Hormonal treatment in pregnancy won't lower odds for preterm birth

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A hormone therapy commonly used to prevent preterm births probably isn't effective, a new study reports.

Doctors have been prescribing vaginal progesterone treatments to help at-risk pregnant women delay delivery for as long as possible, researchers said.

But a new study involving more than 1,600 pregnant women with a history of early delivery revealed that vaginal progesterone had no effect on preterm births, according to results published in JAMA Network Open.

"Our hope is that this information will help practitioners guide conversations with their patients," said lead researcher Dr. David Nelson, division chief of Maternal-Fetal Medicine at the University of Texas Southwestern Medical Center in Dallas.

"Certainly in different populations there may be different outcomes. But among our patients, we did not find benefit of vaginal progesterone when given for an indication of prior preterm birth," Nelson said in a center news release.

Preterm birth—a baby born between 20 and 37 weeks of gestation—occurs in about 1 in 10 live U.S. births, researchers said in background notes.

Both the American College of Obstetricians and Gynecologists and the Society for Maternal-Fetal Medicine recommend progesterone therapy for pregnant women with previous preterm births, researchers said.

Vaginal progesterone is available as a gel, a suppository or a capsule, according to the March of Dimes. Pregnant women use an applicator to insert the progesterone into their vagina once a day.

A 2017 study by Nelson and his colleagues concluded that injectable progesterone wasn't effective at preventing preterm births, but up to now no one had tested the effectiveness of vaginal progesterone.

Between 2017 and 2019, 417 at-risk women received vaginal progesterone through Parkland Health, an urban safety net health system served by UT Southwestern physicians.

Researchers compared these women's rate of preterm births with the historical rate of 1,251 similar patients treated at Parkland Health.

About 24% of women taking vaginal progesterone gave birth at or before 35 weeks' gestation, compared to about 17% in the control group.

Despite these findings, additional studies are likely needed before doctors eliminate vaginal progesterone as a treatment option, Nelson said.

"As we begin to better understand the diverse underlying causes of preterm birth, our hope is that
we can develop treatments that are more targeted and effective to patients," said Dr. Catherine Spong, chair of obstetrics and gynecology at UTSW.

**More information:*** The March of Dimes has more about [vaginal progesterone](https://www.marchofdimes.com/baby-brain-development/vaginal-progesterone.html).


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