

Wear is real, so are our solutions

Pragmatic direct approaches for tooth wear from GC



Wear management, where to start?

A common concern in dentistry, an issue which increasingly affects the daily work, is wear. While it can range in severity, our focus here is on **moderate wear**, where signs are clearly visible but not yet extensive or structurally compromising. At this stage, early intervention is critical to avoid an increase in severity and treatment complexity. The longer care is delayed, the lower the comfort of the patients as they increasingly experience sensitivities, pain and aesthetic issues.



Be on time and prevent discomfort by working together with GC as we cover how to visually **identify** the different signs of wear, how to **prevent** wear from occurring or halt from getting worse and what steps are necessary to **restore** effectively.

39% of your patients are estimated to be affected by tooth wear**

Do you have your treatment plan ready?
We are here to support you in tackling **moderate** wear!

Identify: How do you identify wear effectively?

Wear is most often **multi-factorial** and a combination of the following four types of wear. Whenever wear becomes pathological, causing pain, discomfort, functional problems or deterioration of aesthetic appearance, it also increases the complexity of the treatment.

Erosion

Typical smoothed surfaces caused by acids in food, drinks and/or gastric acids



Courtesy of Dr P. Swerts, Belgium

Abrasion

U-shaped notches cervically or other atypical wear lesions from foreign objects or habits



Courtesy of Dr A. Salehi, France

Attrition

Flattened surfaces, from tooth-to-tooth wear from grinding, clenching and chewing



Courtesy of Dr Simone Moretto, Belgium

Abfraction

Cervical cavities from repeated flexure due to clenching and grinding



Courtesy of Dr. J. Tapia, Spain

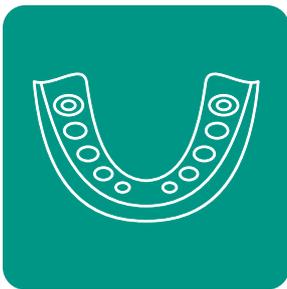
*Azeez, A. A., Sherif, S., & Franca, R. (2021). Statistical estimation of wear in permanent teeth: a systematic review. *Dentistry Review*, 1(1), 100001.

**Zieliński, G., Pająk, A., & Wójcicki, M. (2024). Global prevalence of sleep bruxism and awake bruxism in pediatric and adult populations: a systematic review and meta-analysis. *Journal of Clinical Medicine*, 13(14), 4259.



Prevent: Preventing and halting future wear

A **holistic approach** is paramount when dealing with wear. It is necessary to assess its underlying risk factors (e.g. disease, eating habits,...) prior to establishing any treatment strategy. A **regular surveillance** of the wear progression is needed before intervention, especially at early stages of wear. Using a tooth wear index, pictures, or 3D scans can help to analyse wear progression over time. Finally, the **patient must be aware of any wear-inducing habits** and must comply with preventing further damage to the tooth tissue or eventual restorations for a successful outcome.



Night Guards

Prevent further wear by recommending a night guard when clinically indicated



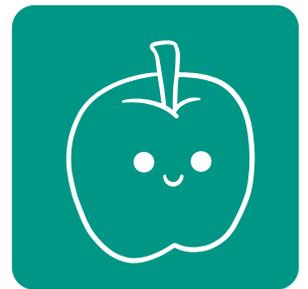
Oral Hygiene

Ensure your patient brushes frequently, but not too aggressively, and with the right tools



Attitude

Change patients' perspective on how to treat and protect their teeth and restorations



Diet

Limit acidic beverages and food, such as energy drinks and citrus fruits, which accelerate wear

Further support with RECALDENT™ CPP-ACP



- ✓ Promotes the remineralisation of enamel and an increase in surface hardness. When the surfaces are remineralising faster and become stronger, wear can be inhibited.
- ✓ Desensitises teeth with exposed dentin
- ✓ Provides extra protection against future acid attacks

In office



MI Varnish

At home



Tooth Mousse

or



MI Paste Plus



RECALDENT™ and RECALDENT™ logo are trademarks of Mondeléz International Group used under license. RECALDENT™ is derived from milk casein. Do not use on patients with a milk protein, hydroxybenzoates or soy bean allergy.



Approach to restore: How to treat moderate wear?

Choose one of these three approaches depending on which fits best the needs of your case.

A **pre-restorative orthodontic treatment** is needed when the patient has malocclusion and wear is prevalent across anterior and posterior teeth. When wear is only located in the anterior area, the **Dahl Principle** can be used instead of an orthodontic treatment. Finally, if there is generalised wear but occlusion is normal and the teeth are properly aligned, then **only a restorative treatment** will suffice.

1

Pre-restorative orthodontics followed up by full-mouth restoration.



Best suited for: Cases of dento-alveolar compensation or when malocclusion or crowding is present

Courtesy of Dr S. Däröste, Sweden



Technique to restore: How to treat moderate wear?

TIP!

Placing a layer of everX Flow ensures further protection against fractures.

Free hand buildup

Best suited when: Patient has **simple treatment** needs where **limited surface has been affected**. Using G-ænial A'CHORD provides great handling, aesthetics and resistance to wear.



Stamp technique

Best suited when: Patient has a **moderately complex treatment** need where **multiple teeth are affected** by wear. This technique is similar to Injection Moulding Technique but using paste composite to build up. Using G-ænial A'CHORD with the stamp technique gives the restoration beautiful gloss that lasts.



Injection Moulding Technique (IMT)

Best suited when: Patient has a **more complex treatment** need where **multiple teeth are affected** by wear. This technique is great to transfer a detailed tooth design into the mouth in a fast and predictable way. Using G-ænial Universal Injectable, our strongest restorative with ideal thixotropy, is preferred for best results.



2

Dahl-Principle



Courtesy of Dr K. Karagiannopoulos, UK

Best suited for:
Patients with localised anterior wear. By restoring the anterior teeth (shown in white wax-up) in supra-occlusion, relative axial posterior tooth movement is allowed, enabling final occlusion to be reached.

3

Full-mouth restoration alone



Courtesy of Prof M. Peumans, Belgium

Best suited for:
Generalised tooth wear without malocclusion

TIP!

Occlusal vertical dimension (OVD)

The new OVD is determined first by how much length is added on the anterior teeth. Changes to OVD typically range from 2 to 5 mm, depending on patient tolerance and required minimum thickness of the restorative material. The freeway space needs to be maintained. Tools such as diagnostic wax-ups, digital smile design, and articulators, both conventional and digital, help to guide safe and predictable adjustments for functional and aesthetic rehabilitation.



Courtesy of Dr R. Zunzarren, France



Courtesy of Prof M. Peumans, Belgium



Courtesy of Dr M. Fostiropoulou, Greece

Our recommendations

G-Premio BOND

- ✓ Quick bonding procedure and **cost-efficient** dispensing with 300 drops per bottle
- ✓ Ideal to **block hypersensitivity** caused by wear

everX Flow

- ✓ **Strengthening teeth** in case of heavy occlusal loading
- ✓ Very **high fracture resistance** to inhibit shock effects caused by bruxism

G-ænial A'CHORD

- ✓ **Long-lasting gloss**, preserving your aesthetics even longer for your freehand or stamp technique
- ✓ The **true-to-nature fluorescence** ensures that your wear solution is invisible under any light

G-ænial Universal Injectable

- ✓ Superior **wear resistance**, making it an ideal composite to treat wear with
- ✓ **Self-polishing ability** for long term gloss and reduced wear of antagonist



Wear is real, so are our solutions

Pragmatic direct approaches for tooth wear from GC



SCAN FOR MORE INFORMATION



G-ænial A'CHORD

Advanced universal composite with unishade simplicity



G-ænial Universal Injectable

High-strength restorative composite



everX Flow

Short-fibre reinforced flowable composite



G-Premio BOND

One-component universal adhesive



MI Paste Plus

Bio-available calcium and phosphate, with fluoride



Tooth Mousse

Bio-available calcium and phosphate, without fluoride



MI Varnish

Enhanced fluoride varnish treatment with bio-available calcium and phosphate



EXACLEAR

Clear vinyl polysiloxane

For ordering information, please check our online catalogue.

everX Flow, EXACLEAR, G-ænial A'CHORD, G-Premio BOND, GC MI Paste Plus, GC Tri Plaque ID Gel, G-ænial Universal Injectable, MI Varnish and Tooth Mousse are trademarks from GC.

GC EUROPE N.V.

Head Office
Researchpark,
Haasrode-Leuven 1240
Interleuvenlaan 33, B-3001 Leuven
Tel. +32 16 74 10 00
Fax. +32 16 40 48 32
info.gce@gc.dental
<https://www.gc.dental/europe>

GC UNITED KINGDOM Ltd.

Coopers Court Newport Pagnell
Buckinghamshire
MK16 8JS
United Kingdom
Tel. +44 1908 218 999
Fax. +44 1908 218 900
info.uk@gc.dental
<https://www.gc.dental/europe/en-GB>