the same, as long as both are biocompatible and bioabsorbable.

Particularly important to this invention is the performance of laser cutting to create the patch **10**. As can be appreciated, it is extremely important that the patch **10** not unravel and have smooth edges which will enhance the time of the patch **10** on the tooth surface **1**. Also epithelial tissue attachment is avoided near these fused edges.

Because any bioabsorbable material must stay within the periodontal space for a period of time in order to allow healing of the periodontal defect, it is undesirable for the mesh to separate. This is especially true in a situation where the mesh is made from a woven material, which may have a tendency, when cut, to separate. Accordingly, in situations where a mesh patch is used, the mesh is cut using a laser cutting device, laser cutting creating localized heat enough to melt fibers but not enough to cause shrinkage, degradation or destruction of the patch **10**. In this manner, the edge becomes welded, and is therefore not susceptible to separation. The patch then is able to be absorbed uniformly.

Once hydrolysis is effected, the periodontal ligament **12** begins to allow attachment of the alveolar bone to the tooth surface. The epithelium tissue has been prevented from moving apically along the periodontal defect, and proper attachment is made. In this manner, the tooth is therefore quite snugly bound within the mouth, and the sulcus is in an improved position at a higher point toward the crown.

An additional aspect of the present invention is the attachment of the ligature material **12** to the patch **10**. As can be seen in FIG. **1**, the attachment must be effected without creating additional holes which may cause epithelial tissue leaks. In this case, the attachment is made by laser or ultrasonic assisted welding of ligature **12** to the semiporous mesh patch **10**.

Alternately, the ligature **12** may be interwoven into the latticework of the mesh patch material **10**. Similarly, there is no hole created in the mesh patch **10**. Therefore, there will be no cell migration associated with growth of periodontal ligament or epithelial tissue during healing of the periodontal defect.

Such creation of a bioabsorbable mesh with the ligature attached in the foregoing manner produces various benefits. First, this allows tension during attachment to be placed on the ligature but not on the mesh material. In addition, as previously indicated, no holes are formed in the mesh. Because there are both fused edges and fused holes, there is no migration of epithelial cells through the holes onto the tooth surface.

Finally, because the semiporous mesh contains a smooth surface, it can be very easily used as a drug carrying means. In addition, ridge augmentation is possible. The patch can be filed with replacement or synthetic bone particles. The patch holds such particles in place until attachment to the alveolar bone occurs. Afterward, bioabsorption of the patch makes removal unnecessary. If the patch is also coated with medicament, various drugs can be simultaneously delivered to the oral cavity.

These and other objects of the present invention are to be understood from the following appended claims and their equivalents, which define the scope of the invention.

What is claimed is:

1. A dental implant comprised of bioabsorbable semiporous mesh material, said implant having sealed edges and emplaceable between the tooth and gingiva, wherein said implant is attached to the tooth by a bioabsorbable ligature material, said ligature material attached to said bioabsorbable mesh material, and wherein said mesh material holds bone particles in the interdental spaced in order to cause attachment of said particles to the tooth.

2. The implant of claim **1** wherein said implant is attached to the tooth by a ligature formed from a bioabsorbable material, said ligature material welded to said implant.

3. The implant of claim **2** wherein said material comprises polyl L(-) lactide co-glycolide.

4. The dental implant of claim **2** wherein said material comprises poly-p-dioxanone.

5. The implant of claim **1** wherein said ligature material is interwoven to said bioabsorbable mesh material.

6. A dental implant comprised of bioabsorbable semiporous mesh material, said implant having sealed edges and emplaceable between the tooth and gingiva, said edges sealed by ultrasonic welding, and said implant attached to the tooth by a bioabsorbable ligature material, said ligature material attached to said bioabsorbable mesh material, and wherein said mesh material holds bone particles in the interdental spaces in order to cause attachment of said particles to the tooth.

7. The implant of claim **6** wherein said ligature is welded to said implant.

8. The implant of claim **6** wherein said ligature material is interwoven to said bioabsorbable mesh material.

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