Remote-controlled sperm ‘tap’ may offer reversible vasectomy

London, January 29 (ANI): Scientists at the University of Adelaide in Australia are developing a radio-controlled contraceptive implant to control the flow of sperm from a man’s testicles.

The device will be placed inside the vas deferens, the duct that carries sperm from each testicle to the penis.

It will block the flow of sperm cells when closed, and allow them to pass again upon being opened. The device will be controlled via a remote control.

The developers of the silicone-polymer valve say that it may be a switchable alternative to vasectomy, which cannot be reliably reversed and often leaves some men to later regret their decision.

“Since it is flexible, the polymer either contracts or expands as a result, and this movement allows the valve to be opened or closed as needed,” New Scientist magazine quoted team leader Said Al-Sarawi as saying.

“It will be like turning a TV on and off with a remote control, except that the remote will probably be locked away in your local doctor’s office to safeguard against accidental pregnancy or potential misuse of the device,” added team founder Derek Abbott.

With a view to securing the device against accidental activation, its makers are producing it in such a manner that each valve will respond only to a radio-frequency signal with a unique code.
Another advantage of the microvalve is that would not require open surgery, unlike a vasectomy, as the 800 micron-long device may simply be inserted using a hypodermic needle.

“The procedure could be performed in a special clinic rather than in a hospital,” says Abbott.

The research team, which has finished the design of all parts of the valve, hopes that it will work effectively. They are planning to test it in the lab with a tube of pressurized water, and after that, in live sheep and pigs.

However, the researchers admit that after a while, the valve may clog with protein and remain shut and, thus, render a man permanently infertile.

“We would only propose the device to men who were thinking of having a full vasectomy anyway. But, unlike in an actual vasectomy, he would have a ‘grace period’ where the procedure can easily be reversed,” said Abbott.

The study has been published in the journal Smart Materials and Structures. (ANI)