

591-P — 2016 [Board 591]

ADA

Electrostimulation with FREMS Is Effective in Therapy-Refractory Painful Diabetic Neuropathy[Map \(epsMap.cfm?id=542\)](#)*Complications - Neuropathy*

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Neuropathy common complicates Diabetes Mellitus (DM), and often converts from sensory loss to painful neuropathy (pDN). In these patients standard pharmaceutical strategies often are ineffective or cause side-effects. We assessed the efficacy of Frequency Rhythmic Electro Magnetic neural Stimulation (FREMS) in patients with therapy-refractory pDN in a phase-IV conducted study evaluating the effects of a 2-weeks treatment on 3 months of pain relief. Two validated scorings systems were used; the Neuropathic Pain Symptom Inventory (NPSI), and the EQ-5d quality of Life score. Upon a call in local newspapers and the internet 307 subjects were screened of which 236 subjects were included with pDN without co-morbidities and unsuccessful medical treatment: 8 subjects cancelled FREMS. So 228 subjects received 10 daily 40 min FREMS stimulations within 2 weeks. FREMS is executed on 2 legs below the knees with 4 pairs of electrodes/leg. The stimulations is unique and differs from conventional treatments in a randomised stimulation with changing frequencies and amplitudes. The results are given as %- changes in NPSI and changes in visual EQ-5D score from baseline to 1 and 3 months after day-1 of treatment. FREMS induced significant changes in absolute NPSI from baseline to M1 and M3 (ANOVA). An at least 50% fall in NPSI was seen in 71/228 subjects at M1 and in 68/228 at M3. In 102/228 subjects at M1 or M3. If a 33% fall was considered these data were 102/228; 100/228 and 115/228. The average EQ-5D visual score (0-100) increased from baseline 53 ± 16 to 62 ± 14 at M1 and 63 ± 16 at M3. In Clinical practice electro stimulation with FREMS is effective in therapy-refractory pNP. The method needs further investigation but is a promising alternative for difficult to treat patients

Disclosure: B.P. Imholz: None. J. Heijster: None. **APPRISOR™** (<http://www.digitalacumen.com/apprisor.html>)

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