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Konishi T, Hamai S, Tsushima H, et al. Pre- and postoperative Coronal Plane Alignment of the Knee classification and its impact on clinical outcomes in total knee arthroplasty. *Bone Joint J.* 2024;106-B(10):1059-1066.

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Dear Editor,

Coronal Plane Alignment of the Knee (CPAK) is currently a vogue topic in total knee arthroplasty (TKA) and has certainly improved our understanding of the individuality of the knee joint. Regardless of one's alignment philosophy, achieving a well-balanced knee and a satisfied patient is paramount. As TKA is a nuanced procedure with many variables, an issue arises with the above paper¹ as the authors find a negative correlation between changes in the arithmetic hip-knee-ankle angle (aHKA), joint line obliquity (JLO), and patient-reported outcome measures without any descriptor of intraoperative surgical technique.

The authors report a mechanical alignment strategy for all TKA in the study and highlight CPAK Type I as the most prevalent preoperative phenotype (55%/155 knees). Bae et al² have shown good long-term survival and clinical outcomes for their cohort of Asian patients with constitutional varus (CPAK Type 1) who had a mechanically aligned TKA. MacDessi et al³ have described that, when using mechanical alignment techniques for CPAK Type 1 knees, by changing constitutional varus to neutral alignment, the knee is expected to be tighter medially with the potential for lateral condylar lift off if the soft-tissue envelope is not addressed. Naturally, the medial collateral ligament (MCL) often falls victim to the balancing process with a varus knee but is a critical structure in knee kinematics and the conformity of the medial compartment. Vigdorich et al⁴ showed soft-tissue releases to independently affect Knee Injury and Osteoarthritis Outcome scores (KOOS) negatively for up to two years and, as such, it is the authors' opinion that soft-tissue balancing is as important as bony balancing. Similarly, without a reported consistency of senior surgeon there are too many variables in play to make the reported conclusion that, by changing the aHKA and/or JLO, patient-related outcome measures are independently affected.

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1. **Konishi T, Hamai S, Tsushima H, et al.** Pre- and postoperative Coronal Plane Alignment of the Knee classification and its impact on clinical outcomes in total knee arthroplasty. *Bone Joint J.* 2024;106-B(10):1059-1066.

2. **Bae K, Lee B-S, Kim J-M, et al.** Preoperative phenotype has no significant impact on the clinical outcomes and long-term survival of mechanically aligned total knee arthroplasty in Asian patients with osteoarthritis. *Bone Joint J.* 2024;106-B(5):460–467.
3. **MacDessi SJ, van De Graaf VA, Wood JA, Griffiths-Jones W, Bellemans J, Chen DB.** Not all knees are the same: using the Coronal Plane Alignment of the Knee (CPAK) classification to understand imbalance in mechanically aligned total knee arthroplasty. *Bone Joint J.* 2024;106-B(6):525–531.
4. **Vigdorchik JM, Wakelin EA, Koenig JA, et al.** Impact of Component Alignment and Soft Tissue Release on 2-Year Outcomes in Total Knee Arthroplasty. *J Arthroplasty.* 2022;37(10):2035-2040.e5.

Conflicts of Interest: None