VDO, a protective anterior guidance would not be possible.

The first step was to seek an orthodontic opinion and place the patient in an orthopedic appliance to test a more open VDO. The first wax up (Fig. 7) determined the VDO for this appliance. The patient, however, could not tolerate the new VDO and thus I decided to maintain the present VDO.

During the healing phase of the upper anterior surgery Empress laminate crowns were placed from 43-33 in order to create an ideal incisal plane for the upper anteriors (Fig. 23). The preparation and temporization was facilitated with silicone indices made from the second diagnostic wax up (Figs. 7-12). No posts were placed in the root canal space as there was sufficient tooth core material remaining to create proper resistance and retention form⁷ (Fig. 13).

ORTHODONTIC TREATMENT PHASE

The goal of orthodontic treatment was to open the bite in the anterior region. Because the prosthodontist wished to maintain the pre-treatment vertical dimension, it was decided to open the bite through intrusion of lower incisors rather than through extrusion of posterior teeth. The excess depth of the curve of Spee was likely the result of over eruption of the lower incisors as tooth erosion had taken place.

Orthodontic brackets were placed on all lower teeth and a light nickel-titanium wire was placed to begin the leveling process. The upper arch was stabilized with a vacu-form retainer. On the second visit, a stainless steel "utility" arch wire was added over the main arch wire to deliver an intrusive force to the lower anterior teeth. The wires were adjusted until there was about 3mm, of bite opening between the upper and lower incisors.

After eleven months of treatment, the brackets



FIGURE 8—Temporary laminates.



FIGURE 9—Lower index.



FIGURE 10—Original and index.



FIGURE 11—Prep index.

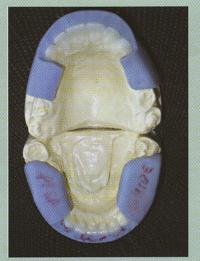


FIGURE 12—Prep indices.



FIGURE 13—Upper post endo.

were removed and a wire retainer was bonded to the lingual of the lower anterior teeth. A vacu-form retainer was also placed to further stabilize the position of the lower teeth (Figs. 15-22).

ENDODONTIC AND PERIODONTAL PROCEDURES

Endodontic treatment was completed on the upper anteriors from cuspid to cuspid due to sensitivity. Crown lengthening was needed: in order to create a ferrule, for resistance and retention form (no lingual