

EP 17.19 Fetal angle of progression during open- versus closed-glottis pushing in nulliparous women before labor

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OBJECTIVES

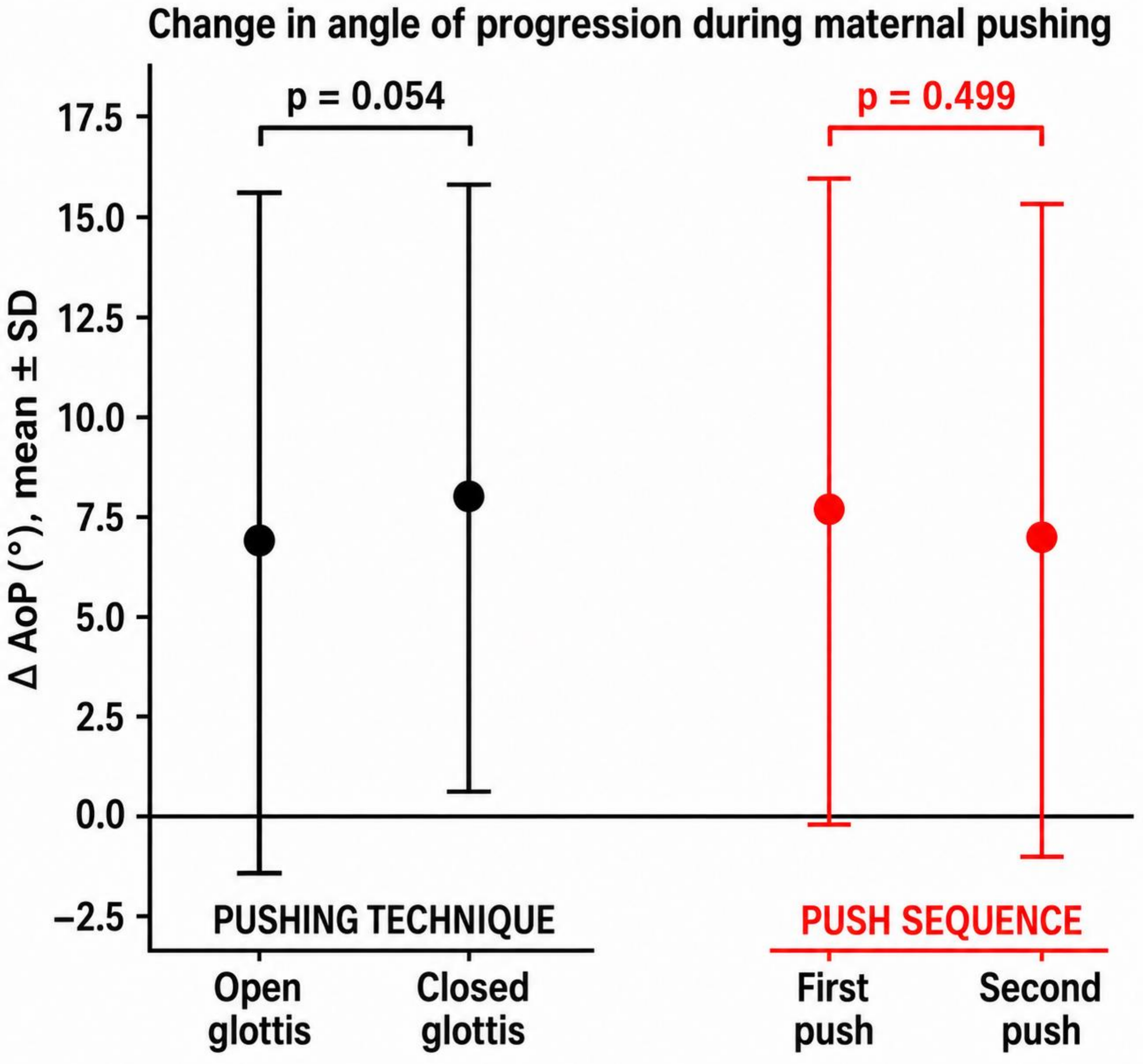
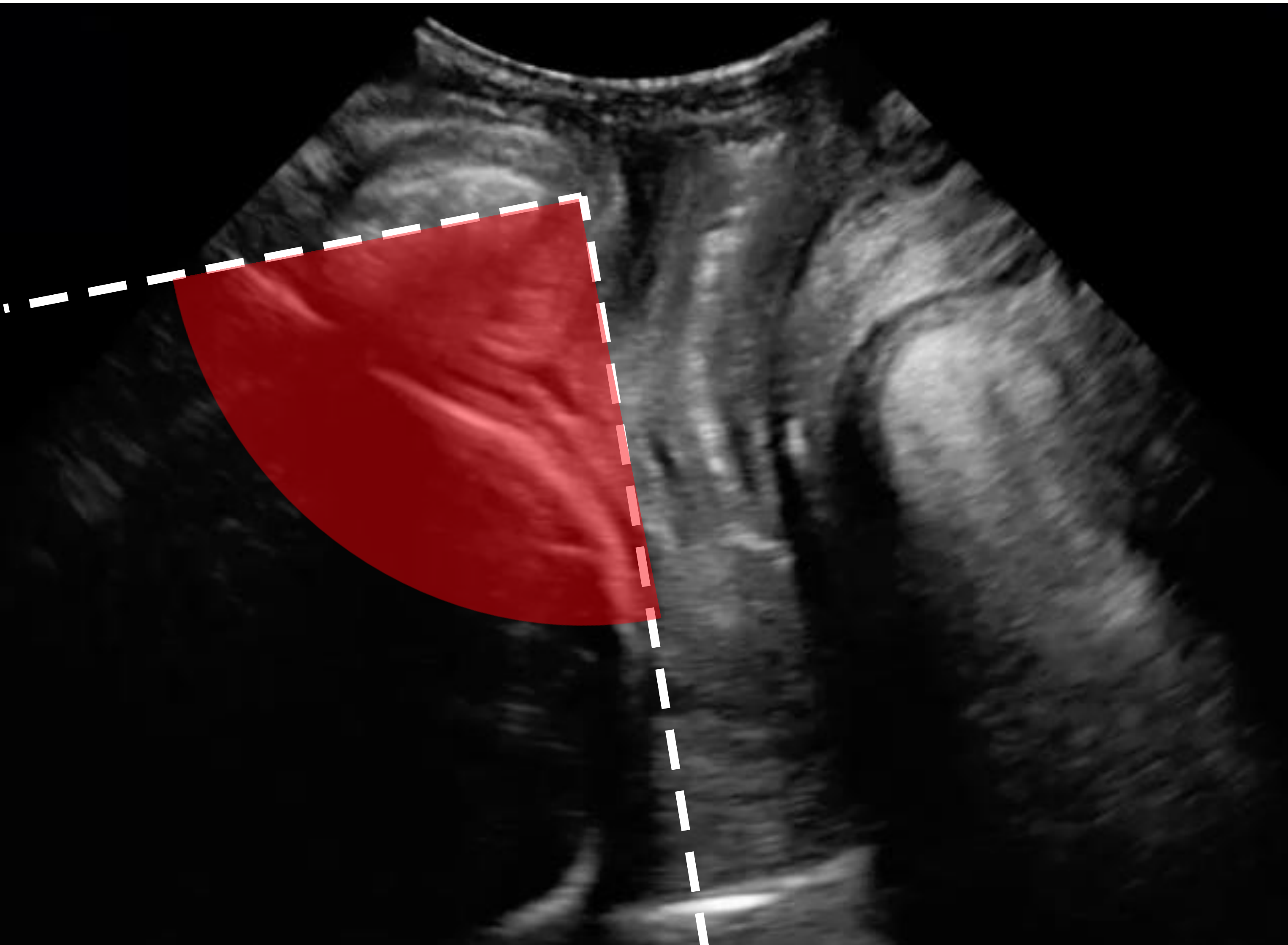
To assess the effect of open- versus closed-glottis pushing on the fetal angle of progression (AoP) in nulliparous women at term before labor.

METHODS

Nulliparous women with singleton cephalic pregnancies between 35 and 41 weeks' gestation were recruited. Four-dimensional transperineal ultrasound volumes were acquired during maternal pushing using both open- and closed-glottis techniques, performed in alternating order. Volumes were analyzed offline, and AoP was measured at rest and during pushing. Changes in AoP during pushing (Δ AoP) were compared between techniques and between the first and second pushing attempts, irrespective of technique.

RESULTS

Ninety-five women were included. The increase in AoP during pushing (Δ AoP) was similar between open- and closed-glottis techniques ($7 \pm 9^\circ$ vs. $8 \pm 8^\circ$, $p = 0.054$). Likewise, no significant difference was observed between the first and second pushing attempts ($8 \pm 8^\circ$ vs. $7 \pm 8^\circ$, $p = 0.499$).



CONCLUSIONS: In nulliparous women before labor, fetal head descent assessed by AoP is similar during open- and closed-glottis pushing. Changes in AoP are also similar between the first and second pushing attempts.