

Improved Vascular Embolization Catheter (20150016, Dr. Jagadeesan)

IP Status: US Patent Issued; **Application #:** 11,219,751

Safer Vascular Embolization

A new catheter design ensures that N-butyl cyanoacrylate and other glues commonly used in vascular embolization cannot inadvertently bind to the blood vessel wall during the procedure. By perpetually bathing the catheter tip in a non-ionic solution, the catheter prevents glue from binding to the vessel wall. Potential complications are thereby decreased, which may encourage more physicians to embrace this effective method for treating intracranial vascular disorders, such as arteriovenous malformations (AVM), as well as peripheral vascular malformations.

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Treats Distal Tip of Catheter

Dextrose is a non-ionic solution that inhibits some glues from binding to free ions in the blood and is widely used to prime catheters prior to injecting glue. However, the distal tip of the catheter is left exposed/untreated. In this new technology, a second lumen provides a constant, 360-degree infusion of dextrose at the distal tip of the catheter. The central glue delivery lumen is completely separate from the dextrose lumen, so the glue itself is never compromised during the procedure.

BENEFITS AND FEATURES OF NON-STICK GLUE CATHETER:

- Negates the possibility of a catheter becoming stuck to a blood vessel wall
- Increases physician confidence in use of faster-setting glue, reducing case time and patient exposure to radiation
- May offer effective treatments for variety of vascular conditions, such as intracranial vascular disorders, peripheral vascular malformations and acutely bleeding vessels
- Reduces risks to patients

Phase of Development - Concept

Researchers

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Technology ID

20150016

Category

Life Sciences/Medical Devices

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