of a successful pregnancy compared to those of women who have had one tube removed (in a procedure called salpingectomy). Some physicians are trying drugs to dissolve the embryo in order to avoid surgery. However, this is still experimental.

An ectopic pregnancy is a traumatic event, both physically and emotionally. It often leads to infertility and all of the stresses associated with fertility decisions and treatments. At the same time, the parents are grieving for their baby, just as other parents do who have experienced a loss. They are sad for the past and fearful for the future.

Maria and Joe consider themselves to be very fortunate. After a year of treatment to help her ovulate, Maria conceived again. She watched carefully for any sign of pain or bleeding, and Joe checked constantly to make sure she was okay. When they saw on an ultrasound that the baby was growing normally in Maria's uterus, they were thrilled. Their celebration of the pregnancy was more subdued this time, however, until Christopher was born.

Joe says now what many others who have experienced a loss also feel:

When we think about that time, we realize how young and naive we were. We thought nothing could hurt us. Now we have a much greater appreciation of life, of Christopher, and of each other. We don't take our family for granted anymore.

"When God made all the decisions, women had no choice but to accept them. If an Act of God gave you a defective child you learned to live with perpetual grief. But there was little guilt or spiritual laceration. Now, however, that science and technology tell mothers they do not have to accept that fate, the Act of God is transformed into an act of her own. The decisions she may have to make can be harrowing."

Jessie Bernard, The Future of Motherhood

In the past, if a husband and wife were aware of a genetic problem in the family, they often avoided having any children at all. The fear of having an abnormal baby outweighed their desire for children, and they suffered the sorrow of not raising the family they wanted. If a couple gave birth to a deformed child, they accepted him or her as best they could.

Yet in the past two decades the technological capability for prenatal diagnosis has developed at an extremely rapid rate, and, since 1973, legal abortion during the first part of a pregnancy has become available to most women. A diagnosis of abnormalities can thus be followed by an abortion (referred to as a selective abortion). As a result, a whole new set of options, experiences, decisions, and controversies has arisen in recent years.

In addition to the many practical and financial problems involved in prenatal diagnosis, parents suffer the emotional stress
of considering whether they will abort if a wanted child is diagnosed as having problems. If they go through with an abortion, they must deal with the same feelings of grief experienced by other parents who lose a child, compounded by the feelings of guilt for their participation in the infant’s death. This is another—and increasingly frequent—tragically ending of pregnancy.

The first decision for many parents is whether to have prenatal testing. The pressures on women to undergo testing are increasing. Sociologist Barbara Katz Rothman points out that there is a growing emphasis on “quality control” in the production of babies, with less and less tolerance for imperfections. Prenatal diagnosis is presented as a choice and an advantage, but for many women it turns a normal pregnancy into a time of great trauma and uncertainty.

There are many reasons why a woman might have prenatal tests. The most common is her age, since women have a greater chance of bearing abnormal children as they get older. Legal decisions have determined that physicians must advise women thirty-five and older of the risks of childbearing and of the possibility of prenatal tests.

There are other situations that might lead a physician to advise parents to consider prenatal testing. A previous pregnancy that produced an abnormal child, a history of genetic disease in the family, the experience of three or more miscarriages, or the presence of male relatives with such sex-linked diseases as hemophilia are all reasons for suggesting prenatal diagnosis.

A couple in any of these situations may want to consult a genetic counselor even before beginning a pregnancy, especially if they are undecided as to whether or not to conceive. Usually the counselor reviews the health of the couple, including any known diseases or disorders, and takes a detailed family history. Explanations regarding the possible causes of previous problems are provided when known. Blood and skin tests may be done. If the woman is already pregnant and prenatal testing is recommended, the counselor can suggest how to obtain it and will help a couple to interpret the results and the options available to them.

Two tests which allow a woman to establish the condition of her fetus are chorionic villus sampling and amniocentesis. Chorionic villus sampling (also known as CVS or chorionic biopsy) is a relatively new procedure which makes it possible to examine the chromosomes of a fetus during the first trimester and to determine within two weeks if certain genetic abnormalities are present. A catheter is inserted through the cervix, and a small amount of preplacental tissue is sucked into the catheter and removed for study. Amniocentesis is a procedure usually carried out later in pregnancy that involves the insertion of a hollow needle through the abdominal wall and uterus to obtain amniotic fluid for the determination of many kinds of anomalies.

The decision to have CVS or amniocentesis can be very difficult for a couple to make and often causes anxiety and fear. The procedures themselves, although not usually painful, sound frightening. Women should be aware that there may be risks to themselves or the baby as a result of the procedures, but the overall risks in an experienced center have been reduced to less than one percent. At the age of thirty-five and after, the chances of bearing a deformed child are greater than the risks of prenatal testing.

Other types of tests may be used in prenatal diagnosis. Ultrasound has become very widely used for the detection of a variety of problems and abnormalities. Ultrasound (also known as sonography) is similar to an X ray in that it produces a picture of the fetus in the uterus so that the locations of the fetus and placenta are determined. When used with amniocentesis, it helps the physician place the needle correctly. Ultrasound may also be used without amniocentesis to establish the exact fetal age (by measuring the size of the fetus’s head) and to determine multiple births; it can sometimes also detect complicated uterine abnormalities. The absolute safety of ultrasound is yet to be proven, but most physicians believe that it is harmless. A panel of experts convened by the National Institutes of Health recommended that it be used only when necessary because of uncertainty about its effects.

Fetoscopy or placental aspiration is a technique that allows a
direct view of the fetus and other contents of the uterus and the extraction of a small fetal blood sample. It has the potential of detecting problems that cannot be uncovered by amniocentesis or ultrasound. This procedure is still in the early stages of research development and is not yet widely available. Risks to the fetus are much greater than they are with amniocentesis; miscarriages result in five to ten percent of these pregnancies, and there may also be some health risks for the mother. Fetal blood sampling is also being performed now by the insertion of a needle into the umbilical cord.

A blood test called Maternal Serum Alpha Fetoprotein (MSAFP) is being used increasingly to screen pregnant women for the presence of neural tube defects such as anencephaly or spina bifida and for Down's syndrome. This test has the advantage of needing only a blood sample, but many physicians are reluctant to use it because of the large proportion of "false positives." Most women whose tests show extra high or low alpha fetoprotein levels do not usually have an abnormal baby, yet they must endure further testing and great anxiety.

Waiting for the results of the amniocentesis is a time of considerable anxiety. Nancy B., a twenty-eight-year-old mother whose first baby had Down's syndrome, told of her experience after having amniocentesis during her second pregnancy:

They told me that the results would take three weeks. I had a friend who got the results in two weeks, so when two weeks passed I waited by the phone. By the third week to the day no one called. Every time the phone would ring my heart was in my mouth, I was going crazy. I finally decided near the end of that day to call them.

Nancy's anxiety is typical of the parents' feelings while awaiting test results. Her subsequent experience is less typical, but it suggests that the feelings of parents in this situation are not always realized:

I reached the social worker and she said, "Mrs. B., we were going to call you tonight." Right away I knew that something was wrong. I said, "Is it Down's syndrome?" and she said, "No, something else." I asked her what and she said she could not discuss it over the phone and asked if we could come down the next day at one o'clock. I said yes. I hung up the phone, and I was hysterical when I called my husband. We both could not believe that we would have to wait until one o'clock the next day. He came home and called back, but only a laboratory assistant was in. She knew the results but also said that she could not tell me. I asked him to ask her, "Is it spina bifida?" She said no. I didn't know what else to ask. The two of us were going out of our minds. We thought, What a way to treat people. It turned out the cells didn't grow and we had to do a test over again.

In less than five percent of fetuses tested through amniocentesis, the existence of an abnormality is revealed. How couples are told about this unfavorable result is very important. It is equally important that the physician advise the couple of their options and provide all information regarding the problems directly, openly, and compassionately. It is very difficult to be told such shocking news, absorb all the medical information, and then make a decision in a short period of time. A couple should be encouraged to request information or explanations in subsequent conversations with the physician. Unfortunately, there is not a great deal of time to spare if an abortion is being considered.

Most couples receive the news either from an obstetrician or from a genetic counselor. They are professionals who usually try to remain impartial about the decision to have an abortion, yet each has his or her own biases that stem from personal and religious backgrounds. Families need to realize that the way this person presents the facts—what is stressed, what is told first, which options are discussed and how—might influence their decision. If they are unsure about the advice, a second opinion can be helpful.

The quality of genetic counseling varies greatly throughout the United States. Even in the best centers, personal contacts are limited to the moments of decision-making, although the time between the test and the report of results and the period following an abortion are when couples experience the greatest stress. This is the very time they receive the least support.

Some couples may have reason to seek advice about aborting
a wanted baby without having prenatal tests. For instance, a woman who contracts German measles (rubella) early in her pregnancy is likely to give birth to a deformed child. Exposure to occupational or environmental hazards—radiation or certain toxic chemicals—or the ingestion of certain medications during pregnancy are reasons to suspect that the health of the fetus may be endangered.

For some women, the danger of any pregnancy to their own health may lead them to consider abortion. The therapeutic abortion, as this situation is called, has long been considered a major reason for termination of pregnancy and is least likely to be opposed on religious or moral grounds. It may occur at any time during the pregnancy and therefore is an experience that varies enormously from one woman to another. Fortunately, medical technology has advanced to the point where therapeutic abortion is not necessary as often as it was in the past.

By the time most couples are faced with a decision about abortion, the baby usually has started to kick and the movements become a dramatic reminder that he or she is alive. In addition, friends and relatives have noticed or been informed of the pregnancy and have given their congratulations. At that point, if the parents choose abortion, their private pain becomes public knowledge.

According to a report issued by the National Institutes of Health, ninety-five percent of the women who learn through amniocentesis that the fetus is abnormal choose to have an abortion. The decision is easier for some couples to make than for others. Some ask genetic counselors what they would do; others have their minds made up even before the results are available. Background and religious feelings may play a role in the decision. Just as waiting for results of tests is very difficult, the time between deciding to abort and completing the procedure is filled with frustration and apprehension. Ordinarily a couple tries to schedule the abortion as quickly as possible in order to shorten this terrible period.

Having an abortion after the twelfth week of pregnancy is usually a very different experience from having one in the first three months. The risks are greater, the procedure is entirely different, and the woman is often very surprised to find herself in the labor and delivery rooms of a hospital. In normal deliveries, if there is preparation for labor, including breathing exercises, the woman is more relaxed and better able to cope with the pain of delivery. But the anxiety that accompanies a selective abortion is often compounded by a lack of this kind of physical and psychological preparation—often the woman is never told it would be similar to a normal delivery. Therefore, her labor pains may be more intense than they would have been for a full-term baby.

Karen's account illustrates what many women experience during a selective abortion. She had noticed a rash one day during her third month of pregnancy. Although her doctor assured her that rashes are common in pregnancy, Karen worked with children and recognized her symptoms as German measles. After some resistance, her obstetrician referred her to a dermatologist, who, in turn, sent her to a pediatrician. Feeling frustrated and angry at not getting definite answers, she sought out a rubella specialist on her own. The specialist confirmed a severe case of primary rubella. By this time, almost a month had passed since the rash first appeared. She recalls:

From the moment we knew it was definite that I had the measles, my husband and I knew that we would have an abortion. I wanted the abortion as soon as possible. I couldn't bear to walk around a day longer. I was showing and everybody knew I was pregnant. The baby had been kicking. They said that they could schedule me a week later. I screamed that it was not possible for me to go around being pregnant. I told him, "I have already made my decision, I am carrying this deformed baby around, I do not want it, I cannot look at myself, I will kill myself if you make me wait until next week." I knew this was very dramatic, but this was how I felt. But they still couldn't admit me for another week. I cried more during that week than I cried in a lifetime. You have this idea that you have a baby but you don't. The idea of trying to realize it's happening, to understand why. The waiting was unbearable.

One week later, at eight o'clock in the morning, they checked me into my room on the maternity floor. I felt terrible—that I was killing this child. I was also totally unprepared for what would happen, even though I had been told the technical details.
They told me the experience would feel somewhere between menstrual cramps and easy labor. Was that ever a joke! I went into a labor room and first they drew some fluid out of my abdomen. I was scared, but it was not painful. Then they put the hormone in. At that point they asked permission if they could have the fetus afterward to study and I said yes. It made me feel good to know that maybe I was doing some good.

Karen’s abortion was carried out with the use of a hormone called prostaglandin, which is considered by many physicians to be the fastest and safest method for inducing delivery. It is now usually given in the form of a suppository. Saline abortion, which used to be more common, is now sometimes used for abortions carried out after the twentieth week of pregnancy. With this method, a salt solution is injected into the uterus to replace amniotic fluid. This causes the placenta to separate from the womb, leading to the death of the fetus. These methods may have uncomfortable side effects, such as nausea, fever, and diarrhea.

For a second trimester abortion, a dilation and evacuation (D & E) is the procedure that has the fewest side effects and is completed in the shortest amount of time. In a D & E, the cervix is dilated and suction is used to remove the fetus. Because of delays in obtaining the results of amniocentesis, many selective abortions occur after the twentieth week when the D & E—and abortions generally—are often unavailable because of questions about safety and because of the reluctance of hospital staffs to perform abortions so late in a pregnancy.

Except with a D & E, a late abortion can take several days to be completed, as in Karen’s case:

Nothing happened that day. I had no idea it would take so long to deliver. That night I could not sleep. At four o’clock in the morning I went into hard labor. The contractions were horrible. I couldn’t believe how out of control I was. I was in the labor room and a woman came in and started to put the fetal heart monitor on me. I told her I didn’t think she should be putting that on, and she said it was a common procedure. I said I wanted it off—if the baby is alive, I don’t want to know about it. I couldn’t bear to hear its heartbeat. I demanded to see the supervi-

sor; she came in, saw it on me, and took a scissors and snipped it off. She was very apologetic. I just wasn’t able to tell the first nurse, who didn’t seem to know why I was there, that I was having an abortion.

From that moment, one nurse stayed with me. Suddenly I felt like pushing and I knew something was happening. I was on my back and couldn’t see anything. I went from intense pain to euphoria. The thing that went through my head the whole time was that it would soon be over and then it would be a memory.

They let me go home the next day. I felt very depressed and sorry for myself. The next few months after that were very difficult. I didn’t quite understand how bad I felt. I found those months to be as difficult as the whole experience. I was very much alone. I still find it hard to believe that this really happened to me.

In cases of selective abortion, there is grief for a wanted child, questions about the characteristics of the baby—not usually seen by the parents—worries about future pregnancies, ambivalence about abortion itself, and guilt—terrible guilt.

Guilt may be particularly strong when the condition of the fetus is not definitely known. For instance, when a woman knows she is a carrier of a sex-linked disorder, such as hemophilia, it can be predicted that on the average, half of all her male children will be afflicted with that disorder. Amniocentesis can reveal the sex of the infant, but not the presence of that disease. Some parents make the difficult decision to abort a male fetus because of the chance that he might be affected. Fortunately, new techniques of prenatal detection for hemophilia are gradually erasing the need for making that agonizing choice.

Many parents are upset and frustrated by the lack of information they are given and feel unable to make a well-considered decision in such a short period of time. Their frustration is intensified by the controversy surrounding abortion. Poor women in particular have been deprived of choice because of the unwillingness of Congress to allow Medicaid funding for abortions after the diagnosis of a defect. Only in a few states are public monies available to pay for abortions for the poor. In some areas it may be very difficult to find a physician who will agree to perform a late abortion.
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Most people who may need abortions for medical reasons resent being put in the same category as those who use abortion as a means of birth control. They are also angry at pressure groups seeking to eliminate the possibility of legal abortion.

Supporters of genetic counseling and diagnosis point out that ninety-five percent of fetuses are found to be normal. Because of tests such as ultrasound and amniocentesis, parents who might otherwise have avoided pregnancy or automatically have had an abortion are now able to have healthy children. As one report stated, the “Russian roulette atmosphere” for couples who fear birth defects can now be eliminated.

Although parents who do have an abortion believe that it was the right decision, they are shocked and overwhelmed by the experience. They may have a very difficult time talking out their feelings with others and making the event real for themselves. They may feel that they will be criticized rather than supported, that no one will understand or sympathize with their grief. As one woman said:

“It was very hard to talk to anyone about it. When I did tell someone, it seemed they were either shocked or else they tried to tell me it was for the best. No one understands that I miss that baby. He was so much a part of me.

The feelings expressed by this woman will be experienced by a growing number of couples as the practice of prenatal diagnosis increases. Yet limitations on the accessibility of abortion services are likely to augment the frustrations of families who desperately want to have a healthy child. As the dilemmas surrounding the creation, the ending, and the quality of life continue to be subjects for public debate, they will also continue to be sources of personal anguish for many families.

“`To everything there is a season, and a time to every purpose under the heaven. A time to be born and a time to die.’ These well-known words from the Bible affirm the expected order of life. Between birth and death there is a time to live, “a time to sow and a time to reap ... a time to weep and a time to laugh.” But when the time to be born is also the time to die, when the beginning of life is the same as its end, when the time to love never comes, then this order is violated. The cry of the longed-for baby becomes a sob of bereavement from the family; the anticipated baptism becomes a dreaded funeral. This is a stillbirth.

They hung a bright yellow butterfly from the ceiling and declared the baby’s room ready. He had labored for weeks on sanding and painting the crib. The drawers were filled with tiny undershirts and night clothes, the changing table stocked with pins and lotion. Together they wound up the mobiles over the crib and once again listened to the music of “Winnie the Pooh.” The baby would love this room, so full of colorful things. Satisfied with their work, impatient for the last few weeks of waiting to be over, they went to bed. As he had done every night for months, John leaned over and whispered into Glenda’s navel, “Good night, Robert or Elizabeth.”

Glenda and John’s experience illustrates some of the feelings and events that can occur in the case of a stillbirth. They had