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From the Editor

Advances in pain research?

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The International Association for the Study of Pain (IASP) announced a new revised definition of pain in 2020 for the first time since 1979 [1]. This definition in theory would be less Cartesian, and is defined as “an unpleasant sensory and emotional experience associated with, or resembling that associated with, actual or potential tissue damage.” This definition should apply to acute and chronic pain, all pain conditions and their pathophysiology (nociceptive, neuropathic and nociplastic pain). Nociplastic pain, proposed in 2016 by Kosek et al. [2], can be defined as “pain that arises from altered nociception despite no clear evidence of actual or threatened tissue damage causing the activation of peripheral nociceptors or evidence for disease or lesion of the somatosensory system causing the pain”. Within the revised definition of pain, nociplastic pain is addressed by the part of ‘resembling that associated with’.

For the research community, however, this new pain component arises with new challenges, since gold standards to detect nociplastic pain, including pain syndromes such as central sensitization, are currently unavailable in humans and have only been convincingly demonstrated in animals [3,4]. Attempts to quantify nociplastic pain in humans, for example by quantified sensory testing, may increase our understanding of this new pain definition. An example in this issue is presented by Zicarelli and colleagues [5], who studied the reliability of pressure pain thresholds in patients with neck- and low back pain. We encourage researchers in this field of important research, but also see that much work is yet to be done in this area.

We would like to highlight the study by Gergelé and colleagues [6] by awarding it this issue’s **Editor’s Choice**. The authors present a study on the validation of machine learning algorithms to serve as clinical decision support tools for clinicians. This research groups pioneers in new ways to personalize care, explore new research designs, and, as you can read in the study, this is not a straightforward process, and algorithms and research designs may need to be evolved to use machine learning in its full potential. We applaud the authors for their efforts and progression in this research.

Furthermore, in JBMR, **COVID-19** papers are always **free to read**. In the current issue, Gao and colleagues report on the use of WeChat software application to guide elderly patients with hip fractures during this COVID-19 pandemic [7]. The authors conclude that there are significant lower complications and mortalities in the group using WeChat as a monitoring system, which is a step forward in remote assistance of therapy, which especially gained interest in the past year.

I hope you all enjoy reading this exciting new issue!
Remko Soer

References

- [1] Raja S, Carr DB, Cohen M, Finnerup NB, Flor H, Gibson S, Keefe FJ, Mogil JS, Ringkamp M, Sluka KA, Song XJ, Stevens B, Sullivan MD, Tutelman PR, Ushida T, Vader K. The revised International Association for the Study of Pain definition of pain: concepts, challenges, and compromises. *Pain*. 2020; 161(9): 1976-1982.

- [2] Kosek E, Cohen M, Baron R, Gebhart GF, Mico JA, Rice ASC, Rief W, Sluka AK. Do we need a third mechanistic descriptor for chronic pain states? *Pain*. 2016; 157(7): 1382-1386.
- [3] Woolf C. Central sensitization: implications for the diagnosis and treatment of pain. *Pain*. 2011; 152(Suppl 3): S2-S15.
- [4] Arendt-Nielsen L, Morlion B, Perrot S, Dahan A, Dickenson A, Kress HG, Wells C, Bouhassira D, Mohr Drewes A. Assessment and manifestations of central sensitisation across different chronic pain conditions. *Eur J Pain*. 2018; 22: 216-241.
- [5] Zicarelli CAM, Santos JPM, Poli-Frederico RC, Silva RA, Barilec F, Barrette G, Iida LM, Russo PP, Larangeira LLS, Fernandes MTP, Fernandes KBP. Reliability of pressure pain threshold to discriminate individuals with neck and low back pain. *J Back Musculoskeletal Rehabil*. 2021; 34(3): 363-370.
- [6] Gergelé E, Parent E, Gross DP. Accuracy of the Örebro Musculoskeletal Pain Questionnaire and Work Assessment Triage Tool for selecting interventions in workers with spinal conditions. *J Back Musculoskeletal Rehabil*. 2021; 34(3): 355-362.
- [7] Gao SS, Wang YJ, Zhang GX, Zhang WT. Rehabilitation guidance for hip fracture patients during the COVID-19 pandemic using chat software: A new model. *J Back Musculoskeletal Rehabil*. 2021; 34(3): 337-342.