Doctor, why does my hand hurt? The nature, course and treatment of pain in hand osteoarthritis

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CHAPTER 7.1

COMMENT ON: IN CLINICAL HAND OSTEOARTHRITIS RESEARCH, SELF-REPORTED PAIN QUESTIONNAIRES DO NOT REFLECT THE PATIENT EXPERIENCE: REPLY

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Dear Editor,

We thank Dr. Tecer and Dr. Yilmaz for their interest in our work on the discordance between recalled pain and changes in pain collected by repeated questionnaires. (1) We have read their letter with great interest.

Pain in hand osteoarthritis (OA) is indeed multifactorial, and may involve various pain mechanisms. This makes accurate measurement of this pain challenging. The biopsychosocial model as an etiological explanation for OA pain is increasingly established and recognized. (2, 3) We do feel a distinction needs to be made between questionnaires aimed at establishing a pain phenotype (etiology) and questionnaires aimed at tracking symptom severity and progression (clinimetry). These need not be the same, as for example a decrease in the severity of neuropathic pain does not imply a change in pain mechanisms. Our study aimed to provide information on the methodological aspects of the two methods of measuring pain progression, not the etiological qualities of the questionnaires.

Regarding the use of the AUSCAN questionnaire, this is one of the most frequently used outcome measures for pain in hand OA. (4) Our main finding was a discordance between changes on this commonly used questionnaire and recalled changes in pain. The main message we derive from those data is that when using the change in AUSCAN pain as the only outcome in a trial, it is not fully clear what is measured. The same goes for the recall question. This is also the reason we conclude the paper with a call to develop a new pain assessment tool aimed at changes over time. (5)

We agree that different types of pain are expected to respond differently to different treatments. It was for this reason we previously investigated the prevalence of neuropathic pain symptoms in the HOPE study using the painDETECT questionnaire. (6) We found that painDETECT scores did not decrease under prednisolone. Adjusting for the presence of neuropathic pain symptoms as measured with the painDETECT questionnaire also did not change the main outcome of the HOPE trial. As such, we found no indication to doubt the outcome of the previous studies. Regarding the current study, one might expect the lack of response seen for neuropathic pain symptoms to emphasize discordance between the recall and AUSCAN changes. This could conceivably lead to higher discordance in the intervention group. However, the stratified analysis described in the paper showed both groups had very low discordance, with the placebo group being even slightly worse (Cohen's kappa 0.23 and −0.06 for intervention and placebo arms, respectively).

As stated in the letter, other factors than anxiety and depression might influence pain in hand OA, and the discrepancy we found. These are important topics that deserve further scrutiny. However, an effect on pain in hand OA does not necessarily imply that the factors will drive the discordance between the methods of measuring pain progression we found, because it can influence pain assessment by both AUSCAN and a recall question.

We agree that variations in hand OA pain over time complicate the use of a recall question and may be in part responsible for the discordance, especially when combined with the effect of the current state of a patient. Weather-induced mood is a good example of this. This is the reason we commented on this in the discussion of our paper, as part of the potential factors explaining our results.

In conclusion, the issues raised in the letter are important in the evaluation of pain, and in driving the research on pain forward. We thank Dr. Tecer and Dr. Yilmaz for their insights on this important topic. However, these considerations do not change our conclusions, that the two measurement methods may not measure the same underlying construct, and that new tools may be required. Conversely, these etiological considerations emphasize the need for more precise measurement, and provide additional topics to be considered when developing the new tools.

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Conflict of interest statement
MK reports the following, all outside the current study: Grants from the Dutch Arthritis Society, paid to the institution. Royalties or licences from Wolters Kluwer and Springer Verlag, paid to the institution. Fees for consulting/advisory boards by Pfizer, UCB, CHDR, GSK, Novartis and Peptinov, all paid to the institution. Payment or honoraria for lectures or presentations from Novartis, paid to the institution. Roles on the OARSI board (member), EULAR council (member advocacy committee EULAR) and presidency of the Dutch Society for Rheumatology.

Data availability statement
No new data were presented.

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