



MEDICAL DEVICE

Cuff for artificial urethral sphincteric device

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What we are looking for

We are looking for a suitable partner to enter into license deal/co-development partnership

What is needed for?

The patented device provides a cuff of and artificial urethral sphincter, which allows for the safe and reliable occlusion of the urethral duct. Specific accessory devices entail the inflation and deflation of the cuff with saline, leading to occlusion or disocclusion of the urethra. In this way the device makes it possible to control micturition in the case of subjects that are affected by urinary incontinence.

Nowadays, urinary incontinence is one of the principal healthcare problems worldwide and the associated socio-economic costs are enormous. The artificial urinary sphincter represents the gold standard treatment, with particular regard to male subjects. The commercially available devices are still affected by different limitations and major concerns: more than 50% of implanted devices fail. During urethra occlusion, current devices implicate non-uniform mechanical solicitation of biological tissues, leading to regions where excessive stress and strain are applied. Vasoconstriction phenomena and subsequent tissue inflammation occur, leading to stricture formation. Sometimes, the device determines urethra erosion.

Advantages

The patented cuff has been designed by means of engineering methods and aiming to induce a mostly uniform mechanical stimulation of urethral tissues during occlusion.

The peculiar behavior of the proposed device aims to minimize tissue vasoconstriction phenomena and urethra erosion, providing for a safe treatment of urinary incontinence.

Applications

Artificial urinary sphincters.
Artificial anal sphincters.

TRL scale

