

18-23.3 yrs	3.2 (1.7-6.0)	<.001	3.2 (1.6-6.0)	.001	3.5 (1.2-11)	.026	NS
23.4-28.7 yrs	ref		ref		Ref		NS
28.8-34.5 yrs	.96 (.58-1.6)	.871	.97 (.58-1.6)	.898	.83 (.43-1.6)	.580	NS
≥34.6 yrs	1.7 (.81-3.4)	.166	1.6 (.75-3.3)	.228	2.4 (.86-6.5)	.096	NS
Occiput posterior presentation	.88 (.65-1.2)	.406	NS	-	1.5 (.93-2.3)	.098	1.6 (1.0-2.7) .043

* After backwards selection of variables. OR. Odds ratio; CI: Confidence interval; LP: Late pregnancy; 6moPP: Six months postpartum.

Interpretation of results

A substantial proportion of young, healthy primiparae in the present study experienced AI in late pregnancy and postpartum. These women may be at risk of suffering AI in the long term.(1) Interestingly, more women were incontinent in late pregnancy than after delivery, challenging the opinion that vaginal delivery as the main cause of women's anal incontinence.

The present results support the view that hormonal changes and mechanical trauma in late pregnancy may be likely to induce functional impairment to pelvic organs than earlier recognized. Considering that only one in five volunteer information or seek medical help for their AI symptoms, mainly due to embarrassment(2), there is a need for an increased awareness among health professionals about the prevalence and predictors of experiencing AI symptoms in pregnancy and postpartum. Further, health professionals should inform pregnant and postpartum women about AI symptoms, e.g. that they are common and may be transient.

Concluding message

One in three women suffered AI during late pregnancy and one third of these experienced persistent AI during the following year. New onset AI was reported by 15% at both time points postpartum and more than half of women incontinent at six months postpartum experienced persistent AI six months later. Experiencing AI symptoms twelve months postpartum was associated with AI in late pregnancy or six months postpartum, and the results may indicate that hormonal and mechanical changes in pregnancy may affect postpartum AI more than vaginal delivery

References

- (1) Pollack J, Nordenstam J, Brismar S, Lopez A, Altman D, Zetterstrom J. Anal incontinence after vaginal delivery: a five-year prospective cohort study. *Obstet Gynecol* 2004 Dec;104(6):1397-1402.
- (2) Bartlett L, Nowak M, Ho YH. Reasons for non-disclosure of faecal incontinence: a comparison between two survey methods. *Tech Coloproctol* 2007 Sep;11(3):251-257.

Disclosures

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