

PRI RECOMMENDED PROPRIOCEPTIVE OCCLUSAL ORTHOTICS



PRI practitioners use flat plane acrylic splints (orthotics) as a temporary intervention to help ‘free-up’ the occlusion while the patient is being put through a program to relax the neck. These hard acrylic splints are sometimes called a ‘relaxation’ splint. The splint is constructed by the dentist to achieve balanced contacts with all opposing supporting teeth and incisal anterior teeth edge. The patient often wears the splint at night and with activity (PRI activity or physical activity). The following two orthotics, although they appear to be very similar to flat plane splints, they are not, and their design and intended purposes are outlined below.

PRI MOOO (Mandibular Occipital Occlusal Orthotic):

Purpose: This appliance is designed for those who require occipital atlanto reference from an occlusal orthotic that compliments and guides neutrality of cervical, cranial and mandible bones and joints.

Fabrication Guidelines: Registration should be made with the patient in “Neutral”, which may require use of shoes that reflect PRI concepts, or PRI foot orthotics.

Registration should be made with the patient in a semi-reclined position and with support under the neck (rolled up towel) to normalize occipital retrusion and cervical lordosis.

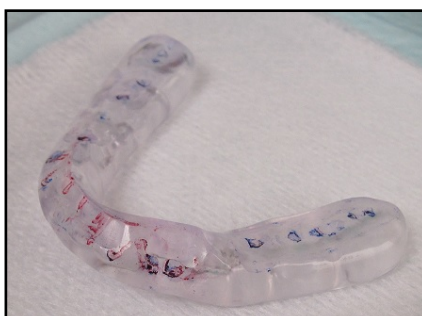
Bite registration should be made with posterior centric occlusion while the patient is in a neutral state in a semi-reclined position, as stated above, or in a supine state, with legs propped up to reduce lumbar lordosis influence on the cervical curvature.

Equilibration Guidelines: With the unequilibrated orthotic in the patient’s mouth, anterior incisor contact should be light, so that permissive perceptual occlusal sense from the anterior centric stops during protrusion and cranial retrusion can be appreciated by the patient.

Guidance should come from lateral cuspid rise during early lateral trusive movement or side to side translation of the mandible. The balance of lateral disclusive contacts is very important to the proprioceptive system. Asymmetrical or crossbite contacts during early lateral trusive movement can have undesirable impact on the hyoid, sub-mandibular muscles, as well as on the upper cervical spine and occipital-atlanto (OA) balance.

Maxillary lingual cusps should make contact on the mandibular orthotic upon closure for proprioceptive guidance and referenced stability at rest. (Posterior Centric Occlusion)

Vertical dimension or height of orthotic should be minimal as possible without losing the objective goals above and without losing orthotic structural strength and stability.





PRI MMOO (Mandibular Molar Occlusal Orthotic):

Designed to position the mandible in a specific relationship to the maxilla when the neck is in a neutral position, at the time the bite registration was taken. Contact incline against the cuspid teeth directs the mandible slightly forward. This is a mandibular splint with acrylic coverage over the posteriors for bilateral molar sensory awareness. Occlusion on this orthotic is upper lingual maxillary cusps (molars and cuspids) contacting the lower flat or indented central fossa of the mandibular teeth.

A metal lingual bar or an acrylic bridge connecting the two occlusal pads can be used. The lingual bar will provide more room for the tongue, when necessary. This orthotic can be worn during the day or night, with or without an ALF, and with upright PRI non-manual technique integrated activity to assist the patient in sensing interoceptive identity.

