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Abstract

Aims: Low intra-abdominal pressure (IAP) and high perineal pressure (PP) are safe conditions for pelvic floor. This study aims to measure IAP and PP in Beninese post-partum women during abdominal exercises and determine what exercise presents less risk for pelvic floor after delivery. **Methods:** IAP and PP were measured at rest and during exercises performed in random order: Cough, pelvic floor contraction (PFC), Curl-up, diaphragmatic aspiration (DA), Drawing-in, DA + Curl-up and Drawing-in+Curl-up, using a Micro-Full biofeedback PHENIX-Vivaltis with dual-channel probe. Results were presented as change from rest (maximal value during exercise minus value at rest) and expressed in percentage of this change for the reference exercise, Cough for IAP and PFC for PP. The ANOVA repeated measures test was used to compare pressures between exercises. **Results:** Seventeen postpartum women participated to this study. The maximal IAP and PP change were the highest (100%), respectively, during cough and PFC. During DA, IAP was the lowest (-7%) and PP was 51%. During Curl-up, IAP was moderate (43%) and significantly higher than during PFC (33%), Drawing-in (16%) and DA. PP was low (29%) and similar to that during Drawing-in (23%). Compared to Curl-up, Drawing-in+Curl-up increased PP (50%) but did not decrease IAP (40%). DA + Curl-up increased PP (58%) and decreased IAP (31%) compared to Curl-up but not compared to DA. **Conclusion:** DA is safe and Curl-up presents little risk for the pelvic floor. According to interindividual variations observed in IAP and PP, intrinsic factors should be considered in future studies. © 2022 Wiley Periodicals LLC.

Author Keywords

abdominal pressure; Benin; curl-up; diaphragmatic aspiration; pelvic floor; postpartum women; rectal sensor

Index Keywords

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