

Documents

Djivoh, Y.S., De Jaeger, D.

Acute effect of Sit-up versus Curl-up on the interrecti distance: A cross-sectional study in parous women [Effet immédiat du Sit-up versus Curl-up sur la distance interrecti : une étude transversale chez les femmes ayant accouché]
(2022) *Progres en Urologie*, 32 (11), pp. 776-783.

DOI: 10.1016/j.purol.2022.07.140

Physiology and Biomechanics of Locomotion Laboratory, Institute of NeuroScience (IoNS), Université catholique de Louvain (UCL), place Pierre-de-Coubertin 1, Louvain-la-Neuve, 1348, Belgium

Abstract

Background: A weakened pelvic floor is less efficient counteracting the increased intra-abdominal pressure during exercise. While intra-abdominal pressure is higher in Sit-up than in Curl-up, Sit-up continues to be practiced in fitness classes. This raises the question of whether it has advantages over the Curl-up for instance in reducing the interrecti distance (IRD), a goal searched by many parous women. IRD has been shown to be acutely reduced during Curl-up. Objectives: To determine if the IRD is more reduced during Sit-up than during Curl-up. Methods: Parous women with an IRD greater than 15 mm were included in the study. IRD was measured at 20 mm above umbilicus with a caliper in Head-lift, Curl-up, Sit-up and Drawing-in + Curl-up. IRD was compared across the four conditions using a one-way Anova test with repeated measures and Bonferroni correction between pairwise comparisons. Results: Nineteen parous women aged between 28 and 54 participated in this study. Compared to Head-lift (20.3 ± 3.9 mm), the IRD was significantly decreased during the Curl-up (12.2 ± 3.0 mm) and the Sit-up (12.1 ± 3.6 mm), but not during the Drawing-in + Curl-up (18.4 ± 4.9 mm). There was no significant difference in IRD between Curl-up and Sit-up. Conclusion: IRD was similarly acutely reduced during Curl-up and Sit-up. The long-term effect of Curl-up on the IRD and on the pelvic floor muscles needs to be studied. Impact: To reduce IRD in parous women Curl-up rather than Sit-up should be practiced. Fitness coaches should consider this information especially with classes attended by parous women, many of whom complain about pelvic floor disorders. Level of evidence: EL05. © 2022 Elsevier Masson SAS

Author Keywords

Abdominal muscles; Diastasis, Muscle; Exercise movement techniques; Parous women; Physical fitness

Index Keywords

adult, cross-sectional study, echography, exercise, female, human, middle aged, pelvic floor disorder, pelvis floor; Adult, Cross-Sectional Studies, Exercise, Female, Humans, Middle Aged, Pelvic Floor, Pelvic Floor Disorders, Ultrasonography

Correspondence Address

Djivoh Y.S.; Physiology and Biomechanics of Locomotion Laboratory, place Pierre-de-Coubertin 1, Belgium; email: yollande.djivoh@uclouvain.be

Publisher: Elsevier Masson s.r.l.

ISSN: 11667087

PubMed ID: 35941009

Language of Original Document: English; French

Abbreviated Source Title: Progr. Urol.

2-s2.0-85135531139

Document Type: Article

Publication Stage: Final

Source: Scopus