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Proceedings of Pain Science in Motion Colloquium—3rd edition. May 31st—June 2nd, University of Genoa-Campus of Savona, Italy

Giving insight in pain research of tomorrow!

C. Paul van Wilgen, Marco Testa

The research findings and the pain models of tomorrow can be found in the research questions of today. Therefore, 7 years ago, within the Pain in Motion group, the idea was launched to start a podium dedicated to PhD researchers. In contrast to traditional congresses, the idea was to present starting or ongoing research. This resulted in the first Pain Science in Motion Colloquium. Researchers were invited not to present existing data and finished research, but primarily to present starting research projects with their underlying theories and designs. This gave the chance for young researchers to present on an international stage early in their career, to meet fellow PhD pain researchers and discuss and share their research. Moreover, young researchers have the opportunity to encounter 5 senior researchers that are invited to give a keynote lecture in the Pain Science in Motion Congress, but in particular to discuss with them during the "meet the expert" sessions.

After Brussels (2015) and Stockholm (2017), the *III edition of the Pain Science in Motion colloquium* will be held in 2019 in Savona, Italy, at the Campus of the University of Genoa. This year, thanks to a multidisciplinary group of PhD researchers coming from all over the world, the program offers 8 oral sessions with 40 presentations and 10 thematic poster sessions with 50 posters with short interactive presentations.

The keynote experts invited will be Prof. Fabrizio Benedetti (University of Torino, Italy) Prof. Rob Smeets (University of Maastricht, Netherlands), Jessica van Oosterwijck (University of Gent/ Antwerpen, Belgium), Prof. Alberto Gallace (University of Milano Bicocca, Italy), Prof. Deborah Falla (University of Birmingham, UK).

We hope that the reading of the short abstracts of the selected oral presentations can be inspiring for future young researchers who will increase the quality of the forthcoming editions of the Pain Science in Motion Colloquium.

More information about the present colloquium, the 2019 version and future editions can be found at the congress website: www.PSIM2019.org or at the website of Pain in Motion: http://www.paininmotion.be

On behalf of the Scientific Committee
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Offset analgesia in patients with migraine and healthy controls

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Migraine is a common and debilitating disease, but the pathophysiology is poorly understood. Dysfunctional endogenous pain modulation is discussed as a contributing factor to the development and/or maintenance of the disease. Offset analgesia (OA) is a frequently used paradigm to identify endogenous pain modulation. The aim of this study is to assess OA in patients with migraine and healthy controls. Twenty-one patients with migraine and 21 healthy age and gender matched healthy controls were recruited. In both groups, selected tests from the quantitative sensory testing protocol were assessed. OA was performed using a three-temperature stimulus paradigm on both sides of the forehead and the forearm. An individualized temperature of 50/100 for 5 seconds (T1), +1°C for 5 seconds (T2), and again the individualized temperature for 20 seconds (T3) were applied. In addition, 3 constant temperature stimuli of T1 were applied for 30 seconds. The constant and offset trials as well as the examined body regions were performed in a randomized order. Results and conclusions: The project is in its final phase. To date, 15 patients with migraine (examined interictally) and 15 healthy controls have been included.

response will be assessed. Two weeks later child's pain and fear memory and future pain expectancies will be assessed by telephone. Recalled pain and fear ratings higher than initial reports are considered indicative of negative memory biases. No results yet to display. No conclusions yet to display.

Influence of education level on the effectiveness of pain neuroscience education: a secondary analysis of a randomized controlled trial

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Objectives: The effects of pain neuroscience education (PNE) at group level are rather small and little is known about personal factors (eg, level of education [LoE]) potentially influencing the effectiveness of PNE. The aim of this study is to investigate the influence of LoE on the effectiveness of pain neuroscience education in chronic spinal pain (CSP) patients.

Methods: A total of 120 people with nonspecific CSP (ie, neck and back pain) were randomly assigned to the control or experimental group. Every patient received 3 education sessions of PNE or neck/back school. Several self-report questionnaires were used to measure treatment outcomes (disability, catastrophizing, kinesiophobia, perceptions and vigilance). Based on both LoE and group allocation, 6 groups were formed.

Results: Analyses are ongoing. Differences between groups will be checked using repeated measures ANOVA and Bonferroni post-hoc analysis.

Conclusions: This is the first study to provide insight in the influence of LoE on the effectiveness of PNE. No follow-up measurements are available, resulting in the inability to investigate long-term effects. The results from this study may contribute to the identification of patients who benefit the most from PNE and those who are less susceptible, based on LoE.

Relations between nutrition and chronic pain in cancer patients and cancer survivors

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Objectives: To date, no clear overview exists on the relation between chronic pain and nutrition in cancer patients and cancer survivors. Therefore, the aim of this systematic review is to identify relevant evidence regarding this association to provide guidance for future research in this field.

Methods: This systematic review will be performed according to the Preferred Reporting Items for Systematic review and Meta-Analyses (PRISMA) guidelines. PubMed, Web of Science and Embase databases will be searched. Firstly, titles and abstracts of the obtained articles will be screened and then second screening will be based on full-text. The Cochrane Collaboration's tool (for randomised controlled trials) and, the Newcastle-Ottawa Scale (for observational studies) will be used for risk of bias assessment of studies. Data will be extracted using a data extraction form, according to collected data, analytical or descriptive synthesis will be performed.

Results: Results are not available yet, as the search is ongoing. Results will be available for presentation during the PSiM congress.

Conclusions: This review is important to see if nutritional interventions might be useful in pain management for cancer patients and survivors.

Noninvasive intracranial pressure monitoring in patients with chronic migraine

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Recent studies have suggested a possible relationship between the dysregulation of cerebrospinal fluid and intracranial pressure in the central nervous system with symptoms such as allodynia and hyperalgesia. The role of increased intracranial pressure has been investigated in patients with chronic migraine whose pathophysiology comprises a complex neurovascular dysfunction. However, this question has still not been investigated thoroughly considering the risks of the invasive methods of measuring intracranial pressure. The aim of this study is to investigate possible alterations in the waveform morphology through noninvasive intracranial pressure in patients with chronic migraine. Thirty women patients with chronic migraine and 30 healthy age matched controls will be evaluated. The noninvasive intracranial pressure monitoring will be performed by a valid method patented by Brazilian researchers that consists of an extracranial deformation sensor positioned in the patients' scalp, which will allow registration of intracranial pressure waveforms. Data will be continuously and simultaneously collected with blood pressure and heart rate measurements during 20 minutes, after 10 minutes-resting, in the supine position. Parameters obtained from the waveforms will be analyzed and compared between groups such as, P1 slope and P2/P1 index. Results and conclusions: The project is in its initial phase of pilot testing.

Associations between health-related quality of life and nociceptive modulation and employment status in patients with lumbar radiculopathy

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Objectives: This study primarily aims to compare health-related QOL of patients with lumbar radiculopathy to a group of healthy subjects. Secondary aims are to assess the association between the patients' health-related QOL and (1) altered endogenous nociceptive modulation and (2) their employment status and sick leave duration.

Methods: Health-related QOL is measured by the Short form 36 item Health Survey (SF-36). Endogenous nociceptive