

IIT Hyderabad working on tech to detect early malfunctioning implants

Early detection of premature failure or malfunctioning prosthetic implants without surgery helps patients avoid reverse surgery, a remedial measure that is more expensive.



By Express News Service

NEW DELHI: Researchers at Indian Institute of Technology, Hyderabad are developing new technologies for bio-compatible implants that will enable early detection of malfunctions through non-invasive monitoring and diagnosis.

Early detection of premature failure or malfunctioning prosthetic implants without surgery can help patients avoid reverse surgery, a remedial measure that can be more expensive and painful than the first time surgery.

A huge number of knee, hip and other bone replacements are conducted in India and across the world every year. The replacements are done mostly on patients aged above 60 years. While the expected durability of the implant is up to 20 years, early failure is observed and sometimes, even immediate failure of implant is also noticed.

This happens due to the lower hardness of the implant and its reaction with the body fluid and organs. The common solution to detect the premature failure of the implant is reverse surgery, which is more expensive and painful than first time surgery.

“IIT Hyderabad Researchers are working towards early detection of malfunctioning implant without surgery, which can solve this problem. For this purpose, a bio-compatible implant with sensing property and high hardness will be the best choice,” researchers said.

Early detection can help save money

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