Levator ani muscle co-activation and active second stage of labor in women undergoing induction of labor
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Objective
To assess the impact of co activation on the duration of the active second stage of labour.

Methods
The study was conducted in two tertiary level university hospitals (Cairo University and Bologna University Hospitals). We recruited a series of nulliparous women with singleton pregnancies undergoing induction of labor at term. We performed transperineal ultrasound to all women prior to induction of labor, measuring the anteroposterior diameter of the levator hiatus at rest and at maximum Valsalva.

Results
There were no significant differences between women who underwent spontaneous vaginal delivery in comparison with the Cesarean delivery group as regards the A/P diameter of the levator hiatus at rest and at maximum Valsalva, nor in the prevalence of levator ani muscle co-activation. Women with levator ani muscle co-activation had a longer active second stage of labor in comparison with women with no co-activation.

Conclusion
Levator ani co-activation is associated with a longer active second stage of labor. Further studies are needed to assess the benefit of specific corrective measures in the subgroup of women with co-activation.