

Addressing Parafunction Using the Parafunction Risk Rating (PRR)

This 4-week protocol utilizing QuickSplint helps dentists determine a parafunctional risk rating for their patient



Is your patient at risk for damage or injury due to parafunction?

Studies show that up to 80% of people who grind their teeth are not aware of their condition. Helping your patient understand and manage parafunction can help prevent tooth wear, tooth fracture, TMJ injury or disorder, associated tension headaches, ear aches, and neck pain.

Charting a Parafunction Risk Rating allows you determine the severity of active parafunction and monitor risk factors over time. The Parafunction Risk Ratings (PRR-1, PRR-2, PRR-3, PRR-4) and the Risk Rating Table work together as a universal grading system that is applied to dental patients on initial diagnostic dental visits and annual recall.

The Parafunction Risk Rating – Overview

PRR-1 LOW RISK	PRR-2 MEDIUM RISK	PRR-3 HIGH RISK	PRR-4 VERY HIGH
<p>A patient who upon examination and interview is aware of episodes of clenching and/or grinding behavior. Some sign of tooth wear is noted on the intra oral structures. Nothing is broken or cracked. No history of painful symptoms associated with the behavior.</p>	<p>UNAWARE PATIENT: A patient who is not aware of clenching and/or grinding, but who has mild signs of tooth wear.</p> <p>AWARE PATIENT: A patient who upon examination and interview is aware of clenching and/or grinding on multiple occasions. They have some mild signs of tooth wear, and may have history of treatment. There can be a history of transient painful associated events such as muscle pain, jaw pain, headache, ear ache etc.</p>	<p>A patient who upon examination and interview is aware of episodes of clenching and/or grinding behavior. They have been previously treated with some type of device and have obvious signs of tooth wear (more than 10% on more than 4 teeth, lock and key facets, etc.) History of painful associated events including headache, jaw, face, TM joint region.</p>	<p>A patient who upon examination and interview is aware of episodes of clenching and/or grinding behaviors that have resulted in direct painful events, presence of significant tooth wear on teeth, history of fracture of dental materials or natural tooth structure and have a history of treatment.</p>

Protocol with New Patients and Recall Patients at Annual Exam

1. Ask the patient whether they clench or grind, have jaw pain or headache. Perform a muscle and joint exam and assess the patient's dentition for signs of bruxism.
2. Encourage the patient to read the **PRR Patient Handout*** and self-assess their clenching behavior. The handout emphasizes that your practice cares about long term dental health and takes the extra time to monitor conditions that could result in problematic tooth wear, gum recession, jaw injury, etc. The PRR Patient Handout also explains that use of a QuickSplint trial oral appliance can better determine whether the patient is actively clenching or grinding. The patient survey portion of the PRR Patient Handout is optional for use if you want to gauge patient awareness.
3. Use the results from your exam together with the patient's input to complete the **Parafunction Risk-Rating Table*** and assign a risk rating for your patient.

Parafunction Risk-Rating Table

Use this Parafunction Risk-Rating Table in conjunction with your exam and patient interview to assess and monitor parafunction risk on initial diagnostic dental visits and annual recall. Add to the patient record.

Instructions: Place a check mark next to the most appropriate description(s) that apply to the patient in each row. If no risk factors are present, leave unchecked. Assign a Parafunction Risk Rating by identifying the highest risk indicator checked across all columns (PRR-1, PRR-2, PRR-3, PRR-4). See example on reverse side.

CHECK ALL THAT APPLY				
INDICATORS	PRR-1 LOW RISK	PRR-2 MEDIUM RISK	PRR-3 HIGH RISK	PRR-4 VERY HIGH RISK
PATIENT AWARENESS	Patient is aware of clenching <input type="checkbox"/>	Patient is aware of clenching on multiple occasions <input type="checkbox"/>	Patient knows that they clench or grind teeth, day or night <input type="checkbox"/>	Patient is aware of clenching and grinding behaviors resulting in direct painful events <input type="checkbox"/>
SIGNS OF WEAR	Some sign of tooth wear <input type="checkbox"/>	Mild signs of tooth wear <input type="checkbox"/>	Obvious signs of tooth wear such as more than 10% on more than 4 teeth and lock and key facets. <input type="checkbox"/>	Significant tooth wear <input type="checkbox"/>
TOOTH FRACTURE	Nothing broken or cracked <input type="checkbox"/>	Nothing broken or cracked <input type="checkbox"/>	Broken or fractured dental materials or natural tooth structure <input type="checkbox"/>	History of fracture <input type="checkbox"/>
PAIN SYMPTOMS	No pain symptoms <input type="checkbox"/>	Transient painful events such as muscle pain, jaw pain, headache, ear ache <input type="checkbox"/>	History of painful associated events including headache, jaw, face, TM joint region <input type="checkbox"/>	Direct painful events <input type="checkbox"/>
TREATMENT HISTORY	No history of previous treatment <input type="checkbox"/>	May have a history of previous treatment <input type="checkbox"/>	History of previous treatment <input type="checkbox"/>	More than one previous treatment <input type="checkbox"/>

Enter the Parafunction Risk Rating associated with the highest risk indicator checked across all the columns (PRR-1, PRR-2, PRR-3, PRR-4)

4. If the patient is graded as low risk (PRR-1) ask them if they would like to try a QuickSplint. If the patient is graded as Medium to Very High Risk (PRR-2, PRR-3, PRR-4) recommend that they wear QuickSplint overnight for a 4-week diagnostic trial.
 - a. PRR-1 patient: Would they like to try a QuickSplint? (optional)
 - b. PRR-2, 3 or 4: Recommend they try a QuickSplint, unless they have a device
5. QuickSplint is fabricated by you or auxiliary staff for overnight use.
6. The patient returns for a follow up visit in three to four weeks to encourage discussion of their condition and review appropriate treatment options.
7. At the follow-up visit, if grind marks are present or the patient experienced reduced jaw and neck tension and other benefits, begin the discussion about their condition and plan for appropriate treatment. (Use the **QuickSplint 4-week Trial Clinical Evaluation Form*** for patient acknowledgment and informed consent.)
8. Document the Parafunction Risk Rating for patient records and monitor annually.



Wear marks from clenching and bruxing are recorded on the QuickSplint.

Rationale for a four-week follow up: The surface of the QuickSplint can begin to show wear facets even at this brief interval. When the patient returns four weeks after their initial visit, review the objectives of this assessment plan and invite them to bring up any questions or ideas that they may have. Esthetics and other optional care are best presented under an initial introduction followed by a reinforcement visit.

Results after four weeks: Assigning a rating

After wearing QuickSplint for four weeks, your patient returns for a follow-up. If grind marks are present on the QuickSplint and/or if the patient experienced reduced muscle tension and other benefits, you should consider that your patient's rating is PRR-2, PRR-3, or PRR-4. If you or your patient identify any other event that falls into a higher risk category (such as tooth fracture) you should consider using that higher risk rating result. Once you have assigned a risk rating, discuss an appropriate treatment plan with your patient.

Monitoring Results: Here are some possible patient outcomes

- Patients with low risk (PRR-1 rating) who have tried the QuickSplint may have peace of mind that veneers are suitable.
- Patients may not tolerate an oral appliance, in which case you have saved them the expense of a custom appliance.

Monitoring Results (*continued*): Here are some possible patient outcomes

- Patients with higher risk may still postpone treatment but they have been informed of the risk of cracked or worn teeth, periodontal conditions.
- Patients with higher risk may understand and be motivated to protect their teeth and address issues immediately.
- Patients with higher risk ratings can integrate information about your treatment recommendations, helping them to have realistic expectations about outcomes
- Patients can be referred to a specialist

About the Parafunction Risk Ratings & the Risk-Rating Table

The Parafunction Risk Ratings and Risk-Rating Table were developed by orofacial pain expert, Bradley Eli, DMD, MS with input from private practice and academic dentists across all dental specialties. The Parafunction Risk-Rating Table and associated documents are made available free of charge to all dental professionals via www.quicksplint.com courtesy of Dr. Eli and Orofacial Therapeutics, LP.

DOWNLOAD FREE ASSESSMENT FORMS

*Download the Parafunction Risk Ratings & Risk-Rating Table, the PRR Patient Handout, and the PRR 4-week Trial Clinical Evaluation Form at <http://www.quicksplint.com/diagnosing-parafunction/>