Letter to the Editor Regarding the Article: "Radiographic Evaluation of Postoperative Alignment in Total Knee Arthroplasty" – Thomaz LDG, Geist JGB, De Lucena RDL, Schwartsmann CR, Freitas GLS, Spinelli LF. *Rev Bras Ortop* 2021 https://doi.org/10.1055/s-0041-1726061. (e-first)

Carta ao editor sobre o artigo: "Avaliação radiográfica do alinhamento pós-operatório na artroplastia total de joelho" – Thomaz LDG, Geist JGB, De Lucena RDL, Schwartsmann CR, Freitas GLS, Spinelli LF. Rev Bras Ortop 2021 https://doi.org/10.1055/s-0041-1726061. (e-first)

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Dear Editor,

First, we would like to congratulate the authors of the article entitled "Radiographic Evaluation of Postoperative Alignment in Total Knee Arthroplasty"[1] for the interesting article. In addition, we would also like to make some comments about the methodology used in the research.

We believe that the performance of orthostatic radiographs in the immediate postoperative period, still during hospitalization, may have compromised the quality of the imaging examination, considering that the intensity of pain and edema common to the immediate postoperative period often limits the total extension of the knee, especially during orthostatism.

The attitude in flexo and external rotation of the operated limb may have been a bias in relation to the correct positioning of the patient and the obtainment of the images. Radiography in the immediate postoperative period has not been shown to be beneficial,[2] and we believe, in line with Abu-Rajab et al.,[3] that the radiographic evaluation should have been performed in a later postoperative period, at around six weeks.

Another methodological point that we thought was inappropriate was to try to infer the location of the femoral head and the center of the ankle on short radiography. On short radiography, the only reproducible axis to be traced is the anatomical axis of the femur and tibia (tibiofemoral),[4] which

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is a good predictor of long-term alignment after total knee arthroplasty.[4]

We conclude that, methodologically, the panoramic radiographs should have been performed in a later postoperative period to avoid a positioning bias, and that a comparison of long and short radiography analyses could only be made taking into account the tibiofemoral anatomical axis. Attempting to infer the mechanical axis on a short x-ray causes an inference bias regarding the location of the femoral head and the center of the ankle.

Conflict of Interest

The authors have no conflict of interests to declare.

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