Health & Medicine

New Down Syndrome Test is Safe, Spots Trouble Early

Spring 2006

Expectant mothers worried about having a child with Down syndrome face invasive procedures that risk miscarriage. Now, Columbia physicians are rolling out a screening program that identifies high-risk patients with a blood test and ultrasound so that fewer women have to undergo the riskier procedures.

The definitive tests for Down syndrome are amniocentesis, which involves extracting fluid from the amniotic sac, and chorionic villus sampling (CVS), in which tissue is removed from the placenta. Due to the risk of pregnancy loss with both procedures, doctors generally only test women over 35, an age group with a higher occurrence of Down syndrome. But because many more babies are born to women under 35, who are unlikely to get the tests, doctors miss 70 percent of cases.

The new program, run by Columbia University's Medical Center department of obstetrics and gynecology, is a screening process that assesses risk early on. It involves a blood test to measure the level of two key proteins and an ultrasound that shows the thickness of skin on the back of a baby's neck. Women identified as low risk are reassured that a CVS and amniocentesis are not worth the medical risk.

The program stems from research published in the New England Journal of Medicine in November by Mary D'Alton,MD, the chair of obstetrics and gynecology at Columbia University's College of Physicians and Surgeons. The study created controversy because some observers fear the earlier screening process will lead to more abortions. Down syndrome affects 1 in 900 babies and is associated with long-term disability and potentially severe mental retardation; many women whose fetuses test positive opt to terminate the pregnancy.

"With this test, we are simply identifying high-risk women, and reassuring low-risk women sooner," says Todd Rosen, MD, director of the Down syndrome screening program. "It gives women more time to make decisions about their pregnancy."

The screening is available now at Columbia Eastside, the Herbert Irving Pavilion, the Allen Pavilion, and Columbia Montclair in Montclair, New Jersey.



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