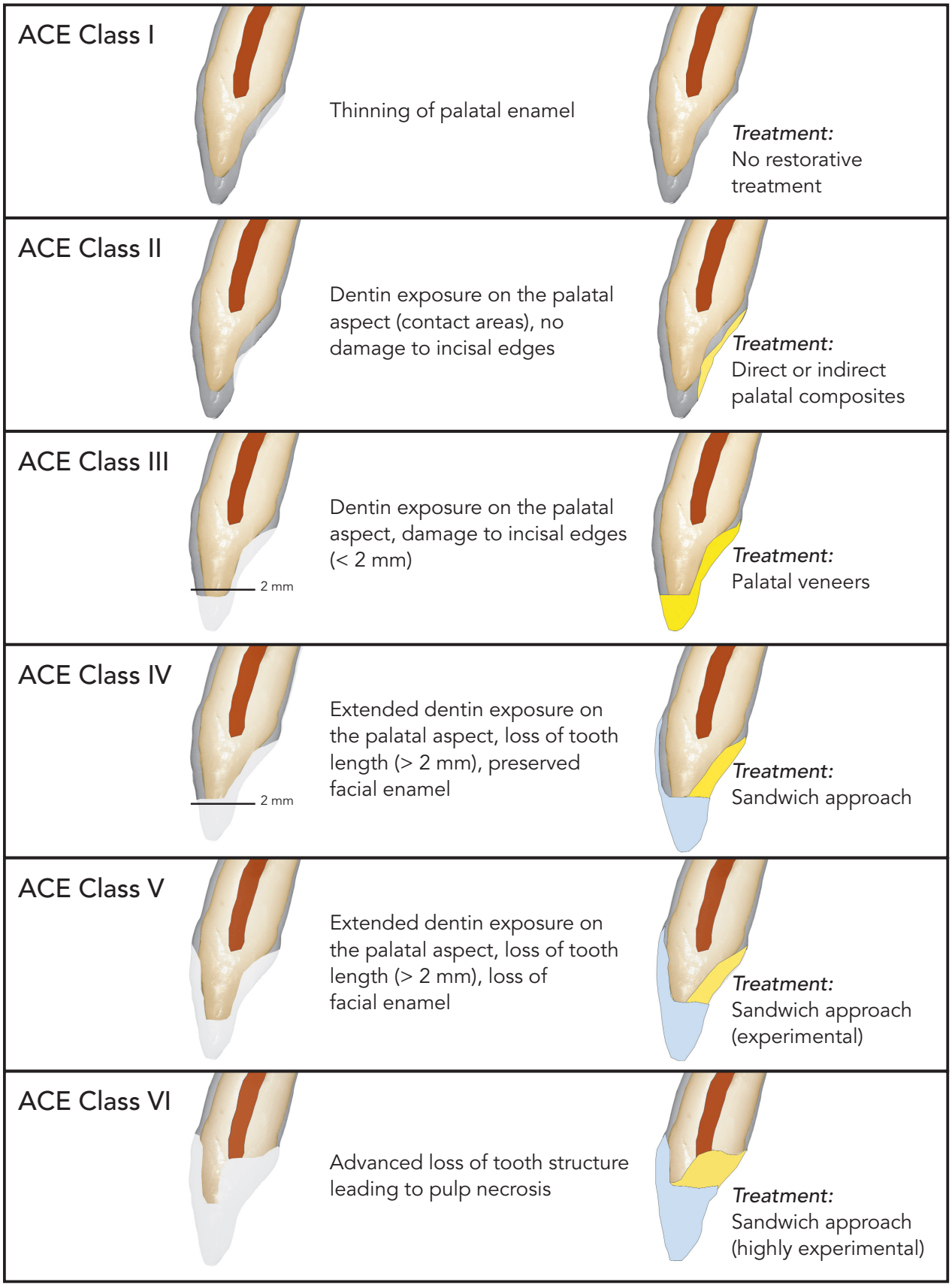
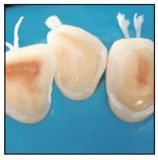


Classification and Treatment of the Anterior Maxillary Dentition Affected by Dental Erosion: The ACE Classification



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Erosive tooth wear is a serious problem with very costly consequences. Intercepting patients at the initial stages of the disease is critical to avoid significant irreversible damages to their dentition and to benefit from still favorable conditions when it comes to clinical performance of the restorative measures proposed. In this article, a new classification is proposed to quantify the severity of the dental destruction and to guide clinicians and patients in the therapeutic decision-making process. The classification is based on several parameters relevant for both the selection of treatment and the assessment of the prognosis, such as dentin exposure in the palatal tooth contact areas, alterations at the level of the incisal edges, and ultimately, loss of pulp vitality. (Int J Periodontics Restorative Dent 2010;30:559–571.)

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In modern society, dental erosion has become one of the major causes of the loss of mineralized tooth structure. Several surveys have pointed out a high and still increasing prevalence, especially among young individuals (eg, 37% of 14-year-olds in the United Kingdom present signs of palatal enamel erosion).[1–12] Signs of dental erosion that may be easily evident at an early stage include: "glossy" (smooth, glazed) enamel, yellowing of the teeth from the underlying dentin, increased incisal translucency, and cupping of the occlusal surfaces. While the presence of dental caries normally leads clinicians to take action immediately, in the case of dental erosion, many clinicians prefer to postpone any dental treatment until the patient is older, even though literature confirms that direct clinical observation is an unreliable method for monitoring the rates of tooth wear.[13,14] To play down this problem is frequently the preferred approach, which is understandable since many clinicians do not feel comfortable proposing an extensive dental rehabilitation to young individuals who are still asymptomatic and unaware of

the problem. What such clinicians are not considering, however, is that these patients sooner or later will need to restore their jeopardized dentition anyway. The debate over whether it is preferable to start earlier with a lighter, less invasive rehabilitation or later with a highly aggressive but eventually more resistant one is still open.

The aim of this article is to convince clinicians that in the specific case of dental erosion, hesitation in undertaking the adequate treatment will inevitably lead to further degradation of the patient's dentition. To persuade the patients and to obtain informed consent for treatment, it is necessary to quantify the dental destruction and to make a prognosis on the future progression of the disease if no treatment would be undertaken. It would appear that the existing erosion assessment indices and classifications have not led to a broad respective awareness among dental care providers to date. This may be because these tools are rather complex and difficult to use in a daily practice set-up, since they have been primarily designed for scientific purposes. Furthermore, practical experience indicates that all relevant signs linked to the various progression stages of generalized dental erosion could be assessed clinically by mainly examining the anterior dentition. This finding may help to simplify the diagnostic process significantly.

Consequently, a new classification, the anterior clinical erosive classification (ACE), has been proposed to provide clinicians with a practical tool to grade the dental status of each patient and to subsequently relate it to the appropriate treatment.

Maxillary anterior teeth and dental erosion

Disease progression

In the case of dental erosion, the palatal aspect of the maxillary anterior teeth usually appears to be the most affected portion of the dentition, particularly in patients with an intrinsic etiology (eg, gastric reflux, psychiatric diseases). At an early stage, acid-caused destruction can be very subtle and thus difficult to discover because of the somewhat hidden location of the palatal tooth surfaces, especially if the disease progresses slowly. Patients frequently do not present signs of tooth sensitivity, even in the presence of dentin exposure. Often, the erosive wear will manifest too late, when irreversible damage has already taken place and costly restorative treatments are required.

At the initial stage, only an attentive and trained eye can detect the more yellowish color resulting from the thinning of the enamel in the central palatal portion of the clinical crown. The cingula appear flatter and their surfaces are very shiny.

The next step of erosive wear leads to a weakening of the incisal edges, which is first noticeable by an increase in translucency. Furthermore, the presence of caries or Class III restorations may contribute additionally to the weakening of the facial aspect of the tooth. In extreme instances, a complete loss of the incisal edge may result, which depends strongly on the original overbite and overjet configuration and on the location of the occlusal contact area. For example, in a patient with a slight vertical overlap (overbite), the risk of incisal fracture is very high because of the destructive combination of erosion and the focal attrition of the antagonist teeth. In fact, at an early stage of enamel erosion, chipping is frequently visible in the form of irregularities at the incisal edges. On the other hand, in patients with a deep bite interarch configuration, the maxillary anterior teeth may present a pronounced concave morphology on their palatal aspect before any effect on the length of the clinical crown manifests. In extreme situations, the loss of the tooth structure may become so extensive that the pulp chamber (or its original extent) can be identified on the palatal aspect. Surprisingly, such teeth frequently keep their vitality; however, they may respond less quickly to the vitality test.

In advanced stages, when the labial tooth structure has been undermined too much, the facial surfaces fracture and the clinical crowns suddenly appear reduced in length. Finally, especially in deep bite patients, the vertical overlap may be aggravated by the supraeruption of the anterior segments.

Traditional reconstructive versus adhesive therapy

Following the guidelines for conventional oral rehabilitation concepts, structurally compromised teeth

should receive complete crown coverage. To place the associated restoration margins at the gingival level, a significant amount of the remaining volume of the clinical crown has to be removed during tooth preparation to provide the required vertical path of insertion for the crown. In other terms, preparing such teeth for crowns will substantially aggravate the destruction of mineralized tissue that was initiated by the erosive process. Not infrequently, elective endodontic treatment will be necessary, mostly accompanied by the use of posts, to assure intraradicular retention of the crowns to be cemented.

To avoid these types of invasive treatment modalities and to keep the teeth vital, an experimental approach to restoring the maxillary anterior teeth of patients affected by severe dental erosion is currently under investigation at the University of Geneva School of Dental Medicine (Geneva Erosion study) by the authors of this research. A minimally invasive treatment concept that consists of reconstructing the palatal aspect with composite restorations, followed by the restoration of the facial aspect with ceramic veneers, is promoted. The treatment objective is reached by the most conservative approach possible, since the remaining tooth structure is preserved and located in the center between two different restorations (the sandwich approach) and performed at two different time points. When it comes to the preservation of mineralized tooth structure, such an ultraconservative approach cannot be matched by any type of complete crown coverage.

The type of restoration best indicated to restore the palatal aspect of the eroded maxillary anterior teeth (direct or indirect composite restorations) is selected according to the amount of the anterior interocclusal space obtained after an increase in the vertical dimension of occlusion. If the space is limited (< 1 mm), the composite restorations can be fabricated free-hand, saving time and money (there is no laboratory fee for the palatal onlays and only one clinical appointment is required). If the interocclusal distance between the anterior teeth is significant, however, free-hand resin composites could prove to be rather challenging.

When the teeth present a combination of compromised palatal, incisal, and facial aspects, it is difficult to visualize the optimal final morphology of the teeth, particularly while restoring only the palatal aspect with rubber dam in place. Thus, the results may be unpredictable and highly time consuming. Under such conditions, fabricating palatal onlays in a laboratory clearly presents some advantages, including superior wear resistance and higher precision during fabrication of the definitive form. A series of articles on full-mouth adhesive rehabilitation address this in detail.[15–17] One of the criticisms to the sandwich approach is the work and cost associated with the fabrication of two separate restorations for each tooth. However, only with two independent restorations are two different paths of insertion possible, and the tooth preparation can therefore be kept minimal. Even the most conservative preparation for all-ceramic crowns could not achieve this level of tooth preservation.

ACE classification

Assessment of the severity of dental erosion is complicated because of the subjectivity of the methods of evaluation and the possible presence of wear cofactors (parafunctional habits, hyposalivation, wear resulting from tooth malposition, aging, coarse diet, inappropriate tooth-brushing techniques, abrasive toothpastes, etc). In addition, the rating scales selected by investigators may be somewhat complicated to translate in a clinical environment, and early alterations are difficult to locate, even with the support of photography, study casts, and attentive clinical examination.[18–26]

Several authors have proposed classifications and indices addressing either tooth wear in general[25] or including diagnostic criteria for erosive tooth wear specifically.[26] Most recently, Bartlett et al[18] published a new scoring system, termed basic erosive wear examination (BEWE), designed for both scientific and clinical purposes. It was the authors' twofold objective to provide a simple tool for use in general practice and to permit more scientifically oriented comparisons with already existing indices. Furthermore, the BEWE aimed to augment the awareness of tooth erosion among general practitioners and to provide a respective guide for treatment when indicated. Finally, the BEWE was intended to stop the continued proliferation of new indices, as

Table 1 The ACE classification

	Palatal enamel	Palatal dentin	Incisal edge length	Facial enamel	Pulp vitality	Suggested therapy
Class I	Reduced	Not exposed	Preserved	Preserved	Preserved	No restorative treatment
Class II	Lost in contact areas	Minimally exposed	Preserved	Preserved	Preserved	Palatal composites
Class III	Lost	Distinctly exposed	Lost ≤ 2 mm	Preserved	Preserved	Palatal onlays
Class IV	Lost	Extensively exposed	Lost > 2 mm	Preserved	Preserved	Sandwich approach
Class V	Lost	Extensively exposed	Lost > 2 mm	Distinctively reduced/lost	Preserved	Sandwich approach (experimental)
Class VI	Lost	Extensively exposed	Lost > 2 mm	Lost	Lost	Sandwich approach (highly experimental)

Fig 1 *ACE Class I:* (left) *Frontal and* (right) *occlusal views. Very early detection of the erosive problem. All the cingula lost their microanatomical details. The enamel appears very shiny. Even though there is not yet dentin exposure, small chipping of the enamel at the incisal edge is visible (minimal vertical overlap). Considering the patient's age (25 years) and etiology (bulimia), this patient has a high risk of deteriorating toward a more severe stage in a short period of time.*

it was hoped to represent a consensus within the specialized scientific community. Nevertheless, there is still an undisputable need for a classification that directly and specifically focuses on the anterior maxillary dentition, where loss of mineralized tissue because of erosion, as minute as it may be at an early stage of the disease, can be assessed easily.

Clinicians not involved in epidemiologic surveys clearly need the least complicated approach to classify each patient rapidly and to decide on the most appropriate treatment plan. Thus, the prerequisite for a precise and rapid assessment is a diagnostic instrument that is based on a limited number of key parameters and that guides the clinician in a logical and systematic way. As a consequence, these two fundamental paradigms have been instrumental in the development and finalization of the proposed ACE classification (Table 1).

The ACE classification is strictly related to the clinical observation of the status of the anterior maxillary teeth, which are generally the most damaged. Patients are grouped into six classes, and for each class, a dental treatment plan is suggested. The classification is based on five parameters relevant for the selection of the treatment and the assessment of the prognosis: the dentin exposure in the contact areas, the preservation of the incisal edges, the length of the remaining clinical crown, the presence of enamel on the vestibular surfaces, and the pulp vitality.

ACE Class I: Flattened cingula without dentin exposure

Suggested therapy:
No restorative treatment

This is the earliest stage of dental erosion. The enamel is present but thinner. The palatal aspect of the teeth may appear more yellowish in the central portion of the underlying dentin and more white at the periphery with the presence of thicker enamel (Fig 1).

Fig 2 *ACE Class II: Pretreatment* (left) *frontal and* (center) *occlusal views and* (right) *posttreatment occlusal view. In this patient, the palatal aspects present areas of dentin exposure at the level of the contact points. The incisal edges were still intact. An early conservative rehabilitation was planned, and all maxillary anterior teeth were restored using an indirect approach (palatal veneers), while the posterior teeth received direct composite restorations.*

For patients in this category, no restorative treatment is recommended. However, preventive measures (eg, occlusal guard, fluoride gel) are mandatory. Most of all, the etiology should be investigated and the cause of the dental erosion eliminated. Since the enamel layer is still intact, 100% recovery is possible at this stage if the patient is capable of preventing further tissue loss.

ACE Class II: Dentin exposure on the palatal aspect (contact areas), no damage to the incisal edges

Suggested therapy: Direct or indirect palatal onlays

In this group of patients, the enamel at the level of the palatal aspect of the maxillary teeth is more compromised and small areas of dentin are exposed, generally related to the contact points of the opposing dentition (Fig 2). Since the mandibular anterior teeth are rarely affected by erosion, their incisal edges, composed of enamel, typically remain intact and act like chisels, damaging the maxillary anterior teeth in a very aggressive manner (focal attrition). Since the occlusal contacts are now composed of softer dentin, it is reasonable to anticipate that the loss of tooth structure will worsen at a faster rate, especially if the cause of the erosion is not under control. This is the reason why the dental status of patients affected by dental erosion may deteriorate quickly after an initial slow start (Fig 3). Nobody can predict exactly how each patient will evolve; nevertheless, parameters such as age and etiology of the dental erosion can guide the clinician to predict the steepness of the curve of the disease progression and to justify early intervention. A bulimic patient in his or her early 20s who already presents exposed areas of dentin (Class II) is at a higher risk of deteriorating the dentition compared to a patient in his or her 50s who suffers from gastric reflux that is kept under medical control. The first patient should be treated immediately, even though several authors recommend controlling the disease first.[27–29]

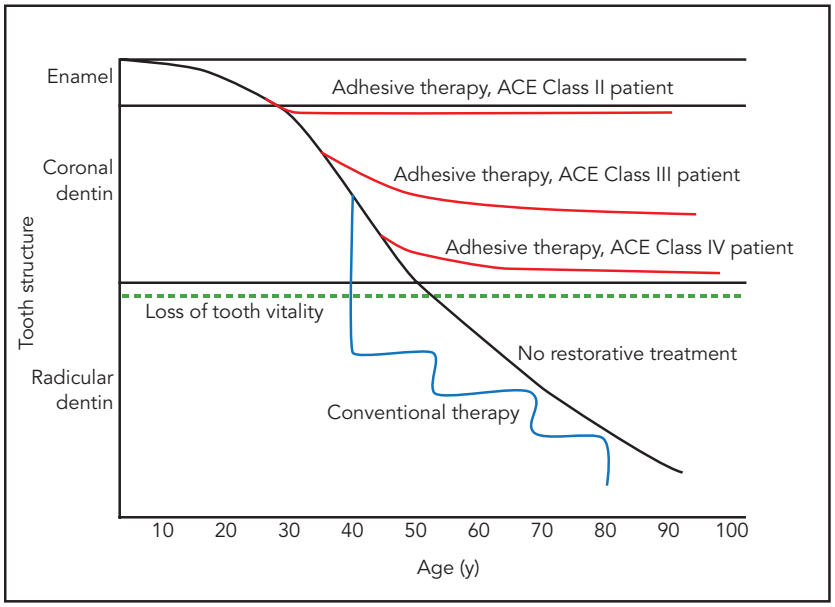

Fig 3 *Correlation between loss of tooth structure and the patient's age in cases of dental erosion. The change in the steepness of the curve is related to the loss of enamel and the consequent dentin exposure in the contact areas. Several factors can add to the aggravation of the steepness of the curve (parafunctional habits, hyposalivation, lack of erosion control, acidic diet, etc).*

Since a psychologic problem is not often resolved quickly, protecting the remaining enamel and the exposed dentin from further damage is recommended, even though the restorations may have a less favorable prognosis under these specific conditions.[30–32] In the opinion of the authors of this paper, the palatal aspect of Class II patients should be restored as soon as possible, either by means of direct or indirect composite restorations (early not invasive rehabilitation).

If the palatal wear has not yet affected the strength of the incisal edges and the length of the facial surfaces of the teeth is still intact, restoration of the palatal aspect of the maxillary anterior teeth could be the only treatment required. To obtain the necessary interocclusal space, adjunctive orthodontic treatment could be advocated, which allows the posterior teeth to be excluded from the treatment. However, not every patient accepts this possibility. A second option to obtain the anterior space needed consists of increasing the patient's vertical dimension of occlusion. In this case, all the posterior teeth, at least in one arch, are restored with direct composite restorations without any tooth preparation. Since the dental destruction is intercepted at an early stage, there is not enough space for thicker, indirect posterior restorations; removing tooth structure to create the space for thicker restorations goes against the principles of minimal invasiveness. This early and extensive rehabilitation based on direct composites is not well accepted among clinicians, who think that restoring so many teeth with so-called "weak" restorations is an overtreatment for which a sufficient longevity would not be guaranteed. As a consequence, many clinicians prefer to wait until further damage has taken place to justify a full-mouth rehabilitation based on stronger restorations (onlays or crowns). Unfortunately, there are no clinical studies available to date showing which choice may be the most beneficial in the long term to ACE Class II patients: an immediate rehabilitation with weaker direct composites and no tooth preparation, or a later treatment with more resistant restorations but a more compromised dentition and more aggressive tooth preparation. Thus, further clinical research is needed.

In the current investigation being undertaken by the authors of

Fig 4 *ACE Class III:* (left) *Pretreatment and* (right) *posttreatment views. In this deep bite patient, a severe loss of tooth structure at the level of the palatal aspect weakened the vestibular surfaces (note the high translucency), but the facial surface was almost intact (shortening of the clinical crown less than 2 mm). This patient required only palatal onlays. No further treatment was necessary to restore the maxillary anterior teeth. Note that all teeth were vital and maintained vitality after treatment.*

this research in Geneva, all patients (ACE Class II) involved were treated as early as possible. Since this prospective clinical study does not have a control group of patients who were left untreated and restored later with conventional therapy, comparison between the two different treatment plans is not possible. On the other hand, this clinical study will provide the first set of data helping to confirm (or reject) the clinical validity of this ultraconservative adhesive approach.

ACE Class III: Distinct dentin exposure on the palatal aspect, damage of the incisal edge length (≤ 2 mm)

Suggested therapy: Palatal veneers

If patients are left untreated, erosion and focal attrition will eventually lead to a weakening of the thickness of the incisal edges of the maxillary anterior teeth, especially if the vertical overlap (overbite) is not significant (Fig 4). When the incisal edges are affected, attentive patients start seeking help, driven mostly by esthetic concerns. Patients in this category are generally in their late 20s or early 30s. Since not all of them are willing to receive orthodontic treatment to create interarch space in the anterior segments of their mouth, an increase of the vertical dimension of occlusion

Fig 5 *When the enamel frame is still present (mesial, distal, cervical, and vestibular aspects), the tooth presents a higher resistance to tensile forces. Adhesive restorations restoring the palatal aspect are subject to less bending forces, and their clinical performance is enhanced (tennis racket theory)*

is necessary and involves the reconstruction of the posterior teeth, which, at this stage, may present signs of erosion as well. The choice between indirect or direct composite restorations is based on the severity of the loss of tooth structure and sometimes on the financial status of the patient.

The final restorative choice for the posterior quadrants (direct composite restorations or onlays) must always be driven by minimally invasive principles. Following the three-step technique to increase the vertical dimension of occlusion, the anterior maxillary teeth are restored with indirect restorations (composite palatal veneers), especially if the anterior space created with the increase in the vertical dimension of occlusion is more than 1 mm. Due to the minimal damage to the vestibular aspect of these anterior teeth, there is often no need for further treatment.

If the vestibular surfaces of the maxillary anterior teeth are intact or only slightly damaged at the level of the incisal edges, facial veneers may be considered an overtreatment since the length could be reestablished by means of palatal veneers. An attempt should be made to match the color of the natural tooth with the palatal veneers, since the horizontal flat junction between the tooth and palatal veneers may be difficult in terms of color blending. Shade modification could always be attempted later if necessary. The clinician should have a discussion with each patient to determine if the patient could be satisfied esthetically without veneers.

Even though no long-term follow-up data are available currently on the longevity of palatal veneers used to replace damaged incisal edges, these restorations have an acceptable prognosis for ACE Class III patients. Often, all the margins of palatal veneers are bonded to enamel. Furthermore, the teeth involved still preserve their enamel frame. In fact, looking from the palatal aspect, this frame could be identified and comparable to the frame of a tennis racket (tennis racket theory, Fig 5).

The mesial and distal walls of such erosion-affected teeth are generally still intact (unless Class III restorations are present). The cervical palatal enamel is also mostly present as a band of 1 to 2 mm next to the gingival margin. Finally, the enamel at the vestibular aspect of the tooth is almost completely intact in this class of patients (less than a 2-mm loss of incisal edge length).

According to the tennis racket theory, compromised teeth with an almost intact enamel frame will show surprisingly high resistance to flexure during function (mastication or occlusion). As a consequence, palatal composite restorations, subject to less tensile forces, will last longer.

Several studies have demonstrated the importance of the marginal ridges for posterior teeth. Restorations that extend to the mesial and distal aspect, such as mesial occlusal distal restorations, greatly affected the strength of the restored posterior teeth.[33–35] In the opinion of the current authors, the mesial and distal marginal ridges of the anterior teeth may have similar importance to that described for posterior teeth. Since their removal during palatal veneer preparation could dramatically compromise the flexure resistance of the tooth, the interproximal contact point should be removed minimally by means of an interproximal diamond strip or not be removed at all.

ACE Class IV: Extended dentin exposure on the palatal aspect, loss of the incisal length of the tooth (> 2 mm), preserved facial enamel

Suggested therapy: Sandwich approach

Most patients in this category are aware of their dental problem since they have noticed the shortening of their clinical crowns and an increase in the translucency of the incisal edges, even though they might not realize the extent of the tooth destruction (Figs 6a to 6d). At this stage, the posterior teeth are often involved, especially the premolars. Since an increase in the vertical dimension of occlusion is mandatory to create the necessary interarch space for the restorative materials in the anterior and posterior segments, the three-step technique should be followed.

To restore the anterior maxillary teeth, the sandwich approach is recommended. After the restoration of the palatal aspect with composite veneers, the treatment should be completed with ceramic facial veneers. The veneers are necessary not only because palatal veneers often do not match the color of the natural teeth, but also because there are no studies to document the long-term performance of such a large composite restoration in case the facial veneers are not placed.

Some patients in the ongoing Geneva study have decided not to obtain facial veneers and are under strict monitoring. If the palatal veneers degrade at a quick rate, ceramic facial veneers could be fabricated at a later date. On the other hand, the remainder of ACE Class IV patients all received the two anterior restorations, and the preliminary results (up to 4 years of follow-up without any clinical problems) are very encouraging (Figs 6e to 6h). While preparing these damaged teeth for facial veneers, attention should be given to not remove the facial enamel and transform these patients into ACE Class V cases. Additive techniques (tested by the diagnostic mock-up) or very thin veneers should be advocated.[36] For this second option, the technician should not be concerned with the final esthetic result (as for the crowns), since these teeth are generally still alive and their original color should not need heavy modification.

ACE Class V: Extended dentin exposure on the palatal aspect, loss of the incisal length of the tooth (> 2 mm), distinct reduction/loss of the facial enamel

Suggested therapy: Sandwich approach (experimental)

Patients who are treated at this later stage, unfortunately, may not have a favorable long-term prognosis if their maxillary anterior teeth are restored using the sandwich approach (Fig 7). In addition to the reduced length of the remaining clinical crown, the lack of enamel on the facial aspect of the teeth compromises the quality of the bond of the definitive veneers and the flexure resistance.

There are no long-term clinical studies reporting on the longevity of a sandwich approach in Class V patients. At the University of Geneva, patients in this category were treated following the adhesive technique since the alternative option (conventional therapy) would require devitalization of all compromised teeth. Preliminary data from the Geneva Erosion study show very promising results: the capacity of the sandwich approach to keep the vitality of all treated teeth, all rehabilitations achieved a very pleasing esthetic result, and tooth preservation was maximal. Nevertheless, patients








Fig 6 *ACE Class IV*

Figs 6a to 6d (left) *Pretreatment and* (right) *posttreatment views of an anterior maxillary restoration. This patient required a sandwich approach (composite palatal and ceramic facial veneers).*

Figs 6e to 6h (left) *Pretreatment and* (right) *posttreatment views. In this patient, the combination of erosion and focal attrition led to a complete loss of the incisal edges (more than 2 mm). Composite veneers were used to restore the palatal aspect; even though ceramic facial veneers were planned to complete the treatment of these teeth, the patient decided to wait since the difference in shade was not visible at a normal communication distance (1-year follow-up). Note that all teeth kept their vitality after treatment.*

should be intercepted and treated whenever possible for an optimal clinical performance of their rehabilitation.

ACE Class VI: Advanced loss of tooth structure leading to pulp necrosis

Suggested therapy: Sandwich approach (highly experimental)

Patients at this stage present a severely compromised dentition (Fig 8). Generally, even in the case of significant loss of palatal tooth structure, the pulp has time to withdraw and compromised teeth surprisingly preserve their vitality, a result of the slow progression of the erosive process. For a tooth to lose vitality because of dental erosion, a very severe and frequent acid attack (eg, bulimic or anorexic patients) is necessary, which overcomes the capacity of the pulp to protect itself, or simply an extreme destruction of its coronal dentin. In both cases, treatment prognosis may




Fig 7 *ACE Class V:* (left) *Pretreatment and* (right) *posttreatment views (2-year follow-up). The dental destruction had involved almost two thirds of the crown length and the dentin was exposed on the facial aspect. The sandwich approach is considered experimental in these cases, since the ceramic facial veneers are bonded mainly to a reduced surface of dentin.*




Fig 8 *ACE Class VI:* (left) *Pretreatment and* (right) *posttreatment views. The dental tissue destruction in this patient was so severe that two teeth were not vital at the time of the first consultation. Since the alternative was the extraction of the four maxillary incisors, the patient was treated following the sandwich approach. The 2-year clinical follow-up results are presented. Note that the palatal composite restorations were made directly in the mouth, and the veneers were fabricated by a laboratory technician selected by the patient for personal reasons (completed in collaboration with Dr H. Gheddaf Dam).*

be poor, especially if the erosion cannot be controlled.

In the authors' opinion, adhesive techniques should still be attempted, even though long-term results are lacking. The sandwich approach has the advantage of preserving the maximum tooth structure and, in most cases, the tooth vitality of the remaining teeth.

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So far, in the Geneva Erosion study, patients in this category have maintained the vitality of all treated teeth. If loss of vitality occurs as a result of the severely affected pulp of these teeth, endodontic access will be made easier through the palatal veneer without damaging the facial veneer. This would be more difficult in cases of full coverage. Another advantage of the adhesive technique in cases of a later loss of vitality is that internal bleaching procedures could be done easily. On the contrary, in cases with conventional therapy, the option to change the shade of a discolored root visible after gingival recession is not available because of the presence of the post cemented in the root.

Conclusion

Dental erosion is a frequently underestimated pathology that affects an increasing number of young individuals. Intercepting patients at the initial stages of the disease is critical to avoid irreversible damage to their dentition and to guarantee a better clinical performance of the restorations selected. In this article, a new classification is proposed to quantify the severity of the dental destruction and to guide clinicians and patients in the decision-making process. The classification is based on several parameters relevant for both the selection of the treatment and the assessment of the prognosis, such as dentin exposure in the palatal tooth contact areas, alterations at the level of the incisal edges, and ultimately, loss of pulp vitality. Patients are grouped into six classes, and for each, a dental treatment plan is suggested. For patients in whom the severity varies depending on location, the most compromised anterior tooth is selected to decide which class the patient belongs to. Finally, with the exception of ACE Class II, where minor orthodontic tooth movement may be considered, treatment of the erosion requires a distinct augmentation of the existing vertical dimension of occlusion to create the necessary space to restore the maxillary anterior teeth. Consequently, direct or indirect restorations of the posterior quadrants must also be planned as an integral part of the definitive oral rehabilitation.

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