

Treating of Complicated Lower Back Pain with Physical Medicine Methods: a Case Report

Dzintra Vavere, Tatjana Eglite

Riga East Clinic University Hospital,

Jugla Medical Center

Physical Medicine and Rehabilitation Department,
Latvia

April, 2012

Discussion

- **The active rehabilitation of patients with lower back pain complicated with muscle paresis remains an actual problem**
- **Usually the treatment lasts for 28-30 days**
- **Patients often need the combination of different factors to score success in recovery process**

Discussion:

BIOPTRON, polarized light

penetrate into tissue 3,0-3,5 mm, reduce the sensation of pain by:

- direct action on nerves to prevent transmission of pain impulses**
- improvement of blood supply to the affected area and reduction of muscle's spasm**
- modulation of inflammatory pain by reducing levels of biochemical markers: PGE-2, mRNA Cox2, IL- 1 beta, TNF – alpha,...**

Discussion: impulses current

- **Improve the blood supply to the affected area**
- **Stimulate cell's metabolism and regenerative activity**
- **Stimulate muscle's contractions**

Discussion: low magnetic field

- **Induction accelerate oxygen consumption in the tissues**
- **Stimulate cell's metabolism**
- **Stimulate processes of regeneration**
- **Dilatate capillaries**
- **Decrease blood viscosity**
- **Decrease oedema and pain**
- **Stimulating production of beta endorphins**

Conclusions

- **Polarized light therapy, multipolar permanent magnets and impulse stimulation decrease pain, restore the functioning of muscles**
- **Physical factor complex affects different parts of the disease's pathogenesis**
- **The usage of physical factor complex shortened rehabilitation period for 5-7 days in comparison with usual**

Thank you for attention!



Aim of the article is to demonstrate
a case of successful treating of
complicated lower back pain
with physical medicine factors
alone without drugs or
physiotherapy

Case report

- **A 49 years old man after L4-5 discectomy**
- **m. peroneus dx. paresis**
- **ower back pain (8-9 NPS)**
- **Functioning inactivity in the right ankle joint**

Treated with combination physical medicine factors

- 1- Polarized light therapy**
 - 2- Impulses currents**
 - 3- Multipolar permanent elastic magnets**
- Every day during 3 weeks**

Methodology : **1-Light therapy**

polarized, polychromatic, spectrum wave
480-3400 nm,
incoherent,
2,4 Joule/cm²
per minute
10 cm distance
10 min



2- Impulses current

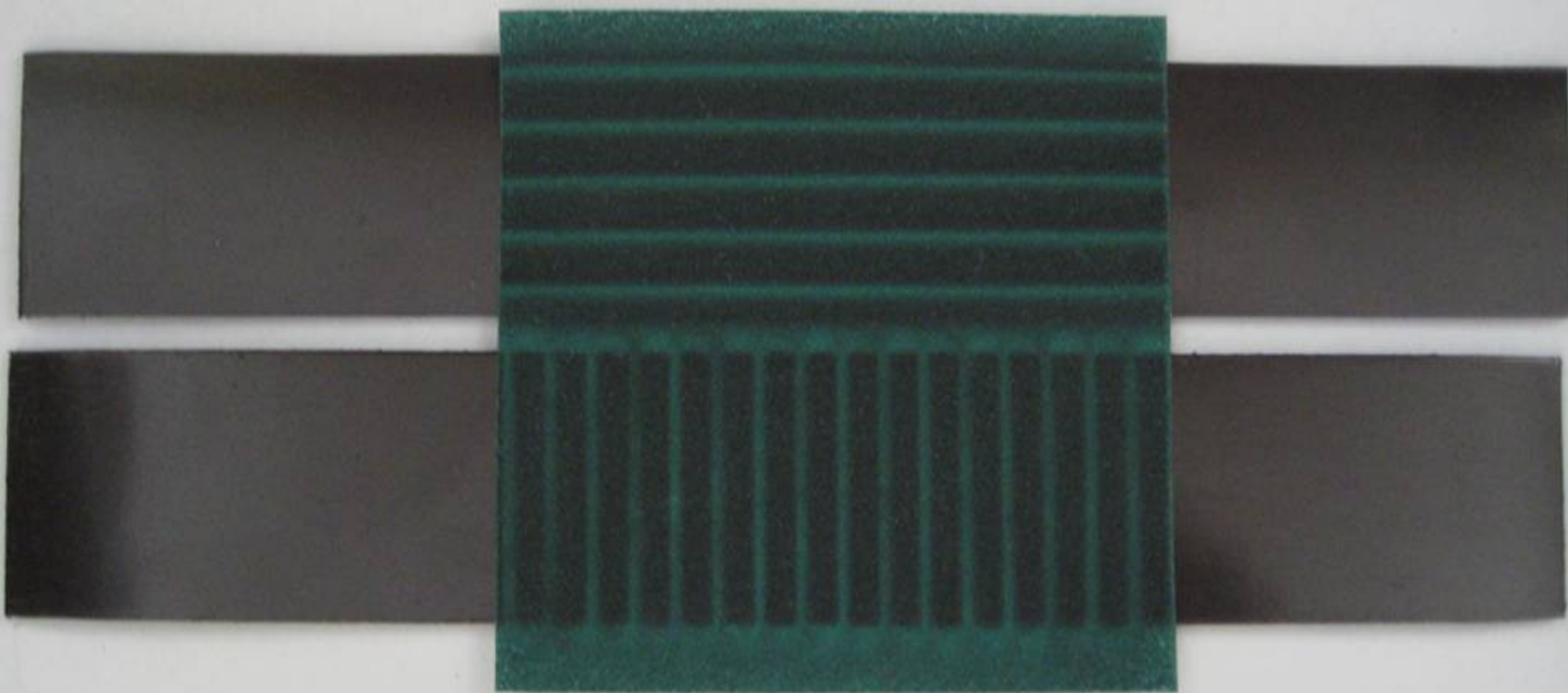
**stimulation of
m. peroneus dx.**

**II modulation
form**

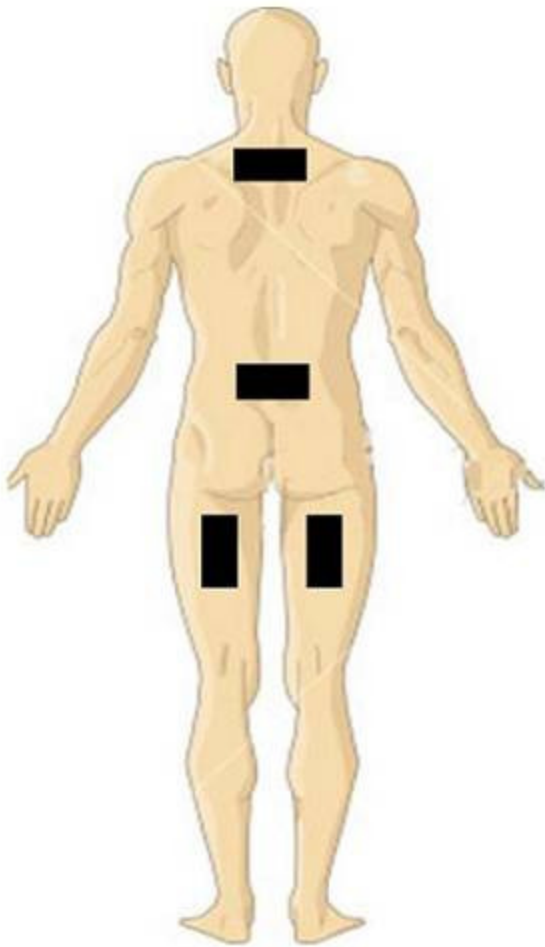
15 min



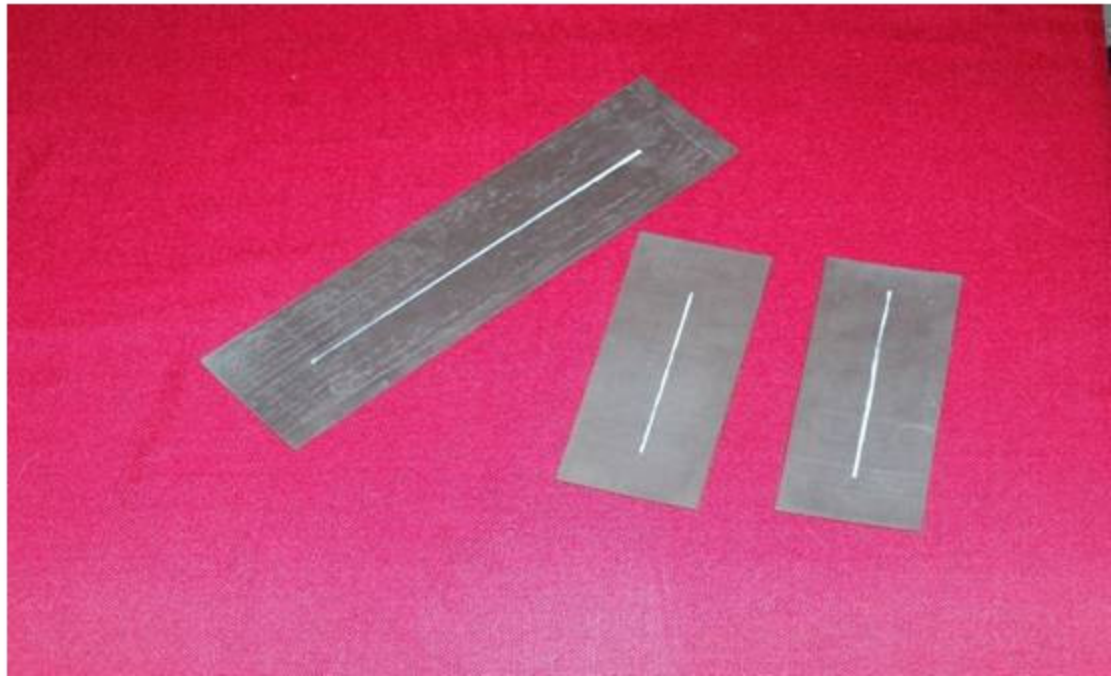
3- Multipolar magnets 45 mT



3- Multipolar magnets 45 mT



- 30 – 60 minutes
- Each day
- 3 weeks



Results

- **After 3 weeks oedema and pain syndrome deleted (8-9 to 1 NPS)**
- **The functioning of right ankle joint renewed**
- **M. peroneus paresis disappeared**