

India brings first indigenous flow diverter stent

18 January 2021 | News

The novel ASD occlude developed by SCTIMST promotes better healing of the hole in the heart and also has softer edge for minimising the damage to adjacent tissue



Indians will soon have access to the country's first indigenous flow diverter stent for diverting blood flow away from localised ballooning of arteries in the brain and a device that promotes better healing of the hole in the heart.

In order to address the challenges, Sree Chitra Tirunal Institute for Medical Sciences and Technology (SCTIMST), an autonomous institute of the Department of Science & Technology (DST), Govt of India, under the Technical Research Centre (TRC), has entered into Technology Transfer Agreements with Pune-based Biorad Medisys for two biomedical implant devices--- an Atrial Septal Defect Occluder and an Intracranial Flow Diverter Stents developed by the institute in collaboration with National Aerospace Laboratories, Bangalore (CSIR-NAL) using superelastic NiTiNOL alloys.

The Technology Transfer Agreements agreements were signed by Dr K Jayakumar, Director, SCTIMST, and Jitendra Hedge, Managing Director, Biorad Medisys, in the presence of Dr Jitendra J Jadhav, Director, CSIR- NAL, through an online meeting last week.

The novel ASD occlude developed by SCTIMST promotes better healing of the hole in the heart and also has softer edge for minimising the damage to adjacent tissue. The delivery system has a novel release mechanism to enable smooth release of the device. The device is protected through two Indian patent applications, one international patent application, and design registration.

The device is also provided with radio-opaque markers for radiographic visibility. The associated delivery system allows accurate positioning of the device across the aneurysm. These features have been protected through two Indian patent applications, one international patent application, and design registration. The cost of the Chitra Flow Diverter stent is expected to be priced significantly lower than the currently imported ones.