

## ELASTIC MANDIBULAR ADVANCEMENT PREPARATION & FITTING

### **INITIAL CONSULTATION**

#### **PATIENT DENTAL HISTORY / HISTORY OF DISEASE**

The Elastic Mandibular Appliance (EMA) is case specific. Make sure the patient understands that any future dental work that changes the shape of the teeth (such as crowns or large fillings) will require a new appliance.

A history of TMJ problems indicates the need for extreme caution when moving the mandible forward.

Obtain prescription from referring physician before treating apnea.

#### **EXPLANATION OF APPLIANCE**

Educate the patient on the EMA

#### **IMPRESSIONS**

Prepare the mouth by rinsing with 50/50 solution of Bayer Surgident Muco Sol and water for a better impression. Take upper and lower dental impressions being careful to have no distortion to ensure maximum appliance performance.

Pour upper and lower dental impressions with a very hard lab stone (preferably green die stone). Take a wax bite (recommend Corning's Waxes Bite Blocks) with the patient in an unprotruded centric occlusion and the bite open 8 - 10 mm in the anterior region.

Because we use the undercut areas of the teeth for retention, mark a dot on the occlusal surface of all teeth that have a crown, an implant or are part of a bridge, with a black felt tip pen.

Send models and wax bite to lab.

### **SECOND VISIT**

#### **FITTING**

Try the upper and lower appliance on separately to check fit and comfort and to make sure there is no gingival impingement.

EMA will feel snug to the patient for the first 3-5 minutes. If pressure on one tooth stands out after 5 minutes, carefully relieve it with a large burr.

Check the posterior bite planes for an even occlusion. If either side is high, grind conservatively until both sides occlude evenly – both in a normal centric occlusion and a protruded position.

Place the longest, softest straps (#1 - white) with the EMA insignia on the tooth side on the upper and lower appliance prior to placing the upper and lower appliance together in the patient's mouth.

Seat the upper appliance and have the patient move the mandible forward and bite down while pushing down on the anterior portion of the lower appliance until it snaps in place.

Question the patient on comfort of both the appliance to the teeth as well as to the TMJ.

Instruct your patient to call the office the day after wearing the appliance for the first time. Commonly reported initial side effects resulting from the mandibular repositioning include clenching resulting in sore teeth, TMJ sensitivity and increased saliva flow. These symptoms should abate significantly or disappear completely within ten days.

If the patient experiences severe pain in either or both TMJs, they should discontinue using the appliance until they return to their baseline. If both TMJs are involved, start with the appliance only. If only one TMJ is affected, start with a #1 white strap on the noninvolved side. If smaller straps are being used and a TMJ problem develops, drop back to a larger size strap on the affected side.

If a patient has a difficult time placing the straps on the appliance, suggest using a tooth pick to dot a small amount of vegetable or olive oil on the head of the button to lower surface tension. After the strap goes on the button, it may be necessary to rotate the strap to seat it properly

## **TERTIARY CARE**

If after a day or so of wearing the appliance only one or two teeth are very sore, the model may have been distorted and you may need to relieve the appliance on the affected tooth with a large burr. Be very careful not to grind a hole in the appliance.

If after the first or second week the patient does not report a significant lessening of apneic episodes and/or snoring, they may start experimenting with either shorter or firmer straps. For example, some patients stretch out the soft white straps very quickly and can progress to the next firmest strap of the same length. If the patient feels the mandible could be moved further forward without discomfort, they can progress to the next shorter strap in the soft durometer. Depending on the sophistication of the patient, they may self direct this progression until satisfactory results are attained.

SIZE / LENGTH	COLOR
#1 - extra long (21 mm)	white - soft
	yellow - medium
	blue - firm
#3 - medium (17 mm)	white - soft
	yellow - medium
	blue - firm
#5 - extra short (14 mm)	white - soft
	yellow - medium
	blue - firm

*EMA Starter Kits include 4 each of these elastic straps.*

*Elastic straps are also available in #2 (long-19mm) and #4 (short 15.5 mm.)*

*All lengths are available clear - extra firm.*