

# Effects of Pelvic Floor Exercises and Core Muscle Exercises on Scar Pain and Pelvic Floor Muscle Strength in Abdominal Hysterectomy Patients: An Observational Study

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## ABSTRACT

**Introduction:** Abdominal hysterectomy is the surgical method when the abdomen is exposed via Pfannenstiel incision. Abdominal surgeries may downgrade abdominal muscle power, efficiency of intra-abdominal pressure.

**Aim:** This study determined the effects of pelvic floor and core muscle exercise on scar pain and pelvic floor muscle strength in abdominal hysterectomy patients.

**Materials and Methods:** Thirty post hysterectomy females were randomly assigned to group A (core muscle exercise group, n=15) and group B (pelvic floor muscle exercise group n=15). The group A performed core muscle exercises (Dead bug exercise, bridging exercise, concentric curl-up exercise, a Straight Leg Raise [ASLR]) and Group B performed pelvic floor muscle exercises (abdominal isometric exercise, pelvic adductor exercise, Ball Bridge exercise,

ball leg lifts) both for 30 minutes once in a day for 2 weeks (6 days). Pelvic floor muscle strength (measured by perineometer) and scar pain {measured with the Numeric Pain Rating Scale (NPRS)} were evaluated pre and post of the intervention.

**Results:** Significant changes showed in both the groups but group A showed highly significant improvement in scar pain compared to group B. The group B showed highly significant improvement in pelvic floor muscle strength compared to group A.

**Conclusion:** Pelvic floor exercise training is recommended to improve pelvic floor muscle strength and core muscle exercise is recommended to improve scar pain in abdominal hysterectomy patients.

**Keywords:** Abdominal isometric exercise, Ball Bridge exercise, Numeric Pain Rating Scale, Pelvic adductor exercise, Perineometer