

## **Title of Presentation**

Neuropathic pain components in musicians with neck-arm pain: Evidence and diagnostic in neck-arm pain.

### **Rationale:**

Neck pain is a large health problem worldwide and often seen in musicians [1, 2]. Neck pain can radiate into the arm due to various underlying pain types and pain mechanisms making it heterogeneous in clinical signs and symptoms [3-5]. On the one hand, patients may present with dominant nociceptive neck-arm pain caused by activation of the nociceptors in muscles, joints, ligaments, fascia, tendons and the connective tissues of a nerve [6, 7]. Activation of nociceptors in nerve connective tissues may cause clinical signs of heightened nerve mechanosensitivity what is per definition categorized as nociceptive pain [6, 8, 9]. On the other hand, patients may present with dominant neuropathic pain, defined as pain as a direct consequence of a lesion or disease affecting the somatosensory system [10, 11]. The clinical profile of these different pain types is sometimes difficult to disentangle based on the localization and pain character [12]. Moreover, non-specific neck-arm pain patients shown a neuropathic pain component based on somatosensory changes detected via Quantitative Sensory Testing (QST) [3, 13]. Classifications with a defined physical examination pathway can be helpful to define subgroups to guide the clinical decision making [14]. This workshop updates the background about the pathophysiology of neck-arm pain and mediates an evidence-based examination to classify patients.

### **Purpose:**

The aim of this workshop is to give a current insight into the background and evidence of neck-arm pain and to plan and practice a physical examination.

### **Content of Presentation:**

This workshop will summarize evidence of neck-arm pain. Thereupon, current evidence-based diagnostic options will be presented and practiced together. Finally, a short insight in the management of neck-arm pain will be given.

### **Approach of Presentation:**

QST testing and current cost-effective evidence-based methods will be presented to identify neuropathic components in neck-arm pain. Selected methods will be performed practically together, e.g. bedside sensory testing and neurodynamic tests.

### **Clinical Significance:**

After the workshop, participants will have improved skills to diagnose in the spectrum of neck-arm pain for musicians with neck-arm pain.

At the end of the presentation, the participants will be able to:

- understand the heterogeneity of neck-arm pain,
- plan an appropriate diagnostic physical examination,
- have an insight in possible management strategies.

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