

Activity restriction fails to avert preterm birth in women with short cervix

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Restricting physical activity does not reduce the odds of preterm birth in asymptomatic nulliparous women with a singleton pregnancy who have a short cervix, and doing so may even be harmful, a study has shown.

More than a third of the 646 women with a short cervix who were studied were placed on some kind of activity restriction, despite the general lack of evidence and guideline endorsement for the practice in this context, Dr. William Grobman reported at the annual meeting of the Society for Maternal-Fetal Medicine.

Compared with their counterparts who were not placed on any kind of activity restriction, women who rested had a more than doubling of the odds of giving birth before 37 weeks after other factors, including cervical length, were considered.

"To me, the key important point is that there is no evidence of benefit, [and there are] multiple potential paths of harm," said Dr. Grobman, who is a maternal-fetal medicine specialist at Northwestern Memorial Hospital in Chicago.

"Even if there is not harm for preterm birth, there probably is harm in other regards – in terms of deconditioning, in terms of bone loss," he said. Placing such women on activity restriction, sometimes in the hospital, also has major implications for resource use and lost productivity.

The findings are consistent with earlier research, he added. "There's no good evidence from any study that [activity restriction] makes a difference. ... Personally, [at my institution], we never did put women on activity restriction," given the lack of compelling evidence of benefit. That's just been the cultural practice in obstetrics, he said.

The new data should temper current screening trends, according to Dr. Grobman. "There has been increasing emphasis on the value of screening asymptomatic women and how that might be beneficial," he explained. "But oftentimes, what is not accounted for in that are the unintended consequences that you bring." The study is not arguing against screening, "but it suggests that if we screen, we have to be very cognizant of that."

In the larger context, about three-fourths of such women with a short cervix will not be delivered preterm, and those who do often give birth many weeks after the condition is first detected, according to Dr. Grobman.

In addition, especially when women are receiving prenatal care, there is usually sufficient opportunity to detect early labor and intervene. "I can remember in 20 years, one woman coming in at 24 weeks in preterm labor and us not having the opportunity to give her steroids or whatever," he commented.

The women studied were participants in the SCAN trial of progesterone for preventing preterm birth in nulliparous women with a short cervix. Those with prolapsing membranes were excluded.

All had a cervix measuring less than 30 mm on second-trimester transvaginal ultrasound, with an interquartile range of about 19-28 mm, Dr. Grobman reported on behalf of investigators with the maternal-fetal medicine unit (MFMU) network of the National Institute of Child Health and Human Development.

Study results, presented in a poster session, showed that 39% of the women were put on some type of activity restriction, meaning pelvic rest (prohibition of sexual activity), reduction of work activity, and/or reduction of nonwork activity. The majority were put on all three types and usually at home, on an outpatient basis.

After adjustment for potential confounders, relative to their peers who were not put on activity restriction, women who were had significantly higher odds of being delivered before 37 weeks (odds ratio, 2.4) and before 34 weeks (OR, 2.8).

The numbers were generally too small to look at associations for individual types of activity restriction, as most women were prescribed all three types, according to Dr. Grobman.

"I think the message is when people get plunked on bed rest, they get shut down," he commented. But analyses among the subset placed solely on work restrictions yielded the same results.

In closing, Dr. Grobman cautioned that the results apply only to the population studied. "I'm not talking about bed rest for anyone, ever, for anything. These are asymptomatic women in a study [who were] found to have a short cervix," he said.