Jerome Smith. DDS

GADGET MAN'S

PICK OF THE MONTH

Preat Perma Fiber and Perma Fiber Mesh

inally... an answer for reinforcing weak areas in resin for use in a new prosthesis or for repair of an existing prosthesis.

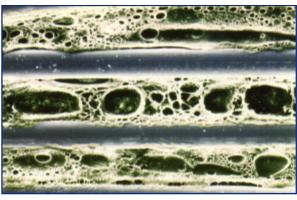
We all have those patients that somehow are able to break just about anything we insert or install into their mouths that is made out of acrylic. As a result, we repair full and partial dentures over and over again as well as provisional bridgework. At some point, we even consider remaking a case and using metal reinforcement hoping that this will remedy the problem. However, a study by P.K. Vallittu published in the May issue of the "Journal of Prosthodontics" indicated that fatigue resistence of a partial denture around an acrylic tooth was increased a hundred fold compared to both non-reinforced and metal reinforced denture base resin.



Preat Perma Fiber

Enter, Preat Perma Fiber and Fiber Mesh... a totally new concept and technique in fiberglass reinforcement for partial and full removable dentures. This is the new answer to metal free strong removable and partial dentures as well as provisional crowns and bridges. These are both products of Stick Technology and were developed through extensive research and development at the University of Turku, Finland.

Previously, and currently with all other reinforcing fibers, there are limited bonding properties of the fibers to the surrounding resins. This leaves space which can actually weaken the resin in certain circumstances. The solution to this problem is the prepolymerized fibers containing a highly porous polymer that provides a chemical bonding (preimpregnantation with silane) to substantially increase fatigue resistance.



Microscopic view of PREAT Perma Fiber showing the porous polymer attached to the fibers

In summary, advantages of the Preat Perma Fiber and Perma Mesh are:

- 1. Strength (glass fibers and bonding)
- 2. Dissolution Bonding.
- 3. Works with all monomers
- 4. Two types of material are available-Fiber and Mesh

The fibers add strength and rigidity to the resins. Maximum strength is achieved by placing the unidirectional fibers at 90 degrees or perpendicular to the forces.



Reinforced lower denture using PREAT Perma Fiber

An introductory kit containing one 150mm Fiber and one 45 square centimeter mesh is available for \$192.00. Phone 800-232-7732 for the Preat Corporation to place your order.

Contact Jerome Smith, at jeromes486@worldnet.att.net