

Advantages of MAPA

1. Prevents almost all temporal muscle contraction by disengaging posterior teeth contact.
2. Prevents masseters and medial pterygoids contraction by 70% or more due a leveraging advantage. It is akin to applying force on a nutcracker near the hinge when the nut is on the end of the handles.
3. Acts as a deprogrammer to relax lateral pterygoids. The jaw protrudes and moves laterally on flat surfaces with no isometric forces.
4. The MAPA fits within the freeway space avoiding all dental contact when elevator and depressor muscles are in balanced opposition or relatively so. You literally have to close to bite on it. If the vertical is too high, teeth can be loaded on and intruded, especially during sleep.
5. Covers the maxillary 1st bicuspid around to the other arch 1st bicuspid (#5 through #12) in most cases. With an anterior crossbite as in class 3 occlusion, the MAPA may switch arches to the lower and become a mandibular anterior passive appliance with the maxillary cuspids functioning against mandibular discluding elements.
6. The cuspid pads on the MAPA (usually less than 2mm thick) act as discluding elements on which the opposing cuspids land when entering the freeway space (as in clenching).
7. Only cuspids touch so no forces can be added by posterior teeth contact. Incisors, however, may touch in protrusion (Incisal guidance).
8. Because it has the same shape as the palate and teeth except for the small cuspid pads, the patient can speak perfectly in over 95% of cases by the second day.
9. Because the material is clear, the MAPA is almost impossible to see. In other words, the MAPA is nearly invisible.
10. Within 10 days, most patients are not aware they are wearing a MAPA.
11. It essentially forces “normal” on the patient while preventing trauma to muscles, joints (discs) and teeth. The condyles can return to their normal condylar/fossa position due to muscles returning to their normal working length. As a result, discs are captured much faster than with other appliances.
12. Allows the dentist to equilibrate when needed since teeth not covered by the MAPA are free to move to stabilize themselves between jaw muscles, tongue and opposing teeth.
13. While the MAPA is used primarily in TMD cases, it can be used in orthodontic cases after bands are removed. It keeps the anterior bicuspid through bicuspid of the maxilla retained while preventing TMJ trauma and minimizing or preventing jaw muscle contraction. It also allows for minor occlusal adjustments to stabilize teeth faster than the old school of “settling in” which can result in a traumatic or unstable bite.
14. When a “night guard” is worn to protect extensive dental restorations, nothing works better than the MAPA to prevent bruxism on dental work while relaxing the jaw muscles, maintaining disc relationships, preventing headaches, encouraging good sleep, etc. The patient will not wear out the MAPA as they do so often from bruxing on full appliances. Full coverage appliances will have difficulty shutting down muscle activity coming from a central neurologic source. This is

where the MAPA shines. Wearing the MAPA before beginning of extensive restorations is highly recommended as well. Not only will it help minimize the patients from having headache and jaw problems; it will help keep yours away also.

15. Equilibration is encouraged to create a stable and functional condylar, tooth and muscle relationship. By wearing the MAPA, which allows teeth to move on their own to their most stable or neutrally balanced positions, you reduce the amount of equilibration you may have done otherwise using a different appliance. Locking teeth with full appliances and adjusting the bite guard at therapy visits may help with condylar positioning, but the occlusion has to be addressed at some point. This type of therapy is crude and slow when compared with MAPA therapy.
16. Other anterior bite guards or appliances such as the NTI or E-appliance cannot compete with the MAPA because of some inherent physiologic problems in their designs. However, some elements are similar to the MAPA's mechanical advantage. Other bite guards like the PSG Relaxer and MAP (migraine prevention appliance) offer full coverage which can create vertical issues with muscle memory. They may lock teeth in positions that need to move. The Incisal discluding elements have similar problems as with the NTI or E-Appliance which have too high of a vertical dimension when landing on incisors. The NTI forgets that inhibition takes a hike at night. Nociceptive Trigeminal Inhibition is a daytime event.