Birth Defects, Prevention
Screening, Detection, Prevention

A birth defect is an abnormal finding found in the first 3 months of pregnancy or seen in the baby at birth. A birth defect is also called a *congenital defect*. Only 2-3% of babies may have a serious birth defect. Some birth defects can be treated with medications. Others can be treated with diet or surgery. Many birth defects can be prevented, but other times, nothing can be done. Death from a birth defect is rare.

Many birth defects can be found by screening during the pregnancy. However, screening is not 100% accurate:
- A test may show positive for a defect, but the child is normal (*false positive*).
- A test may show there is no problem, but there really is a defect (*false negative*).

Some of the screening tests include:
- Ultrasound.
- Blood tests on the mother.
- A test of the chromosomes (*chorionic villus sampling*).
- Amniotic fluid testing (*amniocentesis*).
- Blood is taken from the umbilical cord of the fetus (*cordocentesis*).

CAUSES

Most birth defects have unknown causes. However, some defects have been traced to specific causes, such as:
- Genetics can cause abnormal genes or chromosomes. These include:
  - Cystic fibrosis.
  - Sickle cell anemia.
  - Tay-Sachs Disease.
  - Fragile X.
  - Down syndrome.
  - Thalassemia.
- Infectious diseases. These include:
  - German measles.
  - Cytomegalovirus.
  - Toxoplasmosis.
  - Parvovirus.
  - Chicken pox.
  - Syphilis.
  - Herpes virus.
  - Other sexually transmitted diseases.
- Uncontrolled diabetes before and during pregnancy.
- Reoccurring convulsions (*epilepsy*).
- Chemical agents such as:
  - Alcohol can cause lifelong physical and mental disabilities in the baby. This is called fetal alcohol syndrome (FAS). This is preventable.
  - Mercury found in certain fish (shark, swordfish, tilefish).
  - Lead usually found in paint.
  - Illegal drugs.
  - Smoking.
  - Certain prescription, over-the-counter and herbal medications. If you are taking a prescription medication, talk to your caregiver before stopping it.
- Radiation.
- Chemotherapy.
- Not taking folic acid, a B vitamin, before and during pregnancy.
- Not taking enough iodine before and during your pregnancy.

RISK FACTORS TO CONSIDER

- Being 35 years old or more.
- The father is age 50 or older.
- Diabetes.
- Epilepsy.
- A history of a birth defect in the parents.
- A previous baby with a birth defect.
- A family history of a birth defect.

HOME CARE INSTRUCTIONS AND PREVENTION

- See your caregiver as soon as you think you are pregnant.
- **Do not** drink alcohol before or during pregnancy.
- **Do not** take illegal drugs.
- **Do not** smoke before (when possible) and during the pregnancy.
- Begin taking a multivitamin before getting pregnant.
- Take folic acid (0.4mg) before and during pregnancy. It helps prevent spina bifida and a condition where the brain is undeveloped (*anencephaly*). Multivitamins usually contain folic acid. It is also found in most breakfast cereals.
- Follow the directions from your caregiver about taking iodine. Your caregiver may suggest that you take 150mcg of iodine before and during your pregnancy. Multivitamins usually contain iodine.
- **Do not** take more than 5000 IUs of Vitamin A a day.
- Eat a balanced and nutritious diet.
- Avoid fish that contain mercury (shark, swordfish, tilefish).
- Avoid eating soft cheeses before and during the pregnancy.
- Talk to your doctor before taking any prescription, over-the-counter or herbal medications.
- If there is a history of birth defects in the mother, father, previous pregnancy or family members, have genetic counseling before getting pregnant.
- If you are diabetic, make sure it is in control before and during your pregnancy.
- Get immunizations **before** becoming pregnant. You may need to be immunized for German measles, mumps, red measles, chicken pox, hepatitis and other diseases. Getting these immunizations when you are pregnant may be harmful to the baby.
- If you are going to have a baby with a birth defect that will need treatment, try to have your baby at a hospital. That way, there will be the doctors, intensive care facilities and equipment needed to treat and care for the baby's problem.

MAKE SURE YOU:

- Understand these instructions.
- Will watch your condition.
- Will get help right away if you are not doing well or get worse.

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