

Response of Male Pudendal Neuralgia to Two Different Pulsed Electromagnetic Field Therapy Programs

Zakaria Mowafy Emam Mowafy^{1*}, Maha Abdel Monem¹,
Khowailed Abd-Elhalim Khowailed² and Kamal El Din Ahmed Marie¹

¹Physical therapy department for surgery, faculty of physical therapy, Cairo University, Egypt.

²General surgery department, Faculty of Medicine, Beni Sewaf University, Egypt

Abstract:Purpose: to evaluate the efficacy of two different pulsed electromagnetic field therapy programmes on male pudendal neuralgia. **Methods of evaluation:** Measurement of the serum cortisol level (SCL), naproxen medicament intake (NMI) and the visual analogue scale (VAS). **Methods:-** Sixty male patients who had chronic pudendal neuralgia were participated in the study, their ages ranged from 30 to 50 years, they were randomly divided into 3 equal groups in number; 2 experimental groups (A) and (B) and a control one (C). Group (A) received a programme of strong impulses, stimulating South polarity of the magnetic pulses with frequency fluently changing from 12.5-50 Hz, with buttons 1, 3 and 6 up while buttons 2, 4 and 5 down in addition to the traditional physical therapy and medical care. Group (B) received a programme of mild impulses, soothing North polarity of the magnetic pulses with frequency of 12.5Hz with buttons 1,2,4 and 5 down while buttons 3 and 6 up, in addition to the traditional physical therapy and medical care. Group (C) received the traditional physical therapy and medical care only for 4 months. The pulsed electromagnetic field therapy (PEMF) was applied once daily, three times per week for 4 months as a total period of treatment, each session was conducted for 20 minutes in the form 10 minutes over the perineal area between anus and scrotum on the centrum tendineum with the patient in comfortable supine hook-lying position with abducted hips, while the other 10 minutes were applied over the buttocks medially at the level of the ischial spines (medial to the ischial spines bilaterally) (5 minutes for each side), with the patient in comfortable prone-lying position. **Results and conclusion:-** Results showed a highly significant reduction in SCL, NMI and VAS at the end of the treatment program in groups (A) and (B). So both programmes of strong impulses and mild impulses in groups (A) and (B) were effective in improving the male pudendal neuralgia as manifested by the highly significant decrease in SCL, NMI and VAS. But programme of mild impulses was more fruitful and beneficial than the strong impulses programme.

Key words (Pulsed electromagnetic field therapy, Pudendal neuralgia, Serum cortisol level, Naproxen medicament intake and the Visual analogue scale).