Clinical Techniques

BITE REGISTRATION FOR OCCLUSAL SPLINTS

What’s Needed?

Providing bruxing and clenching splints can be one of the most rewarding treatments in dentistry today. You'll get your patients out of pain quickly and reduce further tooth destruction. This sparkling clear splint is available in two versions: hard or hard with a soft inner surface for extra comfort. Both are designed to be the first step in the treatment of bruxism.

Comfort bite splints are manufactured on stone models using a 4 mm disc and a precise vacuum thermoforming unit with occlusal imprinting device. The co-polyester disc is ISO medically approved for dental use. The occlusal imprinting device, Occluform®, allows a splint to be produced with either a flat occlusal plane and slight opposing cusp indentation, or anterior guidance with posterior disclusion using an open construction bite. After thermoforming, the splint is carefully contoured using carbide burs then polished with felt wheels and acrylic polish for a smooth and comfortable fit. Cold-cure acrylics can be used to increase vertical dimension and chemically bond with the co-polyester bite splint.

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First appointment

1. After diagnosis of bruxism, instruct the patient to close into centric relation to verify midline position and bite.
2. Place two cotton rolls behind the cusps and instruct the patient to close until resistance is felt.
3. You could also place softened wax over the anterior molars and have the patient close to the desired 3 mm opening.
4. With the patient closed into this open bite, inject bite registration material into the posterior openings of both quadrants.

5. Then, inject bite registration material into the anterior opening to capture a complete open construction bite.

6. Using a properly fitting impression tray, take upper and lower alginate impressions using correct water-to-powder ratios.

Fabrication of the splint

7. Upper and lower models with bite mounted in place. Note the open bite between anterior teeth.

8. The upper or lower model is used in the Erkoform-3d to thermoform the splint and create the flat bite table.

9. After thermoforming, the splint is trimmed and polished with carbide burs, felt wheels, and acrylic polish.

Second appointment

10. Seat the splint and evaluate fit, retention, and occlusion. Adjust with a carbide bur and polish if necessary.

11. After completely seating splint, check bite using marking tape to identify any premature occlusion.

12. Instruct the patient to care for their splint by rinsing with water after every use and storing dry.