

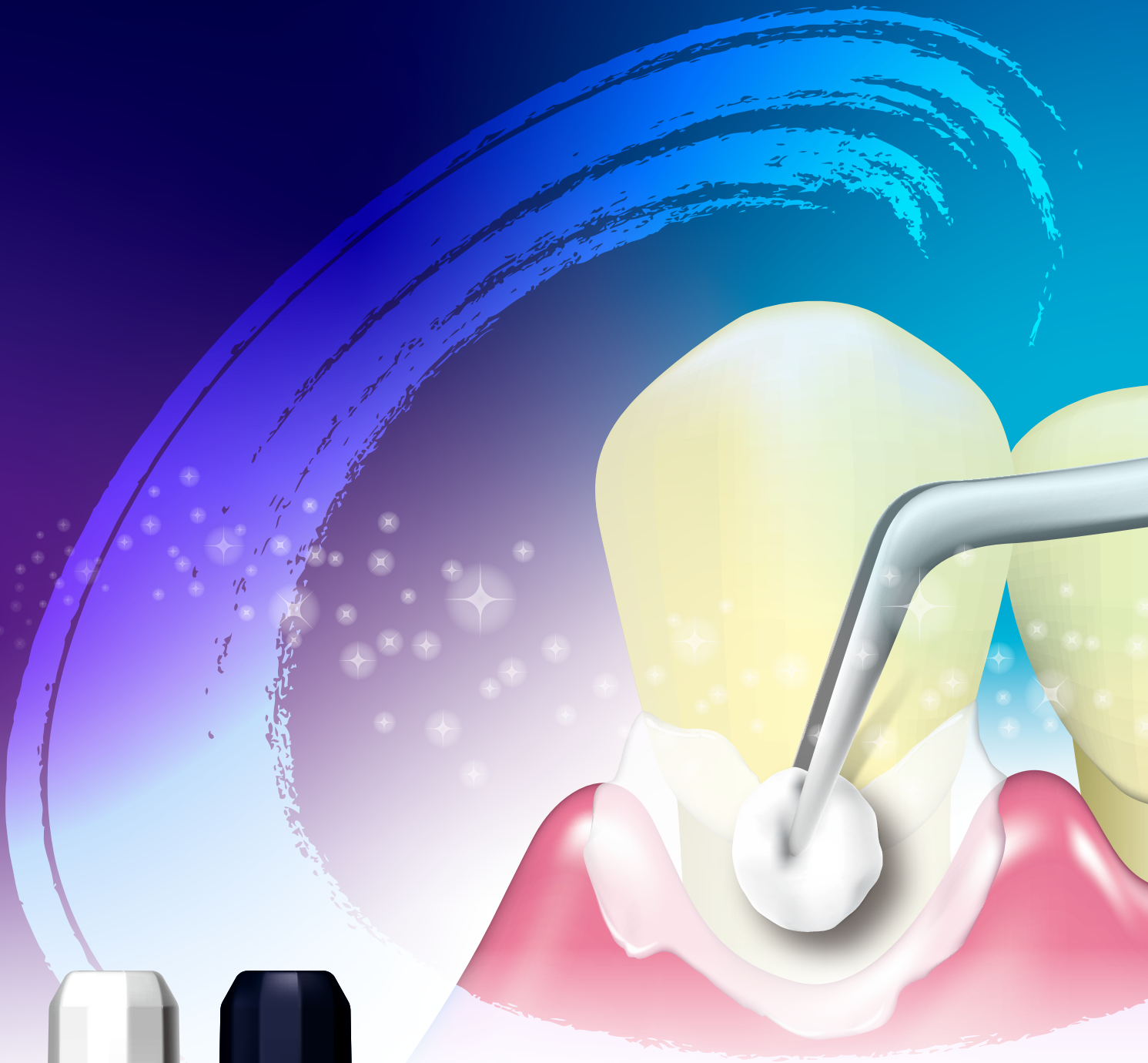
Clinical Case Collection

Dentin Hypersensitivity

Management with Nanoseal



nanoseal®



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Clinical Cases Provided by

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VAS is a patient-reported scale ranging from 0 (no pain) to 10 (worst imaginable pain) used to assess pain intensity.

Huskisson EC. Measurement of Pain. *Lancet*. 1974;304(7889):1127–1131.

Dentin hypersensitivity associated with home whitening

Patient: Female, 22 years and 3 months old

Chief Complaint: Dentin hypersensitivity during home whitening (VAS 5)

Diagnosis: Dentin hypersensitivity associated with home whitening

Clinical Course: The patient started home whitening using a home whitening material containing 10% carbamide peroxide. She was instructed to perform home whitening for 2 hours per day and to attend follow-up visits every 2 weeks. One month after the start of whitening, sufficient whitening effect was achieved, and she was instructed to discontinue whitening. However, as the patient wanted her teeth to become whiter, she continued home whitening for 2 hours daily despite the instruction.

Two months later, she presented with hypersensitivity in the maxillary and mandibular anterior and premolar regions bilaterally (11–15, 21–25, 31–35, 41–45). She described the sensation as a throbbing pain, with a VAS score of 5. She was instructed again to discontinue whitening, and Nanoseal was applied to the affected teeth. One week later, she returned for follow-up, and a second application of Nanoseal was performed. The hypersensitivity symptoms resolved two weeks after the initial application. Thereafter, she performed home whitening only when tooth discoloration was noticed, and no recurrence of hypersensitivity was observed.



Baseline
Start of home whitening



1-month follow-up



2-month follow-up
Onset of hypersensitivity



Nanoseal application



2.5-month follow-up
Hypersensitivity resolved



1-year and 10-month follow-up

Case 2

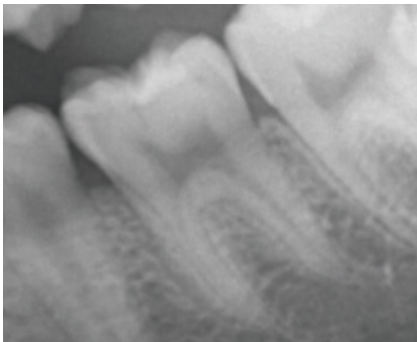
Dentin hypersensitivity associated with excessive brushing pressure

Patient: Male, 20 years and 1 month old

Chief Complaint: Pain (VAS 3)

Diagnosis: Dentin hypersensitivity associated with excessive brushing pressure

Clinical Course: At the initial visit, the patient presented with pain in tooth 36. He reported pain in tooth 36 when brushing or when stimulated by food and beverages (VAS 3). After examination, dentin hypersensitivity was diagnosed. The cause and contributing factor of dentin hypersensitivity, excessive brushing pressure, were explained to the patient, and Nanoseal was applied. The symptoms resolved one week later.



Baseline
Dentin hypersensitivity



Nanoseal application



7-day follow-up
Hypersensitivity resolved after

Case 3

Dentin hypersensitivity in a tooth restored with a CAD/CAM crown

Patient: Male, 31 years and 1 month old

Chief Complaint: Pain (VAS 4)

Diagnosis: Dentin hypersensitivity in a tooth restored with a CAD/CAM crown

Clinical Course: At the initial visit, the patient presented with pain in tooth 36. He reported pain in tooth 36 when brushing or when eating irritating foods (VAS 4). Tooth 36 had been restored with a CAD/CAM crown. After examination, dentin hypersensitivity was diagnosed. The cause and contributing factors of dentin hypersensitivity, occlusal factors including bruxism, clenching, and tooth contacting habit, were explained to the patient, and Nanoseal was applied. The symptoms resolved one week later.



Baseline
Dentin hypersensitivity



Nanoseal application



7-day follow-up
Hypersensitivity resolved

Case 4

Dentin hypersensitivity in a composite resin-restored tooth

Patient: Female, 35 years and 6 months old

Chief Complaint: Pain (VAS 4)

Diagnosis: Dentin hypersensitivity in a composite resin-restored tooth

Clinical Course: At the initial visit, the patient presented with pain in tooth 26. A composite resin restoration was observed in tooth 26. She reported pain when brushing and when eating irritating foods (VAS 4). Dentin hypersensitivity was diagnosed. The cause and contributing factors of dentin hypersensitivity, excessive brushing pressure and horizontal brushing, were explained to the patient, and Nanoseal was applied. The symptoms resolved one week later.



Baseline
Dentin hypersensitivity



Nanoseal application



Hypersensitivity resolved after
7 days

Case 5

Preventive application after vital tooth preparation

Patient: Male, 41 years and 4 months old

Treatment Objective: Pulp protection after zirconia crown preparation

Diagnosis: Preventive treatment for pulpal hyperemia after preparation of vital tooth 35

Clinical Course: Zirconia crown preparation was performed on vital tooth 35. Nanoseal was applied to help prevent pulpal hyperemia and pulpitis associated with preparation-related trauma. No clinical symptoms developed after placement of the zirconia crown.



After zirconia crown preparation
Nanoseal application

2-week follow-up
Zirconia crown placement



Baseline
Before zirconia crown preparation

Case 6

Dentin hypersensitivity after scaling

Patient: Male, 62 years and 7 months old

Chief Complaint: Cold-water pain (VAS 4)

Diagnosis: Dentin hypersensitivity in teeth 31, 32, 33, 41, 42, and 43

Clinical Course: At the initial visit, the patient presented with calculus deposits on teeth 31, 32, 33, 41, 42, and 43. After periodontal counseling due to oral malodor, scaling was performed in the same region. Three days later, he returned as an emergency patient with a chief complaint of cold-water pain. He reported pain in teeth 31, 32, 33, 41, 42, and 43 when brushing (VAS 4). After examination, dentin hypersensitivity was diagnosed. The cause and contributing factors of dentin hypersensitivity, calculus deposition and the scaling procedure, were explained to the patient, and Nanoseal was applied. The symptoms resolved one week later.



Baseline
Scaling procedure



3-day follow-up
Dentin hypersensitivity



Nanoseal application



7-day follow-up
Hypersensitivity resolved

Case 7

Dentin hypersensitivity associated with exposed root surfaces

Patient: Female, 64 years and 0 months old

Chief Complaint: Pain (VAS 4)

Diagnosis: Dentin hypersensitivity associated with exposed root surfaces

Clinical Course: At the initial visit, the patient presented with pain in teeth 44 and 45. Exposed root surfaces were observed on teeth 44 and 45. She reported pain in teeth 44 and 45 when brushing and when eating irritating foods (VAS 4). After examination, dentin hypersensitivity was diagnosed. The cause and contributing factors of dentin hypersensitivity, excessive brushing pressure, horizontal brushing, tooth contacting habit, and clenching, were explained to the patient, and Nanoseal was applied. The symptoms resolved one week later.



Baseline
Dentin hypersensitivity



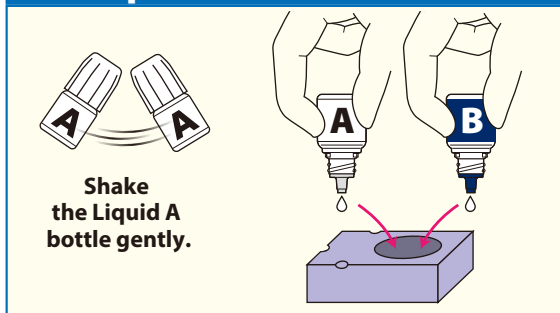
Nanoseal application



7-day follow-up
Hypersensitivity resolved

nanoseal[®] User Guide

1 Dispense & Mix

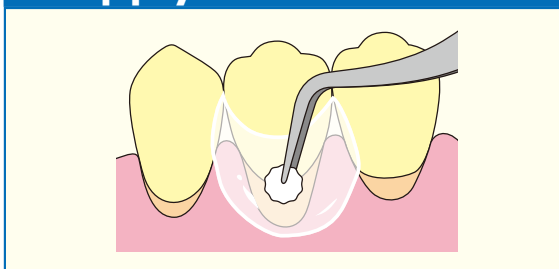


Shake the Liquid A bottle gently.
Place an equal amount of Liquid A and B in the dappen dish to mix them.

Apply the mixture within one(1) minute after mixing.

* In Liquid A dispensed after shaking the bottle gently, aggregated glass particles may rarely be found, which would not affect the properties of this product.

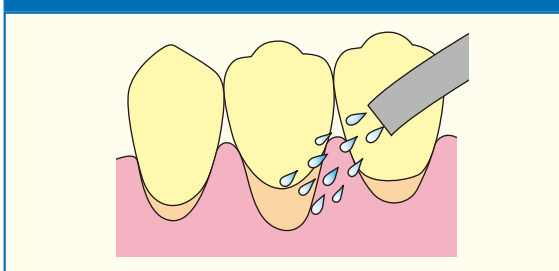
2 Apply



After cleaning tooth surface, **apply sufficiently.**
(Repeat application for five (5) to twenty(20) secs.)

Follow the same procedures when applied to prepared tooth surfaces.

3 Rinse



Wash or rinse.

★ Please read "Instructions for use" carefully before use.

Set • Liquid A 5mL
• Liquid B 5mL
• 1 dappen dish



Mini Kit • Liquid A 1mL
• Liquid B 1mL
• 1 dappen dish



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