

Module 3: Lecture 10. Evidence-based electrotherapy in pain treatment

Introduction

This lecture presents an overview of the range of electrotherapy treatment approaches that may be utilised in the management of acute and chronic pain. The efficacy, indications and contra-indications are summarised and mechanisms of action discussed.

Learning Outcomes Mapped to EFIC Pain Physiotherapy Curriculum

The participants will understand:

1. Mechanism of medications and PEA actions (3.5.2)
2. Indications, contraindications of medications and PEA, side effects- the importance of electrotherapy in pain treatment which is used to reduce joint and muscle pain; the current concepts of Electrotherapy /EPA; the main characteristics of EPA commonly used in practice to treat pain (1.1.5., 3.1.2.,3.1.3.,3.5.1.,3.5.4)

Preparation

1. Study and understand what is Electrotherapy_

[https://www.physio-pedia.com/Current Concepts in Electrotherapy](https://www.physio-pedia.com/Current_Concepts_in_Electrotherapy),
<https://www.electrotherapy.org/modalities/concepts.htm>

2. Alcock MM. Defining pain: past, present, and future. Pain. 2017 Apr;158(4):761-762. [PubMed]

Content

This will be interactive where we will present some key elements regarding the application of PEA, their use in clinical reasoning, the importance of knowledge of contraindications and adverse effects in order to avoid accidents and incidents.

Participants will be encouraged to actively contribute to the session by sharing their own knowledge and experiences and participating in a 'Q&A' and reflective moments.

Follow up / suggestions for processing and practice

Participants will acquire knowledge about electrotherapy. The participants are encouraged to work in a multidisciplinary team and make decisions about pain treatment and set the treatment.

Reference material

1. Bonanni, R., Cariati, I., Tancredi, V., Iundusi, R., Gasbarra, E., & Tarantino, U. (2022). Chronic Pain in Musculoskeletal Diseases: Do You Know Your Enemy?. *Journal of clinical medicine*, 11(9), 2609. <https://doi.org/10.3390/jcm11092609>

2. Springer, S., Laufer, Y., & Elboim-Gabyzon, M. (2015). Clinical decision making for using electro-physical agents by physiotherapists, an Israeli survey. *Israel journal of health policy research*, 4, 14. <https://doi.org/10.1186/s13584-015-0015-x>

3. Tim Watson (2014) Key Concepts in Electrotherapy

https://www.physio-pedia.com/images/2/29/Key_Concepts_in_Electrotherapy_March_2014.pdf

4. Colloca, L., Ludman, T., Bouhassira, D. *et al.* Neuropathic pain. *Nat Rev Dis Primers* 3, 17002 (2017). <https://doi.org/10.1038/nrdp.2017.2>