invasive cardiologist may apply the PEPS technique on a wide clinical basis after the first episodes of restenosis. In addition, because the PEPS technique significantly aids in the vascular healing process post intervention, it may be readily used prophylactically after initial angioplasty prior to any incidence of restenosis. This would free the patient from the risks of repeat intracoronary procedure as well as those associated with metal stenting.

We claim:

1. A process for paving or stabilizing an irregularly contoured interior surface of a body vessel or organ in an animal, including man, comprising introducing flowable polymeric material onto and filling said irregularly contoured interior surface of the vessel or organ and reconfiguring the polymeric material to form a layer of polymer, said polymer layer having an outer surface which conforms with and is affixed to the irregularly contoured interior surfaces of the vessel or organ and a smooth inner luminal surface.

2. A process as described in claim **1**, wherein the polymeric material is a biodegradable polymer.

3. A process as described in claim **1** or **2** wherein the polymeric material is applied in a preshaped form to the interior surface of the vessel or organ.

4. A process as described in claim **2**, wherein the layer of biodegradable polymer as applied has a thickness of about 0.005 mm to 0.50 mm, so as to create a thin layer.

5. A process as described in claim **2**, wherein the layer of biodegradable polymer is about 0.05 mm to 5.0 mm so as to impart structural stability to the organ or vessel.

6. A process as described in claim **2** wherein the biodegradable polymer is selected from the group consisting of a homopolymer, a binary and ternary copolymer.

7. A process as described in claim **6** wherein the polymer is selected from the group consisting of glycolic acid, lactic acid, delta-valerolactone, p-dioxanone, and epsilon-caprolactone.

8. A process as described in claim **6** wherein the biodegradable polymer constitutes a blend of homopolymers or copolymers.

9. A process as described in claim **6** wherein the biodegradable polymer is cross-linked with a biscaprolactone.

10. A process as described in claim **2**, wherein the biodegradable polymer is poly (epsilon-caprolactone).

11. A process as described in claim **2**, wherein the polymer contains a pharmaceutical agent.

12. The process as described in claim **11**, wherein multiple polymers containing various pharmacological agents are applied.

13. A process as described in claim **2** wherein the vessel is a coronary artery.

14. A process as described in claim **1**, wherein a catheter is used to enter the interior of the vessel or organ and to apply the polymer layer.

15. A process for paving an irregularly contoured interior surface of a coronary artery in an animal, including man, comprising flowing poly(epsilon-caprolactone) onto the irregularly contoured interior surface of the artery and reconfiguring the poly(epsilon-caprolactone) to form a layer, said layer having an outer surface which conforms with and is affixed to the irregularly contoured interior surface of the artery and a smooth inner luminal surface.

16. A process as described in claim **15** wherein a catheter is used to introduce poly(epsilon-caprolactone) into the artery.

17. A process as described in claim **1** wherein the polymer is applied in such a manner as to shape the vessel or organ.

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