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SURGICAL TOOL DISSOLVES BLOOD CLOTS THAT CAUSE DEEP VEIN THROMBOSIS

The creation uses a low-frequency intravascular ultrasound to break down clots and is thought to be the first of its kind.

Researchers from the North Carolina State University and University of North Carolina at Chapel Hill have developed a surgical tool that uses a low-frequency intravascular ultrasound to break down a blood clot type known to cause deep vein thrombosis. The tool is thought to be the first ultrasound ‘drill’ mechanism that can be aimed straight ahead, meaning doctors can easily and more directly target clots. Current tools used to clear blood clots emit ultrasound waves laterally, making it harder for medical professionals to target specific clots.

The tool also uses an injection tube that injects microbubbles towards the location of the clot, making the ultrasound waves more effective when attempting to break down the offending clot. To date, researchers have only tested a prototype of the device in a synthetic blood vessel using blood from a cow. The creators have filed a patent on the technology and are next looking to work with industry partners to help further develop the device.

The utilisation of advancing technologies to help medical conditions is on the up, with a chest wearable that monitors and regulates stress and a battery-free medical device that charges within the body using biological fluids, are just two examples coming into the market in recent months. How else can technology help those with difficult health problems?

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