

The Evaluation of the Couple with Recurrent Pregnancy Loss

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Pregnancy Loss

Miscarriage is the spontaneous loss of a pregnancy before 20 weeks. It occurs in 20% of all first pregnancies. When it recurs, it is known as recurrent pregnancy loss (RPL). It is estimated that 3-5% of all couples desiring pregnancy will suffer RPL. The experience of pregnancy loss is both physically and emotionally draining and often results in feelings of grief. A complete evaluation is needed to identify the causes of RPL. The majority of couples with RPL will eventually have a successful outcome.

The Causes of Loss

After a complete evaluation, the cause(s) of RPL can be determined in two-thirds of cases. Identification and treatment of problems significantly increases the successful outcome in most cases. However, a complete evaluation is necessary to identify possible problems. This includes a medical history, history of all prior pregnancies, review of all test results on the couple, evaluation of social and environmental risks, and a complete laboratory evaluation.

Genetic Problems

Many couples tend to ascribe RPL to genetic factors, so it is important to emphasize some basic points. There are two broad types of chromosomal (genetic) abnormalities, with the first and most common kind occurring in the baby. This usually involves a problem unique to the particular union of egg and sperm that resulted in a baby that was not capable of survival. This finding has no bearing on future pregnancies in many cases. The second kind of chromosomal abnormality exists in the patient or her partner and may be of concern in all of their future pregnancies. Fortunately, this type of genetic abnormality is discovered in only 3-5% of couples with RPL.

Hormonal Problems

Abnormal ovarian function with decreased progesterone production has been termed a "luteal phase deficiency" and is found in 5-8% of women with RPL. Other hormonal deficiencies that are associated with pregnancy loss include hypothyroidism, an excess in production of prolactin, and imbalances in glucose and insulin. These conditions can be treated medically.

Anatomic Problems

Uterine abnormalities are found in 15-20% of women with a history of RPL. These abnormalities may be congenital (from birth) or acquired in the course of the woman's lifetime. Many of the congenital and acquired abnormalities can be treated with a surgical procedure called operative hysteroscopy. This day-surgical procedure can be used to treat uterine septa, intrauterine scar tissue (adhesions), and growth of smooth muscle (leiomyomas) or glands (polyps).

Immune Problems

The area of immunology has become one of the most controversial in the assessment of pregnancy loss. The causes include autoimmune factors (immune reaction against another) and alloimmune causes (immune reaction against another). Tests for lupus anticoagulant and antiphospholipid or anticardiolipin antibodies are clinically indicated diagnostic tests and are abnormal in 20% of women with RPL. Other tests under investigation include antiphospholipid antibodies, natural killer (NK) cells and embryotoxic factors. Treatment may include the use of a blood thinner, such as heparin with baby aspirin.

Coagulation Problems

Imbalances in the blood clotting system have recently been recognized as an area of importance in RPL. A number of inherited disorders may predispose women to venous and arterial thrombosis. As many as 15% of women with unexplained RPL may have a blood clotting disorder. These include deficiencies of protein C and antithrombin intramuscularly mutations in factor V and factor II, and hyperhomocysteinemia which is often caused by a B vitamin deficiency. Once identified, these conditions can be treated.

Infectious Problems

Infection of the uterine lining or endometrium with slow growing bacteria such as mycoplasma or ureaplasma has also been associated with pregnancy loss in 5-10% of women with RPL. These bacteria can be cultured and treated with antibiotics. Both partners should be treated.

Environmental Problems

Certain habits and occupations may be related to pregnancy loss. It is known that tobacco use of greater than 15 cigarettes per day or alcohol use of greater than 4 drinks per week will increase the chance of pregnancy loss up to two-fold. Also, some studies have suggested that airline attendants, women who are exposed to chemicals in their work environment (such as hair stylists), and women with physically strenuous work may have an increased risk of miscarriage. Nontraumatic exercise, intercourse, and normal daily activity do not cause miscarriage.

During the Evaluation

The couple is counseled not to become pregnant while the reason for their past pregnancy losses is being investigated. The couple is advised to use barrier contraception until all test results are back and any necessary treatment plans are made. The entire process requires about six weeks, which approximates the time of physical healing after a loss. The emotional healing may take considerably longer.

Dealing with Pregnancy Loss

The loss of a pregnancy at any stage can result in feelings of grief. Some patients decide they do not want to conceive again, most commonly because they feel that they cannot deal with another loss. Some couples may want to take a few months to sort out their feelings. Couples with recurrent pregnancy loss usually have a greater sense of fear anticipating what might occur in a subsequent pregnancy. Other couples often feel a lack of control over their lives.

It is important to emphasize that the couple's relationship with each other is just as important as the bond either or both may feel with their unborn child. In many cases, the stresses associated with pregnancy loss may serve to strengthen the bond of marriage. In other couples, there may be the

false hope that a child will help to save a failing marriage. One partner may place blame on the other, or one partner might believe the other is placing the blame on him or her. Some individuals feel profound guilt and blame themselves for past indiscretions. These couples may be directed to appropriate bereavement resources for support and counseling.

With Your Next Pregnancy

Couples are instructed not to engage in any activity for which they will blame themselves if they have another loss. This may include travel, certain work-related activities, and even intercourse in early pregnancy. Optimal medical care and support are important early in pregnancy especially in the cases of multiple early losses. As a pregnancy progresses, interventions which are appropriate based on the prior history and risk level should continue. Emotional support and reassurance are important throughout the pregnancy. Our work with over 3,000 couples with RPL indicates that 70-75% will ultimately have a successful pregnancy.