Importance of Genetics in Pregnancy

Chromosomes and genes provide our unique characteristics. Your baby's physical appearance, blood type, gender, body build, some personality and mental traits already have been determined at conception. A baby inherits chromosomes and genes from their parents. A baby has 23 pairs of chromosomes, one set from the mother and one set from the father. Genes also come in pairs, so everyone has two copies of each gene, one copy from each parent.

Some genes and chromosomes have mistakes in them, which can cause problems in development of a baby. A disease-causing gene may exist in a family member and not cause a condition or trait for several generations. Both partners should ask about any diseases that may run in their families and how relatives have died. By doing this, we can better predict the possibility of a genetically carried birth defect or disease in your family. Body text is 11 pt. Arial. Paragraph is single spaced with 8 pt spacing after paragraph.

Genetic Counseling

A genetic counselor gathers facts and provides you with information to help you make decisions about your pregnancy. You may want to make an appointment with a genetic counselor during your pregnancy depending on your personal and family medical history:

- Women in their mid-30's or 40's who are pregnant or planning a pregnancy
- Pregnant women with an increased chance of having a child with spina bifida or Down syndrome (based on a maternal serum screening)
- Pregnant women with a change of having a child with a genetic condition or birth defect because of features seen on an ultrasound
- Pregnant women concerned about the effects of certain medications, drugs, radiation or infections on their pregnancy or baby
- Couples who have a child with a chromosome problem (such as Down syndrome)
- Couples who have a child with a birth defect (cleft lip/palate, congenital heart defect, clubfoot, etc.)
- Couples who are close blood relatives
- Persons of specific ethnic backgrounds with an increased chance of genetic conditions (Tay-Sachs in the Jewish population or sickle cell anemia in the African-American population)
- Couples with a history of infertility, two or more pregnancy losses, stillbirths or early infant deaths
- Couples with a family history of a known genetic condition (cystic fibrosis, muscular dystrophies, etc.)
- Couples with a family history of mental retardation or learning disabilities
- Couples with a family history of cancer, diabetes, coronary artery disease or other hereditary conditions

Genetic Testing

The First Trimester Screening, Cystic Fibrosis Carrier Screening and Maternal Serum Screening are blood tests offered to all pregnant women to help identify genetic conditions. A specialized ultrasound (level II) can be ordered, if needed. The genetic counselor or your provider may offer you more genetic tests, if appropriate. You can receive information on genetic counseling and testing from your clinic.