



# Letter to the Editor Regarding the Article “Asian ethnicity: a risk factor for adhesive capsulitis?”

## *Carta ao editor sobre o artigo: Etnia asiática: um fator de risco para a capsulite adesiva?*

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Rev Bras Ortop 2019;54:357.

First, I would like to thank you for the opportunity to participate in this discussion aiming the growth of science and the assistance to physicians. The authors conducted a cross-sectional study with the primary objective of assessing whether Asian ethnicity is a risk factor for the development of adhesive capsulitis.<sup>1</sup> The study concludes that Asian ethnicity is an independent risk factor with an adjusted odds ratio (OR) of 3.6 (95% confidence interval [CI] of 2.0 to 6.5). However, this research was designed as an observational, cross-sectional study, which is inappropriate to answer this type of scientific question.<sup>2</sup> A cross-sectional observational study is considered the gold standard for epidemiological studies aiming to reveal the precise prevalence of a particular issue with two or more associated variables; however, it is not the ideal study design to infer cause and effect.<sup>3</sup> In prospective cohort studies, the researchers select a group of individuals and measure risk factors or exposures before the outcome, thus establishing temporality, an important factor in determining causality.<sup>3</sup> This type of study is performed in some stages, including: sample selection, observation of each group over time, and comparison of groups exposed or not to the risk factor. Its main disadvantages are the high cost due to the large number of subjects that must be included in the study and the long

follow-up time.<sup>3,4</sup> Accordingly, the inference of the authors regarding the OR for Asian ethnicity and the development of adhesive capsulitis may be an overvalued measure due to the study method and statistical analysis performed. Odds ratio is a statistical measure used in longitudinal cohort studies, in which the incidence at the exposed group can be compared with the incidence at the nonexposed group, hence its name; as such, researchers should follow cases (Asian individuals) and controls (non-Asian individuals) over time to reach a possible risk factor.<sup>4</sup>

### Conflicts of Interests

The authors have no conflicts of interests to declare.

### References

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received  
March 24, 2019  
accepted  
May 7, 2019

DOI <https://doi.org/10.1055/s-0039-1692435>.  
ISSN 0102-3616.

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