LETTER TO THE EDITOR

Letter to editor in chief: Do hip muscle weakness and dynamic knee valgus matter for the clinical evaluation and decision making process in patients with patellofemoral pain?

We read the article by Rabelo and Lucareli with great interest and would like to congratulate them for their manuscript and the choice of such a current and pertinent theme. The authors claim that hip muscle weakness and kinematic changes such as dynamic knee valgus are not the only factors that should be taken into consideration when evaluating patients with patellofemoral pain (PFP). The authors question in the title the use of these two biomechanical issues in the clinical decision-making process. However, we noted that the arguments used in the manuscript refer extensively to the discussion of the “egg-or-chicken” theory, i.e., theorizing the cause or effect of anterior knee pain instead of the use or not of muscular strengthening in patients with PFP.

There are important randomized controlled trials on this topic that test the strengthening of the hip muscles, associated or not with strengthening of the quadriceps muscles, has shown clinical benefits in comparison with a non-treatment or placebo group or even isolated strengthening of the quadriceps. Indeed, this information can be confirmed in recent systematic reviews. It should be highlighted that the fact that the studies cited by the authors of this masterclass do not show a direct relationship between muscle strengthening and correction of dynamic valgus does not invalidate this therapeutic approach in clinical decision-making, since the primary outcomes like pain and function should always prevail over secondary outcomes like strength and kinematics. The authors themselves have published clinical trials showing the beneficial effects of muscle strengthening in this population.

From the approach and discussion developed about the influence of strength or dynamics valgus as a predisposing factor for anterior knee pain, we believe that the arguments presented are much more about prevention of PFP rather than treating patients with this condition. Besides this, even regarding preventive character, there is evidence that the reduction of eccentric hip abduction strength and dynamic valgus in specific populations are risk factors for PFP. Finally, greater care should have been taken when suggesting a biopsychosocial approach to the treatment of PFP, since no clinical trial has compared the efficacy of adding this approach to the current usual care. The studies cited on this masterclass suggested the use of a biopsychosocial approach in patients with PFP. However, this still cannot be considered a therapeutic tool to be implemented in the treatment of a primarily biomechanical condition, due to the fact that the influences of this type of intervention have not been tested in high-quality clinical trials.

References

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