

High Frequency selective block of sacral extradural roots for bladder voiding

Published date: July 23, 2009

Technology description

Individuals with neurological disease or injury such as spinal cord injury often develop dyssynergic lower urinary tract reflexes, which can prevent bladder-voiding and compromise their health. Permanent and destructive neurotomies can allow bladder-voiding, but eliminate residual sacral sensation and disrupt reflexes governing defecation and sexual function, severely affecting quality of life. The subject technology may eliminate the need for such destructive neurotomies through the application of high frequency electrical stimulation. Researchers at Case Western Reserve University have demonstrated bladder voiding using sacral root stimulation to activate the bladder and either peripheral nerve or sacral root high frequency block to prevent activation of the external urethral sphincter. This technology enables complete bladder-voiding equivalent to voiding following pudendal neurotomy and reduces maximum bladder pressure during voiding. The technology was developed in part with funding from the Coulter-Case Translational Research Partnership.

Institution

[Case Western Reserve University](#)

联系我们



叶先生

电话 : 021-65679356

手机 : 13414935137

邮箱 : yeyingsheng@zf-ym.com