Abstracts and Learning Objectives (in alphabetical order, as available at this point in time)

Gerd Antes

Title:

Medical knowledge: generation, processing, and utilization

Abstract:


Learning Objectives:

- How is medical knowledge generated?
- How does knowledge transfer occur?
- How is medical knowledge used?

José Johann Chidiac

Title:

The “failure” problem and its management in temporomandibular disorders

Abstract:

Failure occurs when the provided treatment gives no or different results from the expected ones. The complexity of TMDs and the different treatment modalities related to different school of thoughts and dogmas encourage such failures. This presentation will give a personal approach to the management of patients who have relapses or want to be treated after several attempts by one or many practitioners.

Learning objectives:

1. What is a failure?
2. Why failures occur?
3. How to manage failures.

José L. de la Hoz

Title:

Orofacial Dyskinesias
Abstract:

Orofacial Dyskinesias (OFD) are a group of neurological syndromes characterized by an excess, deficit or aberration of movement of orofacial structures unrelated to muscle weakness or spasticity.

The Orofacial Pain dentist plays a primary role in the diagnosis and management of OFD, not only because these disorders affect the Orofacial and Masticatory structures, but also because they may compromise the quality of oral health, and promote breakdown of dental structures. In this presentation, the speaker will review the basic functional anatomy of the neural structures involved in movement execution and coordination and will update the concepts regarding the confusing taxonomic classification, pathophysiology, clinical presentation, diagnosis and therapeutic options for these clinical entities including dental restorative considerations.

Learning objectives:

Explain the role of the OFP and the general dentist in the diagnosis and management of patients affected with OFD.

Nenad Lukic

Title:

Treatment failure

Abstract:

The proper diagnosis of patients suffering from craniomandibular disorders is based on a profound history addressing somatic symptoms and psychosocial disease-modulating factors. Some cases may experience persistent burdening symptoms after initial therapy (treatment failures). Based on videotaped patients, this lecture will analyse clinical cases that failed initial treatment and discuss aspects how a more favourable outcomes might have been achieved in a timely manner.

Learning Objectives:

Learn about a diagnostic strategy for reaching prompt and proper diagnosis resulting in adequate patient management.

Giovanni Mauro

Title:

Botulinum Toxin and Orofacial Pain: facts or fiction? Review of the literature

Abstract:

Despite several treatment modalities were suggested for orofacial pain, none has emerged as clearly superior to others. Several reviews have claimed that botulinum toxin can be an effective aid in the treatment of some orofacial pain situations while other reviews are skeptical.
The present lecture will present the up to date literature on this issue and will draw some guidelines for the clinician.

**Learning Objectives:**

1. Learn about the concepts regarding the action of botulinum toxins.
2. Learn about the most recent advances in their use in various orofacial pain fields: myofacial pain, neuropathic pain, headaches
3. Learn about risk and complication management of botulinum in the clinical practice
4. Learn about the clinical applicability and limits of botulinum toxins in a multidisciplinary approach to OFP management
5. Understand the role of the dentist and the learning curve needed for the applicability of such technique in a clinical setting

**Thorsten Pachur**

**Title:**

*Making good decisions in a complex world*

**Abstract:**

The world often presents us with an abundance of information; in addition, much of the information is uncertain. How to make good decisions in light of these challenges? I present evidence from various decision-making domains, such as sports, finance, and medicine, that an effective tool to deal with a complex and uncertain world is—perhaps surprisingly—to rely on simple rules that ignore information. Whereas simple decision rules have traditionally been viewed as an obstacle to good decision making, I will explain why simplicity can be a good guide to battle uncertainty and describe approaches to construct simple decision tools.

**Learning Objectives:**

I will address the following questions. What is a heuristic? Why can simple decision rules be more robust under uncertainty than complex rules? What is important for simple decision rules to work well?

**Antonio Romero-Garcia**

**Title:**

*Epigenetics, pharmacogenomics, neuroimaging, sleep and chronic pain vulnerability: Where does the future of our specialty lie?*

**Abstract:**

In the last decade numerous advances in the knowledge of chronic pain conditions regarding epidemiology, mechanisms, and future treatment strategies have been made.

OPPERA study has begun to show us that there are many known risk factors for the development of chronic pain conditions, although the biological key issues that link these factors to abnormal processing of painful signals are only just beginning to be explored. Although research in this area is still in its infancy, a better understanding of how pain vulnerability emerges has the potential to help identify individuals at risk and may open up new therapeutic avenues. Furthermore, ineffectiveness of current therapeutic strategies seems to be at least partly due to an incomplete understanding of the mechanisms involved in chronic pain conditions. The development and maintenance of chronic pain involve long-term changes in multiple areas of the central nervous system (CNS), which are often characterized by adaptations at the cellular and molecular levels. Recent findings on
epigenetic changes in the spinal cord and brain during chronic pain states may guide fundamental advances in new treatments. In our presentation we will discuss the potential mechanisms that have been proposed to underlie vulnerability and resilience toward developing chronic pain and will discuss recent studies that highlight the involvement of epigenetic mechanisms in the CNS in orofacial chronic pain conditions.

The technical advancements made in both functional and structural MRI have been used to delineate the cerebral signature of pain specifically, the brain responses to noxious stimuli and specific pain-related forebrain responses, as well as pain modulatory effects. The information derived from neuroimaging studies, specially the recognition of supraspinal pain mechanisms suggest that chronic (orofacial) pain states may be related to a dysfunctional brain network and may involve a compromised descending inhibitory control system. This can be of tremendous interest to the field of chronic orofacial pain conditions.

Individual pain variability and differences in the efficacy of analgesic drugs are genetically controlled. The application of pharmacogenomics of the field of pain management tries to characterize how genetic variations can contribute to an individual’s sensitivity and response to a variety of drugs important to pain management practice. Pharmacogenomics of pain management represents the most familiar area of practical pain genomics, showing how genomic variations, can dramatically change the response to analgesic drugs through either change in their metabolism or receptor targets.

Finally, in the last decade, in the OFP field, special attention has been paid to the issue of sleep. These two vital functions sleep and pain interact in such a complex way that ultimately impacts the biological and behavioral capacity of the individual. Different studies have demonstrated the bidirectionality of the sleep-pain relation. Given this bi-directionality, treatment must focus on alleviation of both the pain and sleep disturbances.

From the review of the above, a main question emerges... Are really these issues having a great impact in the daily treatment of our patients? The final discussion of our presentation will be addressed to give a practical answer to this question.

**Learning Objective:**

- To present the latest advances and future trends in the research of chronic orofacial pain disorders

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**Hans Jürgen Schindler**

**Title:**

*Treating therapeutic failures in a specialized private practice. How many "real" failures do really exist?*

**Abstract:**

Therapeutic failures for TMD patients are often a reason for mixed emotions among general dentists. Systematic evaluation of the literature regarding the response to the management of different TMD patient subgroups shows considerable selection bias: the vast majority of the studies have been performed in 3rd grade patient care settings; moreover, almost no studies have differentiated the patient populations for their chronic pain status. Hence, it can be assumed that a considerable proportion of the patients in the aforementioned settings suffer from dysfunctional chronic facial pain. This, however, does not reflect the reality in the everyday practice, thus giving a wrong impression about how many therapeutic failures can be expected.
The aim of this study was the systematic evaluation of the registry of the last three years of a specialized private practice.

A total of 230 consecutive TMD patients were treated in this time frame. The majority of the individuals (84%) had a myofascial pain diagnosis according to the RDC/TMD. The Graded Chronic Pain Status of the patients showed that 23% had dysfunctional chronic pain (grade III or IV). Seventy percent of the patients responded positively to different management measures in various degrees.

The results of the re-treatment are rather encouraging: most "resistant" cases are indeed manageable by following standardized diagnostic procedures and employing a variety of therapeutic methods. Management of TMDs requires often longer time periods and a combination of evidence-based therapeutic options. Prerequisite for a successful management is a proper diagnosis, especially for early recognition of patients with chronic/dysfunctional pain.

**Learning Objectives:**

- Which validated diagnostic tools are applicable for the private practice?
- Which management modalities are available in the private practice?
- Which time frame is considered appropriate for a TMD treatment in the private practice?

**Jens Türp**

**Title:**

*Failures in chronic pain therapy across the disciplines: a review of the pertinent literature*

**Abstract:**

Treatment failure has been defined as “a measure of the quality of health care by assessment of unsuccessful results of management and procedures”. A PubMed search ["Treatment Failure"[Mesh] OR "treatment failure"[All Fields]] carried out in April 2016 yielded 41075 references; only 654 (1.6%) of them were published in dental journals. A search for articles about treatment failure in chronic pain resulted in 90 hits. When additional databases, such as LIVIVO, are considered, the number of relevant hits increases. Nonetheless, the low yield indicates selective suppression of information in medical/dental Journals on that topic. The reasons for this reporting bias will be elucidated.

**Learning Objectives:**

At the end of the presentation, the audience should know the main reasons for
- the low number of reports about therapeutic failure in chronic pain;
- therapeutic failure in chronic pain, with special emphasis to orofacial pain.

**Eduardo Vázquez-Delgado**

**Title:**

*Is Platelet-Derived Growth Factors a Treatment Option for Refractory TMJ Osteoarthritis?*
Abstract:

Osteoarthritis (OA) is a prevalent and disabling disease affecting an increasingly larger percentage of world population. Many treatment options have been made available during the last decades to address problems regarding osteoarthritic cartilage damage, each with its own advantages and disadvantages, being the use of the Platelet-derived growth factor (PDGF) (autologous growth factor) a rapidly growing treatment option in orthopedics and sports medicine due to its role in regulating physiological remodeling and cartilage healing by stimulating cellular growth, proliferation, healing, and cellular differentiation. Nevertheless its use as a primary treatment option in musculoskeletal disorders including temporomandibular joint (TMJ) osteoarthritic conditions remains controversial due to the limited amount of high quality clinical trials that support its use when compared to other treatment options. It is the aim of this lecture to provide back-ground on the underlying basic science, the methods used for producing and infiltrating PDGF, and an overview of the available scientific literature on its application in the treatment of TMJ OA.

Learning Objectives:

To provide back-ground on the underlying basic science, the methods used for producing and infiltrating PDGF, and an overview of the available scientific literature on its application in the treatment of TMJ osteoarthritis.