Fluor Protector

Superior protection against dental caries and erosion

FLUOR PROTECTOR OF CLINICAL EVIDENCE 40 YEARS

Fluor Protector

Fluor Protector Gel

ivoclar vivadent: passion vision innovation
Fluor Protector

Overview

- Superior protection against dental caries and erosion
- Fluoride – Clinically proven
- Fluoride varnish – Features and mechanism of action
- Application
- Intensive care gel
Risks to teeth

Erosion

Loss of tooth structure due to acid without bacterial involvement

Caries

Loss of tooth structure due to acid with bacterial involvement

(Pictures: Prof. Dr. A. Lussi, Dr. C. Stecksén-Blicks)
Fluoride – Mechanism of action

Fluoride

- Stimulates remineralization
- Inhibits demineralization
- Reduces plaque activity and plaque growth
Fluoride – Clinically proven

Indications

- Strengthening of enamel resistance
- Treatment of hypersensitive teeth
- Caries-long-term prophylaxis
- Protection against erosion
- Remineralization of initial lesions
Fluoride varnish – Accepted worldwide

WHO: There is no doubt that fluoride varnish has a significant caries-reducing potential.
(Fluoride varnish for community-based caries prevention in children, 1997)

FDI: Professional topical application of fluoride has been shown to be a safe and effective procedure to reduce dental caries.
(FDI policy statement of fluorides and fluoridation for the prevention of dental caries, 1993)

ADA: Evidence-based clinical recommendations for the professional application of fluoride varnish.
(ADA Council on Scientific Affairs, 2006)
Fluoride varnish – The method of choice

Advantages of varnish delivery form

- Local protection against caries
- Prolonged adhesion to tooth surfaces
- Improved incorporation of fluoride into the tooth structure
- Proven caries-preventive effect
- Easy, fast application
- Compared to gels, lower risk of swallowing in young children
- Limited systemic exposure
- Safe, comfortable application

(Zero 1992; Zimmer 1993; Beltrán-Aguilar et al. 2000)
Fluoride varnishes – Fluor Protector and Fluor Protector S
Fluoride varnishes – Flow and wetting properties

High-viscous fluoride varnish stands on the enamel surface.

Low-viscous fluoride varnish e.g. Fluor Protector S or Fluor Protector has optimum flow and wetting properties.
In contrast to other commercially available fluoride varnishes, Fluor Protector S and Fluor Protector are supplied as a homogeneous solution. The fluoride component is completely dissolved. As a result, the fluoride dosage can be controlled and its availability ensured.
Fluoride varnish – Mechanism of action

Acidic oral environment:
The tooth structure demineralizes if fluoride is not present.

Neutral oral environment:
A protective calcium-fluoride layer forms if fluoride is present.

Acidic oral environment:
Bioavailability of fluoride
Fluor Protector S – Fluoride layer

Demineralized enamel

CaF$_2$-like precipitates

Calcium fluoride-like layer on demineralized enamel after the application of Fluor Protector S; SEM photos, magnification: 30000x

(R&D Ivoclar Vivadent, Schaan, 2012)
Comparison of fluoride varnishes – Fluoridation

Fluoride varnishes and their fluoride content measured one hour after application:

- Fluor Protector S: 40 µg/cm²
- Duraphat*: 10 µg/cm²
- Clinpro White Varnish*: 5 µg/cm²
- MI Varnish*: 5 µg/cm²
- Bifluorid 10% *: 10 µg/cm²
- Negative control: < 1 µg/cm²

*) Not a registered trademark of Ivoclar Vivadent AG

Alkali-soluble fluoride on the enamel surface measured one hour after the application of various varnishes

(R&D Ivoclar Vivadent AG, Schaan, 2012)
Fluor Protector S – Step-by-step procedure

1. Clean
2. Apply Fluor Protector S
3. Leave to dry for 60s
4. Establish a relatively dry working field

or

More information
Fluor Protector S – Step-by-step procedure

Tips for patients after the application of Fluor Protector S

Do not rinse immediately after the application

1 h

Avoid:

- Drinking
- Eating

1 h
Fluoride varnish – Targeted protection of at-risk areas
Fluoride treatment – Intensive care gel

Dentists recommend Fluor Protector Gel, because it benefits their patients:

The protective formula of “calcium + 1450 ppm fluoride + phosphate” strengthens the teeth against acid attacks.
Intensive care gel to strengthen the teeth

Special care for special needs
- Sensitive teeth
- Exposed cervicals
- Consumption of acidic food
- Dry mouth
- During orthodontic treatment
- High caries risk
- After professional tooth cleaning
- Sensitive peri-implant tissue
- Within tooth whitening

More information
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