



L'usure

Chronologie clinique

Charles Toledano - Strasbourg

Mécanique



Attrition

Serrages diurnes



Attrition + Abrasion

Grincements nocturnes
Brossage énergique

Chimique

A close-up photograph of the upper front teeth (incisors) showing severe dental erosion. The enamel is significantly worn away, exposing the underlying dentin. The erosion is most pronounced on the central incisors, which appear flattened and have irregular, pitted surfaces. The surrounding gingival tissue is pink and appears slightly inflamed.

Reflux gastro oesophagiens
3l de coca/j

Erosion

Chimique et mécanique



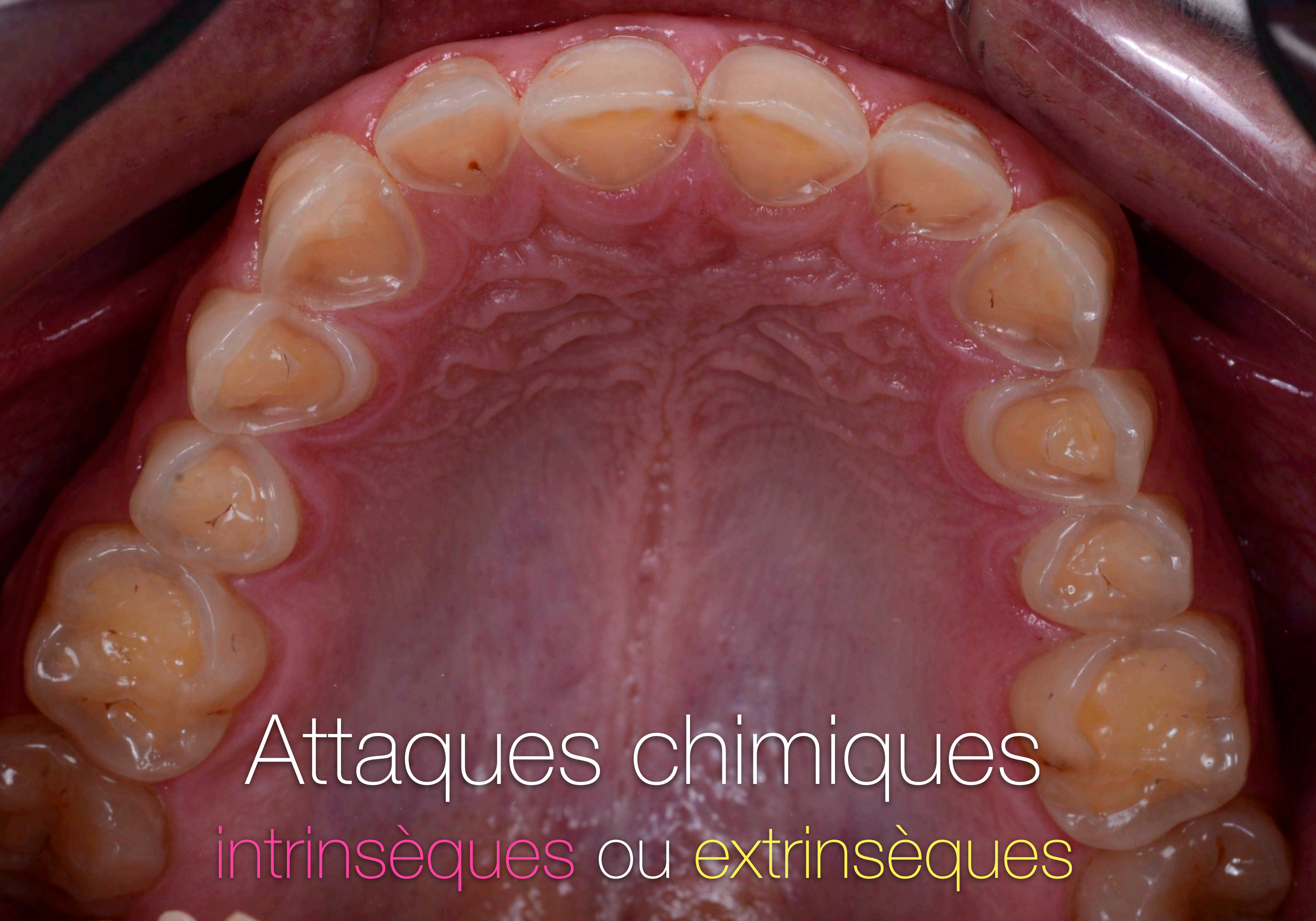
Reflux gastro oesophagien
Serrage diurne
Brossage énergique

Tribo-érosion

Chimique et mécanique



R Peter Shellis , Martin Addy Attrition, Abrasion and Erosion and Their Interactions in Tooth Wear Monogr Oral Sci 2025;33:19-31.



Attaques chimiques
intrinsèques ou extrinsèques



La Presse Médicale
Volume 35, Issue 1, Part 1, January 2006, Pages 23-31

Article original

Le reflux gastro-œsophagien dans la population générale française: Résultats d'une enquête sur 8 000 sujets adultes

Gastroesophageal reflux in the French general population: national survey of 8000 adults

Jean-François Bretagne¹, Bruno Richard-Molard², Charles Honnorat³, Agnès Caekaert⁴, Philippe Barthélemy⁴

6 à 10% de RGO hebdomadaires

Résumé

Objectifs
Évaluer la prévalence (RGO) définie se
préciser les caractéristiques
modalités de la

Méthodes
Enquête épidémiologique
de 8 000 sujets
administré con
prise en charge
le degré de sati

► Nutrition Clinique et Métabolisme. 2022 Mar 7;36(1):S28-S29. [Article in French] doi: 10.1016/j.nupar.2021.12.053

Forte augmentation de la prévalence des troubles du comportement alimentaire chez les étudiants pendant la pandémie COVID-19

MP Tavalacci^{1,*}, J Ladner², P Dechelotte³

► Author information ► Article notes ► Copyright and License information

PMCID: PMC890095

Abstract

Introduction et

Les troubles du comportement alimentaire (TCA) chez les étudiants sont devenus un enjeu majeur de santé publique. Le confinement, la distanciation sociale et les cours en distanc



26% de boulimie

5,7% d'anorexie

Piège à facettes



A close-up photograph of a person's upper teeth. The teeth are white, healthy, and have a natural shape. There is no visible gap between the teeth, and no signs of veneers or other dental work. The gums are pink and appear healthy.

Pas de place

Pas de facettes

J'ai besoin de place!!!



L'usure est localisée

Je l'adresse à l'ortho



L'usure est généralisée

J'augmente la DVO

1	Analyse esthétique et fonctionnelle
2	Evaluation de la DVO
3	Wax up
4	masque en résine
5	Validation esthétique et fonctionnelle
6	Préparation des secteurs antérieurs
7	Collage des restaurations en céramiques antérieures
8	Préparation des secteurs postérieurs
9	Collage des restaurations en céramiques postérieures
10	Gouttière de protection

Chronologie clinique



L'usure est généralisée

J'augmente la DVO

A clinical photograph showing the upper anterior teeth of a patient. The gingiva (gums) is severely inflamed, appearing bright red and swollen. There is significant recession of the gum tissue, exposing the roots of the teeth. The teeth themselves appear slightly discolored and worn. The overall appearance suggests a severe periodontal condition.

Dois je lui augmenter la DVO?

Oui si je veux me faire de la place...



Cale composite de surélévation

Ai-je *assez de place* pour restaurer les arcades *sans trop préparer* les dents?

De quelle épaisseur puis je augmenter la DVO?



2,5 à 3 mm
en postérieur

5 à 6 mm
maximum en antérieur

ARTICLE IN PRESS

Keywords

Temporomandibular Joint Disorder
Vertical Dimension Of Occlusion
Cephalometric Analysis
Vertical Dimension At Rest
Interocclusal Rest Space

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**EPA Consensus Project Paper:
The Vertical Dimension of
Occlusion. How to Determine
and How to Alter?
A Systematic Review**

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ABSTRACT

Purpose: The aim of this systematic review was to explore the dental literature to identify high quality clinical studies that introduced methods of determining the vertical dimension of occlusion (VDO), and additionally to find studies which assessed alterations in the VDO. *Materials and methods:* An electronic search of the literature was conducted through PubMed, Embase, and Cochrane Library databases referring to the determination and alteration of the VDO by 12/2021. *Results:* A total of 215 records were obtained from the initial search. After the first two screenings, 33 studies were selected for inclusion. *Correlations in the morphometric group ranged between r=0.18-0.87, p<0.05-0.001, correlations in the cephalometric group ranged between r=0.28-0.92, p<0.05-0.001, and correlations in the mechanometric group ranged between r=0.21-0.75, p<0.05-0.01. Regarding the alteration of VDO, in all studies the increase ranged between 1.8 mm and the patients adapted. Conclusions:* No clear guidelines can be established yet, in relation to the determination and alteration of the VDO. There is no apparent benefit in using more invasive and complex methods compared to the use of the facial anatomical landmarks. Patient adaptation seems to be successful when the range of VDO increase was 1.8-6.0 mm.

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INTRODUCTION

The clinical procedures of determining and establishing the patients' Vertical Dimension of Occlusion (VDO) could still be considered as one of the dogmas in dentistry.¹ VDO has been defined as the distance between two selected anatomic or marked points (usually one on the tip of the nose and the other on the chin) when in maximal intercuspal position.² In healthy dentate patients VDO could be determined by the occlusal surfaces of the posterior teeth, while in edentulous patients by the contact of the wax occlusal rims on the record bases.² Therefore, tooth wear, tooth loss, or changes at the occlusal surfaces of existing prostheses over time might require the need to restore the patients' initial VDO.³ Additionally, concerns and reservations have been expressed as to whether the VDO could remain constant through patients' life or if the overeruption of worn teeth could compensate for the loss of the original VDO.⁴

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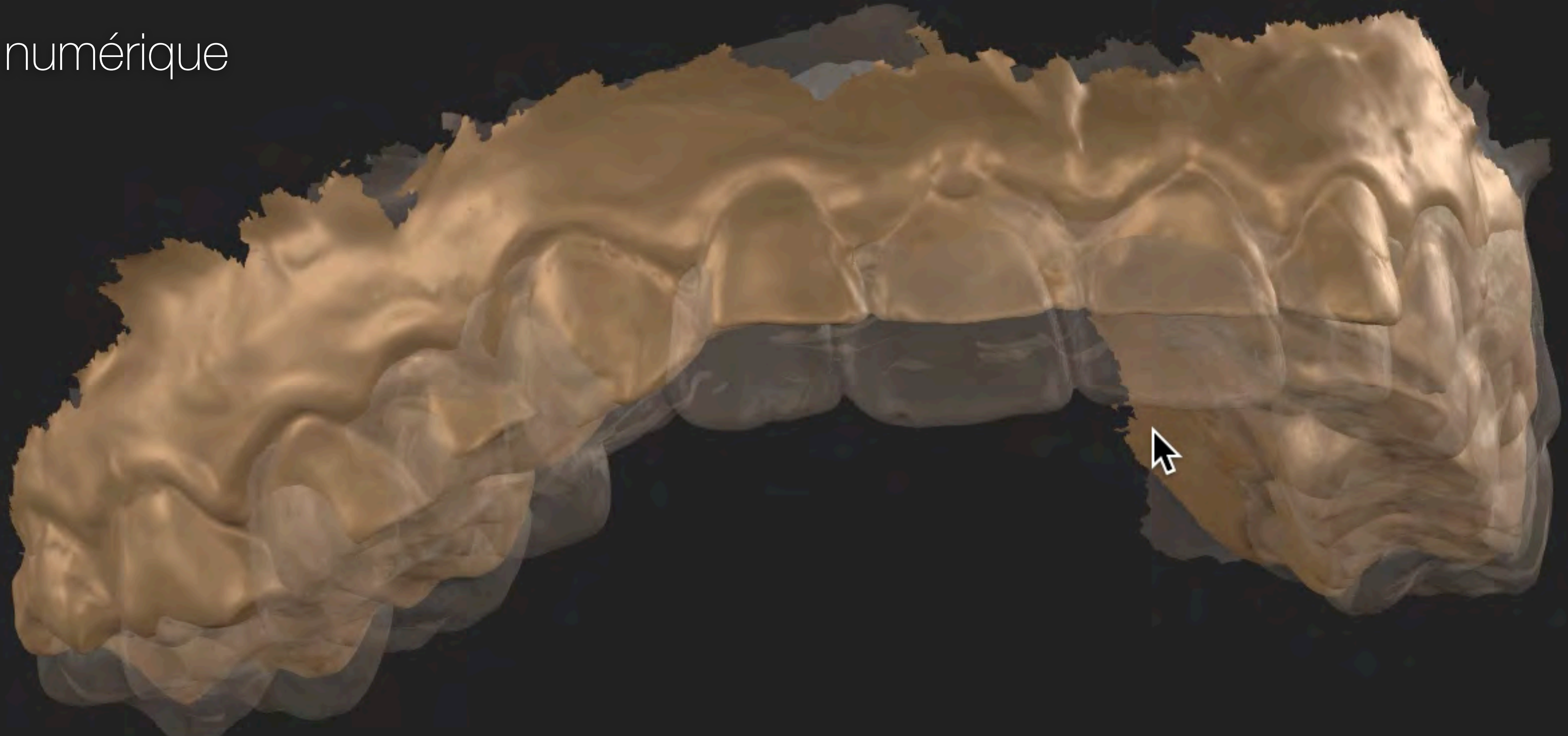
Peut on augmenter la DVO?

On peut augmenter ou diminuer
la DVO en une fois sans danger

Jean Daniel Orthlieb



Wax up numérique



Vailati F., Belser U. – Full-mouth adhesive rehabilitation of a severely eroded dentition:the three-step technique.Part 1.Eur J Esthet Dent 2008;3(1):30-44.
Vailati F., Belser U. – Full-mouth adhesive rehabilitation of a severely eroded dentition:the three-step technique.Part 2.Eur J Esthet Dent 2008;3(2):128-146.
Vailati F., Belser U.– Full-mouth adhesive rehabilitation of a severely eroded dentition:the three-step technique.Part 3.Eur J Esthet Dent 2008;3(3):236-257.
Koubi S, Gürel G, Margossian P, Massihi R, Tassery H. Traitement de l'usure : rôle fondamental du projet esthétique et fonctionnel. Info Dent 2014 ; 96 (31) : 66-80.

Adhésif

Full Mock Up

Durée du test

Manque de preuves

Gérer les attentes du patient

Séquençage du traitement.

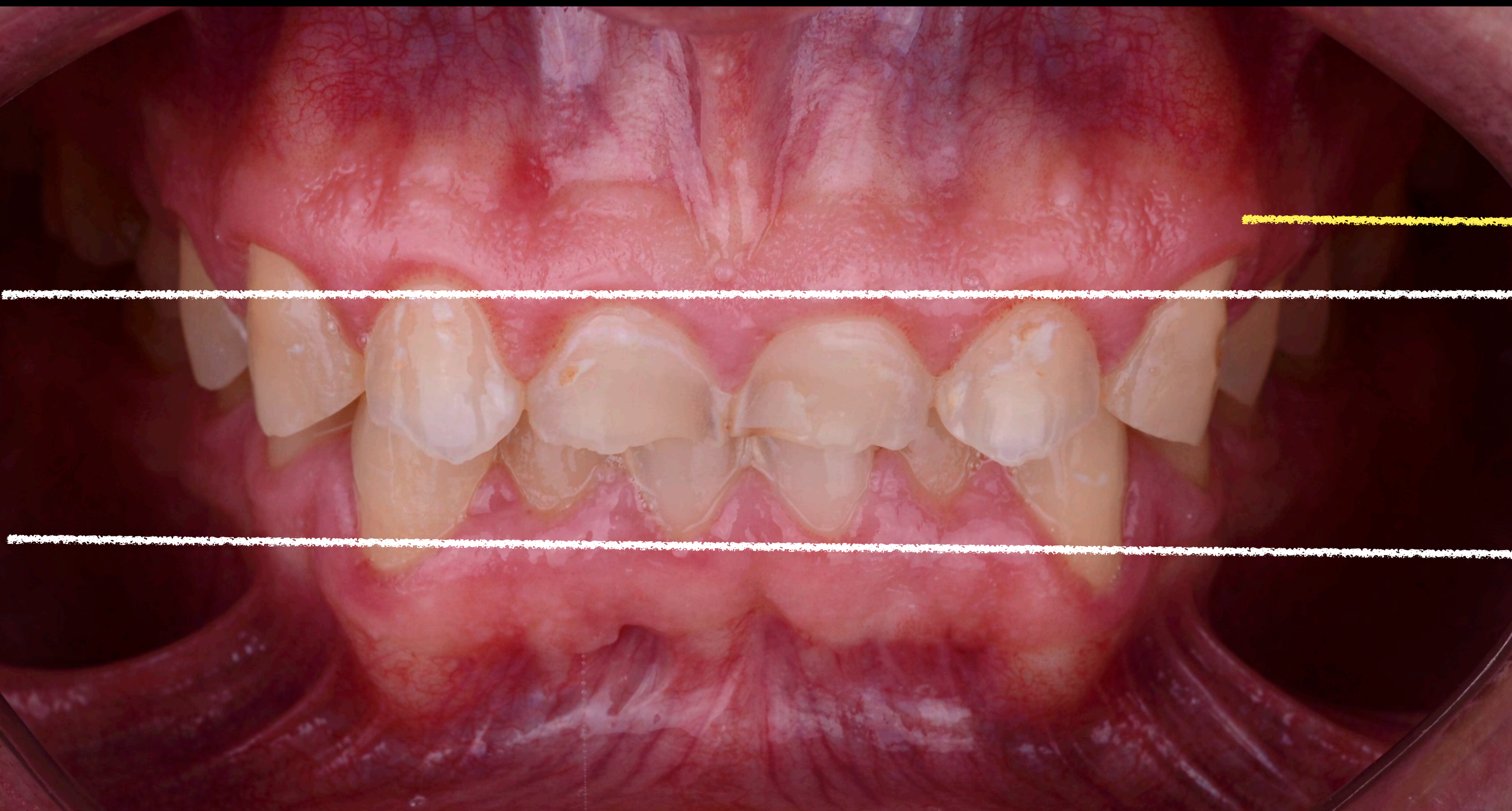


Full Mock Up



3 semaines





Céramiques



Controle annuel

Traitement de l'usure

Overlays monolithiques en disilicate de lithium
(1mm minimum)



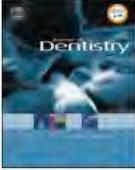
100% de survie à 11 ans

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Restorative options for moderate and severe tooth wear: A systematic review

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ARTICLE INFO

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Outcomes
Restoration failure
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ABSTRACT
Objectives: This systematic review aimed to evaluate the failure of different types of restorative treatments for tooth wear.
Study design: A search was conducted in Medline, Cochrane, Web of Science, SCOPUS, and Embase (October 2023) with no limits for publication year or language. Randomized and non-randomized studies comparing restorative options to treat moderate to severe tooth wear were included. Two reviewers independently selected studies, extracted data and assessed the risk of bias. Failure data was obtained from each study and organised into either 'major failure,' with the need to replace the restoration, or 'minor failure,' where the restoration was repaired or refurbished. Studies that did not bring comparisons or sufficient data to calculate failures were excluded.
Results: 3977 articles were found; 43 studies were eligible for analysis. For RCT studies (n = 6), direct composite showed a mean annual failure rate (AFR) of 10.54 % for minor failures and 8.38 % for major failures. For non-RCT studies (n = 37), these were 3.97 % and 0.4 % respectively. For RCT studies, indirect composite showed a mean AFR of 12.84 % for minor failures and 10.41 % for major failures. For non-RCT studies, these were 2.9 % and 0.15 % respectively. For RCT studies, indirect ceramic showed a mean AFR of 0.09 % for minor failures and 0.13 % for major failures. For non-RCT studies, these were 0.83 % and 0.33 % respectively.
Conclusion: Indirect restorations demonstrated lower failure rates; however, they can be more invasive and require more operator time than alternatives. Direct methods showed greater failures but offer a minimally invasive modality. (CRD42022358586)
Clinical Significance: This study will provide clinicians with a more informed view of the success, survival and failure rates of materials when deciding how to restore tooth wear.

1. Introduction

Tooth wear is the incremental loss of tooth tissue through mechanical or chemical breakdown of the enamel and dentine [1,2]. Tooth wear can present physiologically as part of normal function throughout the lifetime of a patient. Conversely, it can be pathological where the rate and severity of active wear is atypical and can impact on the patient's oral health-related quality of life and ultimately on tooth survival [3–7]. The incidence of this destructive process is increasing; however, the progression of tooth wear is amenable to prevention [8–13]. The preferred management approach for patients exhibiting moderate to severe tooth wear where restorative treatment is not indicated or not clinically necessary involves the implementation of counselling and an appropriate monitoring protocol [3,14]. This needs to be balanced against the risk of the condition worsening, which could potentially result in a less optimal result due to a decrease in the more favourable enamel substrate for bonding [3,5].
The potential impact of tooth wear as well as the costs and challenges associated with the rehabilitation of the severely worn dentition underpins the importance of a timely diagnosis and effective prevention, which may be delivered by dentists, patient education and government healthcare initiatives [15].
Moderate to severe tooth wear can manifest with a variety of effects, such as a reduced vertical dimension of occlusion, and symptoms, which

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Taux d'échec annuel

The chart displays the annual failure rates for three types of restorative treatments: Composites Directs, Composites Indirects, and Ceramiques. Each treatment is evaluated based on its reparability (Réparable or Non réparable). The Y-axis represents the annual failure rate percentage, ranging from 0 to 14. The X-axis lists the treatments and their categories. The bars are color-coded: blue for Réparable and green for Non réparable.

Treatment	Category	Annual Failure Rate (%)
COMPOSITES DIRECTS	Réparable	~10.5
	Non réparable	~0.4
COMPOSITES INDIRECTS	Réparable	~12.8
	Non réparable	~0.15
CERAMIQUES	Réparable	~0.09
	Non réparable	~0.13

Alani A, Mehta S, Koning I, Loomans B, Pereira-Cenci T. Restorative options for moderate and severe tooth wear: A systematic review. J Dent. 2025 May;156:105711.