

Letter to the Editor

Reply-Letter to the Editor-Effectiveness of medial-wedge insoles for children with intoeing gait who fall easily

Faizan Kashoo 🕩

Department of Physical Therapy and Health Rehabilitation, Majmaah University, Riyadh, Saudi Arabia

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Dear Editor,

I have read the original article entitled "Effectiveness of medial-wedge insoles for children with intoeing gait who fall easily" by Hasashi Mouri et al. published in the Turkish Journal of Physical Medicine and Rehabilitation (2019; 65 (1):9-15). I would like to congratulate the authors for this successful clinical study, contributing to the evidence-based pediatric rehabilitation.

There are certain methodological concerns in the article before we use medial-wedge insoles (MWI) in clinical practice. The prolonged use of orthotic devices are associated with habituation and adverse effects on the musculoskeletal growth and development, for instance, ankle-foot orthosis in case of foot drop in stroke^[1] or detrimental effect of lumbar support in healthy individuals.^[2] In children particularly, the extended use of MWI may lead to habituation, frail medial arch of the foot, flexure drift of bones of the lower limb,^[3] and chances of recurrent ankle sprain due to excessive foot supination.^[4] Moreover, it should be kept in mind that MWI corrects the effect, but not the cause of the problem. The toe-out attitude of the foot is a consequence of pathology at the proximal segments of the body, that is persistent tibia torsion and femoral anteversion. Therefore, our treatment strategies must target the cause, but not the effect of the problem. A number of non-invasive treatment options are available which specifically target the cause of the problem, such as, exercises for weak external rotators of the hip joint and stretching for tight hip internal rotators, gait training, parental education, and counseling.^[5]

Followings are few recommendations about the methodology of the article and for the future research study.

- 1. The authors must have measured the internal tibial torsion and femoral anteversion and correlated the same with corrected toe-out angulation using the MWI.
- 2. The inclusion criteria must specify children with either muscular tightness or bony deformity.
- 3. The inclusion assessment of children must include tests to exclude children with visual, vestibular, and somatosensory impairment, as falls among children are common with impairment in these systems.

In conclusion, clinicians must carry out a thorough assessment before prescribing an MWI to any children with intoeing gait.

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This letter was submitted to the authors of the manuscript; however, not responded.

Corresponding author: Faizan Kashoo, MD. Department of Physical Therapy and Health Rehabilitation, Majmaah University, Riyadh, Saudi Arabia. e-mail: f.kashoo@mu.edu.sa

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