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Manual rotation of persistent occiput posterior position: more research is warranted.
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To the Editor-in-Chief
American Journal of Obstetrics and Gynecology MFM Professor Vincenzo Berghella

Parma, 24.03.2021

Dear Professor Berghella,

We are submitting the Letter to the Editor entitled "Manual rotation of persistent occiput posterior position: more research is warranted." for consideration for publication in the American Journal of Obstetrics and Gynecology MFM.

In this letter we comment on the findings of the RCT entitled "Persistent occiput posterior position outcomes following manual rotation: a randomized controlled trial", which was recently published in the Journal. While we acknowledge the appropriate methodology of the trial, in this letter we comment on some aspects which may have impacted on the study findings.

This letter is not under consideration by any other journal and all authors approved the manuscript and this submission.

We hope that the content of the letter is of sufficient interest for it to undergo review. We are of course happy to make any changes that are required.

Yours sincerely, Andrea Dall'Asta Tullio Ghi TITLE PAGE

Manual rotation of persistent occiput posterior position: more research is warranted.

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List of abbreviations

RCT: randomized controlled trial

MROP: manual rotation of the occiput posterior

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Dear Editor in Chief,

we read with interest the recently published RCT by Phipps et al. evaluating the role of manual rotation (MROP) in the context of the persistent occiput posterior position (1). While a trend towards a reduction of instrumental deliveries was noted, the study showed that MROP does not reduce the frequency of obstetric intervention nor of maternal/perinatal morbidity. We congratulate with the Authors for their hard work in conducting the RCT and would like to comment on some methodological aspects which may have impacted on the study findings.

In first instance, the Authors report different techniques of MROP as well as a large number of investigators performing MROP, whose level of expertise was rated based on the overall number of procedures performed and not on the number of successful MROP. Failed MROP was reported in 39% of cases, with 27/127 (21%) cases showing persistent OP following MROP; instrumental delivery and rotational procedures were recorded in 11 (57 vs 68) and 13 cases less (31 vs 44), respectively, in the MROP-group. This accounts for approximately 10% of the included cases each. We do envisage that little or no difference exists between a sham rotation and a failed MROP, therefore a sub-analysis of the study cohort including only the cases with successful MROP in relation to the primary outcome could lead to significant results.

In second instance, 10/127 (7.8%) cases of the "sham rotation" group had a non-OP position at post-intervention ultrasound. The spontaneous rotation of OP fetuses at full cervical dilatation was previously reported(2) and may have impacted on the level of significance in the RCT by Phipps et al.

In third instance, the labor management protocol including the definition of arrest of labor in the second stage leading to obstetric intervention is not detailed, and MROP was performed under different clinical contexts including the cases of normal labor progression with OP fetus at the beginning of the pushing efforts. Intrapartum ultrasound has been suggested to support labor

management being currently endorsed in the context of labor dystocia(3), nonetheless it has proven to be detrimental when performed in the absence of clinical indication(4). OP position has been associated with slow labor progression and obstetric interventions but does not preclude vaginal delivery, hence MROP could be beneficial only when the malposition is associated with labor dystocia. Should our hypotheses be confirmed, the study could de facto be underpowered.

Acknowledgements

None.

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Each author is required to submit a signed Statement of Authorship upon submission. This applies to <u>all</u> submission types including Editorials, Letters to the Editor, etc.

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Authors may either sign the same form or submit individually

I am an author on this submission, have adhered to all editorial policies for submission as described in the Information for Authors, attest to having met all authorship criteria, and all potential conflicts of interest / financial disclosures appears on the title page of the submission.

Signatures are required - typed signatures are unacceptable.

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