



Letter to Editor Concerning “Total Hip Arthroplasty Using Ceramic-on-ceramic Bearing Surfaces: Long-term Assessment of Squeaking Sounds” by Kim et al. (Hip Pelvis. 2018;30(1):18-22, <http://dx.doi.org/10.5371/hp.2018.30.1.18>)

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With our great interest in total hip arthroplasty and its various implant selections, we were delighted to read the recent article by Kim et al., describing long-term evaluation of ceramic-on-ceramic bearing surfaces and its squeaking sound. The authors provided meaningful results regarding factors that may have contributed to occurrence of squeaking sound and a relatively longer duration of follow-up period compared to previous studies. Nonetheless, after review of the manuscript, we would like to comment on the article for several reasons.

First, even though the authors defined a squeaking sound as a high-pitched audible sound that is directly heard by the observer and that occurs during movement of hip joint, it is quite vague to definitively categorize squeaking sound out of other audible sounds, such as clicking and popping. It would be helpful to understand nature of squeaking sound when provided with specific assessment criteria rather

than subjective evaluation by patients and their relatives in order to explain frequency, intensity, and time interval although we agree with hardship in objective and numerical conversion of the sound¹⁾.

Second, in assessment of causal factors on squeaking sound, the authors mainly examined demographic characteristics and position of acetabular cup; however, more thorough evaluation can be made by assessing anteversion of femoral stem as well as stem and cup combined anteversion in addition to single valuation of cup position²⁾. Furthermore, presence of stem-to-liner impingement, assessment of possible adverse reaction to metal debris by measuring metal ion levels including alumina, and comparative analysis in bearing diameters could have been supportive variables in order to broaden perspectives in understanding causal factors on squeaking sound, compared to previous studies³⁻⁵⁾.

Finally, after the review of the manuscript, critical differential points in analyzing between squeaking sound that require clinical attention and surgical intervention still remain in question even though the authors stated that only case that necessitate revision surgery was due to destruction of prosthesis, rather than the squeaking sound itself. Although not only the authors but also previous studies have concluded that squeaking sound had no influence on clinical and radiologic results compared to those without squeaking sound, because there has been abundant psychological stress relating to squeaking sound in patients, it would have been helpful to suggest possible

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differential criterion between severe cases requiring clinical attention and those that can be observed⁶⁾.

We appreciate Kim et al. for addressing several important points about squeaking sound occurring postoperatively in total hip arthroplasty patients during a long follow-up period. As we continue to learn more about pathology and analysis of squeaking sound by studying wider spectrum of perspectives in its causality, we may be able to resolve patients' postoperative complaint and discomfort more accordingly.

CONFLICT OF INTEREST

The authors declare that there is no potential conflict of interest relevant to this article.

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