Retrievable stent

The retrievable stent is a revolutionary treatment that involves inserting a catheter into an artery, running the stent into the brain, trapping the blood clot, then removing the clot from the body. The technique is similar to the way cardiologists open up arteries after a heart attack. This procedure has been shown to quickly restore blood flow, dramatically improving outcomes for stroke patients.

Devices

Since the Food and Drug Administration's approval of the first two retrievable stents—Solitaire (Medtronic, Dublin, Ireland) and Trevo (Stryker)—additional devices are rapidly being brought to market. Although they have minor variations in design with resultant purported benefits, they function similarly. First, the clot is crossed with a microcatheter. As the retrievable stent is unsheathed from the microcatheter, it deploys, integrating into the clot and providing immediate reperfusion. After a short time (typically 2-4 min) of allowing the stent to integrate into the clot, the stent and microcatheter are retrieved (hopefully), pulling out the clot.