

Can delayed umbilical cord clamping reduce infant anemia at age 8, 12 months?

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A delay of three minutes or more in umbilical cord clamping after birth reduced the prevalence of anemia in infants at 8 and 12 months of age in a randomized clinical trial in Nepal, according to a new study published

online by *JAMA Pediatrics*.

Children with [anemia](#) and iron deficiency have associated impaired neurodevelopment, which affects cognitive, motor and behavioral abilities. Fortified foods and supplements are the current treatment but some have suggested delayed cord clamping could be a low-cost alternative that may reduce the risk for [iron deficiency anemia](#). Transfused fetoplacental blood after delivery has been shown to increase iron stores in early infancy, according to the study.

Ola Andersson, M.D., Ph.D., of Uppsala University, Sweden, and coauthors examined whether delayed [umbilical cord](#) clamping after birth - waiting three or more minutes - compared with early clamping - waiting one minute or less - would reduce anemia in later infancy in a low-income country with a high prevalence of anemia. The 540 newborns included in the clinical trial were evenly split between delayed and early clamping groups.

The authors report that at 8 months of age, the average [hemoglobin level](#) was higher in the delayed clamping group and the prevalence of anemia was less. At 12 months, the delayed cord clamping group still had a higher hemoglobin level than the early clamping group and anemia was less prevalent, according to the results.

Conducting the clinical trial in a low-income country contributed to the study's strengths and limitations, which included a high incidence of protocol deviation in the delayed cord clamping group.

"This study shows that delayed cord clamping for 180 seconds was an effective intervention to reduce anemia at 8 and 12 months of age in a high-risk population with minimal cost and without apparent adverse effects. If the intervention was implemented on a global scale, this could translate to 5 million fewer infants with anemia at 8 months of age, with

particular public health significance in South Asia and Sub-Saharan Africa, where the prevalence of anemia is the highest," the article concludes.

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