SAGITTAL APPLIANCES

Laboratory Requirements:
- Upper and lower stone casts
- Construction bite in ideal vertical Class I A-P open 2mm in 2nd bicuspid region.
- **Class III Sagittal**: DO NOT extract Mx 2nd molars.

Fabrication Improvements:
- Acrylic appliances are reinforced with wire mesh or Kevlar to reduce fracture.
- 14 karat gold solder joints to prevent discolouration/erosion.

Compliance Issues:
- Improve retention by placing a resin wash to create an undercut for the circumferential clasps on the lower cuspsids and 1st molars (illustrated).
- Consider bonding the non-activated appliance in place for the first week.
- Rough up the occlusal surface to aid in mastication.
- Request rugae to the upper appliance to improve speech for teenagers and adults.

**Indications for Sagittal Treatment:**
- Increase arch length and/or width
- Pre-maxillary development Ages 6-12 (prior to upper 2nd molar replacement)
- Distalization of posterior quadrants (following 2nd molar replacement)
- Anterior and/or Posterior Crossbite Correction

**Appliance Modifications Available:**
- **Standard Two Screw**: Arch Length
- **“Optional” Three Screw**: Transverse and Arch Length (common design)
- **Occlusal Coverage**: To clear a crossbite and provide comfort during mastication. Far less fracture and patient acceptance.
- **Anterior Bite Plane**: Along with occlusal coverage can increase vertical as you relieve the acrylic over the lower 1st molars following several millimeters of expansion.

The Sagittal is worn 24/7 (including meals) for approximately four months.

Acrylic coverage over Mx 2nd molars for non-extraction treatment requiring pre-maxillary development alone.