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4. The apparatus of claim 1, wherein said energy-directing tip comprises a tubular member surrounding said distal end of said optical fiber.

5. The apparatus of claim 1, wherein said optical fiber is located within a catheter, and said catheter and optical fiber are slidable relative to each other.

6. The apparatus of claim 1, further comprising a light source configured to emit a beam of light through said optical fiber and through said output channel, said beam of light being of sufficient intensity to reduce the diameter of the vein.

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7. The apparatus of claim 1, further comprising a light source configured to emit a beam of light through said optical fiber and through said output channel, said beam of light being of sufficient intensity to structurally alter the collagen in the vein wall.

8. The apparatus of claim 1, wherein said elongate member has a non-tissue penetrating distal tip.

9. The apparatus of claim 1, wherein said elongate member comprises a single optical fiber.

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