Splinting: Orthodontic Retention

Step-by-step:

1. The treatment has been finished by making a retention splint between lower canines of helical metal wire for the lower front area. The purpose of the splint was to prevent further movement of the lower front area. The retention has lasted for approximately three years. The splint is now partly loose, and the patient thinks that it is unhygienic and rough.

2. The old metal splinting was removed. The remaining plastic composite was removed from the lingual surfaces and proximal of lower canine and lower second incisor. Prior to making a new retention splint, the enamel was roughened by using a fine finishing diamond.

3. With the help of dental floss, a suitable length of Perma Fiber was measured and cut with scissors. The Fibers were wetted, and put into a light protected case while the teeth were treated. Wooden wedges were applied into the interdental spaces. The working area was kept dry by using cotton rolls and saliva ejector.

4. After etching and bonding, the resin was added and spread by gently blowing. Then each tooth was light-cured for 10 seconds. After the light curing, a thin layer of flow composite was applied directly from the tip onto the area to be equipped with splinting, including the proximal space at the contact point.

5. The fiber bundle was put in its position on the unhardened flow composite. After the whole splinting has been shaped on the surface of the tooth, light curing with a short impulse (approx. 5-10 seconds) is carried out on one tooth at a time. By using effective light curing, the fiber can be hardened from the labial side through the tooth. The rest of the fiber bundle was protected from premature hardening by using a wide instrument called Stick Stepper. After the retention splinting had been fixed, it was completely covered with flow composite. The final light curing was carried out for 20 seconds on each tooth.

6. The retention splinting and gum lines were finished by using a hard metal instrument of suitable shape and a polishing tip intended for hybrid plastic. Finally, the construction was checked for any residual plastic by using an intra-oral camera, and access to the bottom of the splinting was tested by using dental floss.

7. Long-lasting retention splinting made by using Perma Fiber. The first check-up is after a week, and later in connection with treatment.
PREAT Perma Fiber & Mesh is a product of

http://www.preact.com/ortho_splinting-tech.htm