

# Addressing Tooth Sensitivity in Orthodontics: A Practical Approach

Clinical experience with effective approaches to reduce pain and enhance treatment success

## An easy-to-use gel to support orthodontic treatments – PROFISIL® FLUORIDE VARNISH

Orthodontic treatments are aimed at improving dental occlusion and smile aesthetics. However, they can cause some temporary side effects, including dentin hypersensitivity. Triggered by various factors, it manifests as an acute, temporary pain in response to thermal, chemical, or mechanical stimuli.

During tooth movement, the applied orthodontic forces are transmitted through the periodontal ligament. This mechanical stimulus can cause local inflammation and activate pain receptors in the periodontal area. Furthermore, orthodontic forces can cause an inflammatory response that leads to vascular changes in the dental pulp, making the tooth more sensitive to thermal or tactile stimuli.

Another common cause of hypersensitivity is exposed dentin or exposed root surfaces (fig. 1-2). The use of **PROFISIL® FLUORIDE VARNISH** during orthodontic treatment is an effective therapeutic solution for managing dentin hypersensitivity.

**PROFISIL® FLUORIDE VARNISH** has a dual therapeutic effect: occlusion of dentinal tubules, reducing dentin permeability, and a remineralizing effect, promoting mineral deposition in dentin structure, contributing to the reduction of sensitivity.

The gel is easily applied with a brush to the surfaces to be treated (fig. 3–4). It adheres well to the tooth, so any potentially painful drying of the tooth during pretreatment can be avoided.

Clinical benefits include a significant reduction in pain, improved compliance with orthodontic treatment, and improved home hygiene. It is essential for the practitioner to evaluate the patient's characteristics and select the most appropriate desensitizer, integrating it into a personalized treatment plan based on scientific and clinical evidence.



Fig. 1



Fig. 2



Fig. 3



Fig. 4



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- Graduated with honors and a special mention from the University of Cagliari, Master in Clinical Dentistry Orthodontics (United Campus of Malta HEI Foundation).
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