

IFMBE Proceedings

Volume 77, 2020, Pages 417-420

4th International Conference on Nanotechnologies and Biomedical Engineering, ICNBME 2019; Chisinau; Moldova; 18 September 2019 through 21 September 2019; Code 232319

Sontea, V.,

Ungureanu, S.,

Sipitco, N.,

Fosa, D.,

Vidiborschii, V.

Technical University of Moldova, Bld. Ștefan cel Mare și Sfânt 168,
Chișinău, Moldova

State University of Medicine and Pharmacy „Nicolae
Testemitanu“, Chișinău, Moldova

Method for performance evaluation of electrostimulation of the lower esophageal sphincter

Abstract

Recognized world experience could confirm, that gastroesophageal reflux disease (GERD) is one of the most common gastroenterological diseases. In many cases conservative treatment is not efficient, that could lead to severe complications. Existing options like antireflux laparoscopic surgery in recent years were supplemented with direct tone modulation of lower esophageal sphincter (LES) with implantable electrical stimulator. Having experience in

development of wireless powered LES electrostimulators (WPLES), authors elaborated simple and inexpensive method of assessing the effectiveness of LES stimulating devices during tests on laboratory animals.