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PII: S0002-9378(21)02730-7
DOI: https://doi.org/10.1016/j.ajog.2021.12.037
Reference: YMOB 14242


Received Date: 19 November 2021
Accepted Date: 21 December 2021


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Is manual rotation really increases the spontaneous vaginal delivery rate?

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The authors report no conflict of interest.
TO THE EDITORS: With great interest, we read the article by Bertholdt et al.\textsuperscript{1} about the association between spontaneous vaginal delivery and manual rotation during labor for occiput posterior or transverse positions. These authors involved seven randomized controlled trials and found manual rotation was associated with spontaneous vaginal delivery only for the occiput posterior position (risk ratio = 1.08, 95% confidence interval: 1.01–1.15).

However, we advanced the following methodological concerns:

First, in study of Broberg et al. which was involved in that meta-analysis,\textsuperscript{2} they mentioned that “For both groups, manual rotation could be performed later in the second stage if indicated for slow progress or other usual indications, such as concern for fetal well-being and need to expedite delivery”. That means the prophylactic early manual was performed in early manual rotation group, and some patients in the control group was also intervened by manual rotation. Therefore, this study may not suitable to be selected in that meta-analysis.

Second, in study of Yang et al.,\textsuperscript{3} excepted for manual rotation, position management and a U-shaped birth stool were also used in the intervention group. The difference of spontaneous delivery rate between the intervention and control groups in this study may not be caused by manual rotation. At the same time, “There were 196 women in the intervention group and 188 in the control group”, which was not consistent with the extracted data in the study of Bertholdt et al..\textsuperscript{1} Meantime, this study had the largest sample size and an overwhelming weight (83.4%, five studies involved) after stratification by type of position in that meta-analysis. This study is such whopper that it overpowers all other four studies with negative results.

Third, it would be better to perform the sensitivity analysis in that meta-analysis. After omitting the study by Yang et al.,\textsuperscript{3} the risk ratio was decreased to 1.02 (95% confidence interval: 0.86-1.20, \textit{P} = 0.84 in a random-effects model), means the conclusion of “manual rotation was associated with spontaneous vaginal delivery only for the occiput posterior position” was not solid.

In brief, whether manual rotation could increase the spontaneous vaginal delivery rate need more randomized
controlled trials to confirm, it is worth noting that it’s a safe intervention without adverse maternal and neonatal events. Obstetricians could try manual rotation in the patients with occiput posterior or transverse positions due to the reduction in occiput posterior or transverse positions at delivery and in episiotomies according to that meta-analysis.

**References**

