

Functional Performance in Pregnant Women with and without Pelvic Pain

AIM & HYPOTHESIS

Aim: To compare sit-to-stand (STS) performance between pregnant women with and without pelvic girdle pain (PGP).

Hypothesis: Women with PGP would show longer times and lower repetitions.

Study Design: Case-control study at Gulhane Training and Research Hospital, Obstetrics Clinic.

METHODS

The study included 28 pregnant women, of whom 18 were without PGP and 10 were with PGP. Inclusion criteria were aged 18–50 years, had a singleton pregnancy at 14–28 weeks' gestation, and a BMI below 30 kg/m².



5xSTS

- Time for 5 full repetitions.



30sSTS / 1minSTS

- Number of sit-to-stand cycles within 30s / 1min.



PGP criteria

- Pain reported in the area between iliac crest–gluteal folds
- Posterior pelvic provocation test
- Straight leg raise

The statistical analysis included descriptive data presented as mean ± SD and median values. Independent t-tests were used for the 30sSTS and 1minSTS, while the Mann–Whitney U test was applied for the 5xSTS, with statistical significance set at p < 0.05.

RESULTS

Participant characteristics were comparable between groups.

	PGP (-) n=18	PGP (+) n=10
Age (years)	29.11 ± 5.94	27.00 ± 4.50
Gestational age (weeks)	20.76 ± 5.58	20.01 ± 4.62
BMI (kg/m ²)	27.15 ± 5.05	27.95 ± 6.03
Gravida (median)	1.50	1.00
Parity (median)	0.00	0.00
Miscarriage (median)	0.00	0.00
Abortion (median)	0.00	0.00
30sSTS (reps)	13.33 ± 3.88	14.10 ± 3.28
1minSTS (reps)	25.61 ± 7.76	24.40 ± 9.16

There were no significant differences between the pelvic pain and non-pelvic pain groups in demographic or obstetric characteristics, and sit-to-stand performance was also comparable (30sSTS p = 0.602, 1minSTS p = 0.713, 5xSTS p = 0.103).

CONCLUSION

Interpretation

- PGP did not significantly affect STS performance in pregnant women.
- Non-significant findings may relate to movement adaptations, kinesiophobia, training levels, or variability in pain perception/management.

Clinical Message

- The functional impact of PGP may not always be reflected in standard STS tests.
- Clinical evaluation should also consider pain adaptation, movement strategies, and psychosocial factors.

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