

Firm with novel brain clot buster seeks venture funds

An Indian-American engineer is gearing up to make a mark in the lucrative medical equipment market with his blood clot busting device that can be used inside the human brain.

Chennai-born Vikram Janardhan, now based in the US, has designed the catheter device, which can be inserted into the thin brain blood vessels to measure anything with a diameter of 1.5-4 mm to bust the clots and collect the debris in an umbrella-shaped net that opens up at the top end.

'The device, branded as Shelter, is now made by my Insera Therapeutics company,' he told IANS.

Vikram, who was here recently to promote Shelter among the doctors in the city and also to assess the market potential of the product, said Insera, promoted by him, was now in talks with venture capital firms to raise around \$22 million.

The funds could be used to meet the high expenses of clinical tests and for other commercial needs.

'To start with, we expect \$1.3 million funds and the balance from subsequent rounds of funding. We will do the clinical trials in the US, [Europe](#) and India,' he added.

'Though such bust and catch catheter devices for removing clots in the neck region exists, Shelter is the first device that could navigate inside the tortuous thin brain blood vessels,' said Vallabh Janardhan, assistant professor of Neurology at University of Minnesota and Vikram's younger brother.

Vikram has a reason for developing the device - he lost his grandparents to brain stroke.

Speaking on its design challenges, he said: 'The device should be so flexible that it can move smoothly without rupturing the tortuous brain blood vessel.'

The first thing he did was to read the patent papers that had been filed in this space to be sure about the absence of such a product.

That helped him choose the metals, polymer and a biocompatible glue.

Vikram has now filed a patent for Shelter.

Later he floated Insera to market the product.

He added that the animal trials of Shelter were on in the US and the company had already initiated discussions on human trials with consultants in India and Europe.

Insera is also planning to manufacture some of the components of Shelter in India to cut costs.

'If made in the US, the single use device would cost around \$3,000 which is very high for Indian patients,' Vikram added.

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