

Case 14

Prenatal testing has come a long way. A long time ago, people thought they could predict the sex of a baby by tying a wedding ring to a string and suspending it over the pregnant woman's palm. If the ring swung in a circle, the baby would be a girl, but if it swung back and forth in a straight line, it would be a boy. In modern times, a whole battery of prenatal tests, including amniocentesis, ultrasound, and the Triple test, are routinely offered to pregnant women at different times during their pregnancies. These tests are used to discover whether the fetus is at risk of various diseases or conditions, such as Down syndrome, spina bifida, cystic fibrosis, cleft palate, and some problems that can be treated by fetal surgery. They can also reveal the sex of the fetus, its gestational age, its placement in the uterus, and whether there is more than one fetus.

Prenatal genetic testing is becoming more important, sophisticated, accessible, and in demand. In the foreseeable future, it could become routine to identify and analyze fetal DNA, at a reasonable cost, obtained with minimal invasion from the mother's blood during the first trimester. DNA from the fetus floats freely within the pregnant woman's bloodstream, and, once separated from the mother's DNA, it can be genetically screened with no danger to either the mother or the fetus. When that sort of screening becomes a reality, doctors potentially will be able to predict an astounding number of things about the health and prospects of the child and the later adult.

This veritable tsunami of information will bring with it many new challenges. Predictably, many parents who know their baby is likely to suffer and die from incurable genetic defects will choose to terminate the pregnancy rather than force their child to endure the months or years of suffering a birth would bring. Similarly, many parents who know their baby will require special attention to overcome or cope with non-fatal defects will choose to terminate the pregnancy. Just as predictably, many parents who would simply prefer a different sort of child—say a boy, or an athlete, or a redhead—may choose to abort and try again.

The issues brought about by having so much information will affect more than just the parents. Insurance companies, for instance, may be unwilling to provide coverage for medical conditions that the parents knew about but chose to accept. A sudden disappearance of new cases of a lifelong condition, like Down syndrome, might make it harder to fund research in those areas, even though there are still many people with the condition who could benefit from it.

Doctors with extensive genetic knowledge about the fetus must decide what to tell and what to withhold from the parents.