakage is highly unlikely for this bonding technique. The polymerization protocol for One Coat 7.0 requires 10 s and 20 s for each incremental layer of Synergy D6. The first increments transform the existing class II cavity into a class I cavity (Fig. 11).

The One Coat 7.0 self-etching adhesive was applied (Fig. 10) for 20 seconds by brushing lightly with the microbrush.

The hydrate layer around the collagen is very sensitive and responsible for the stability of the fibres.



Fig.12 Modelling of the dentin core.

Each additional increment is cured for 20 s. The core is then covered with a layer of enamel material to obtain a clear opalescent effect. This multilayer technique illuminates the appearance of a natural tooth, especially in younger patients (Fig. 13).



Fig.13 Application of the Synergy D6 enamel material.

The consistency of Synergy D6 allows the fabrication of very anatomical occlusal surfaces (Fig. 14). These delicate structures can be contoured and shaped very easily using a microbrush (Fig. 15).

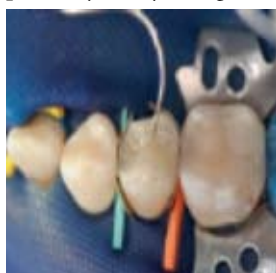


Fig.14 Design of the occlusal fissures.

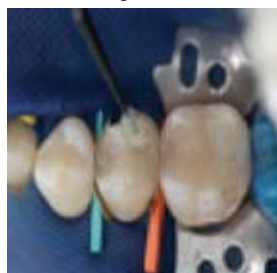


Fig.15 Shaping the fissures and smoothing of the margins

Individual characterization can be incorporated very discretely into the fissures. After the last polymerisation, the matrix bands are opened, with removal of excess material (Fig. 16). Due to the good bond to unprepared enamel, this can be somewhat more difficult. In combination with this, the time invested to place well-adapted, non-elastic matrix bands will pay for itself (Fig. 17).



Fig.16 Removal of the fixed partial matrices using a clamp.



Fig.17 Situation after gross preparation.

After the removal of the rubber dam, the removal of excess material is performed in interproximal areas that are difficult to access using oscillating fine diamond files. Pre-polishing using polishers from Diatech (Fig. 18 and 19), and the static and dynamic occlusion were checked using Hanel occlusion paper (Fig. 20).

Fine and high-gloss polishing create the last step towards functionally and esthetically perfect results (Fig. 21, 22)



Fig.18 Prepolishing interdentally



Fig.19 Occlusal prepolishing



Fig.20 High-gloss polishing



Fig.21 Static occlusal contacts.



Fig.22 Finished adhesive restoration