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Spina Bifida

Patient name: _____

Admission: _____

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I. The client/caregiver can define spina bifida.

- A. It is a neural tube defect involving incomplete development of the brain, spinal cord, and/or the protective coverings.
- B. It is caused by the failure of the fetus's spine to close properly during the first month of pregnancy.
- C. The three types of spina bifida are
 - 1. Myelomeningocele (most severe)—the spinal cord and its protective covering protrude from an opening in the spine.
 - 2. Meningocele—the spinal cord develops normally but the meninges protrude from a spinal opening.
 - 3. Occulta—one or more vertebrae are malformed and covered by a layer of skin.
- D. Spina bifida can cause bowel and bladder complications.
- E. Spina bifida is often associated with hydrocephalus (excessive accumulation of cerebrospinal fluid in the brain).

II. The client/caregiver can list risk factors for spina bifida.

- A. Spina bifida is more common among Hispanics and whites of European descent.
- B. Family history of neural tube defects
- C. Folic acid deficiency
- D. Some medications (antiseizure medications) taken during pregnancy can increase risk for neural tube defects.
- E. Diabetes and poor blood sugar control during early pregnancy
- F. Obesity and prepregnancy obesity
- G. Increased body temperature in the early months of pregnancy

III. The client/caregiver can list methods to screen and diagnose spina bifida.

- A. Maternal serum alpha-fetoprotein (MSAFP) test. This is a blood test

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performed during weeks 16 and 18 of pregnancy.

- B. Based on the results of this test, the physician may suggest amniocentesis or high-resolution ultrasonography.

IV. The client/caregiver can list current treatment considerations for SB.

- A. The treatment depends on the severity of the condition.
- B. Often a caesarean birth is planned for the safety of the baby, and it can provide for quick and skilled intervention after birth.
- C. Research is promising regarding prenatal surgery to correct defects before birth.
- D. Treatment can include multiple surgeries and a multidisciplinary team of health care providers.

V. The client/caregiver can list prevention tips and measures to manage this condition.

- A. Folic acid supplements taken at least 1 month before conception and during the first trimester of pregnancy will greatly reduce the risk of neural tube defects.
- B. March of Dimes, the Centers for Disease Control and Prevention, and the Institute of Medicine recommend that women of childbearing age take folic acid supplements of 400 micrograms daily.
- C. Be informed. Develop realistic goals.
- D. There is a need for periodic and ongoing medical evaluations and treatment.
- E. Understand medications and treatments.
- F. Prevent infection and injury.
- G. More than 70% of people with spina bifida have a latex allergy. Check Latex allergy information in Chapter 2. The Spina Bifida Association offers a latex update list (2006).
- H. Promote family coping. Seek counseling, education, emotional support, and financial assistance as needed.

(Continued)

RESOURCES

National Institute of Neurological Disorders and Stroke
www.ninds.nih.gov/disorders/spina_bifida/spina_bifida.htm

Spina Bifida Association of America
800-621-3141
www.sbaa.org

March of Dimes Birth Defects Foundation
888-MODIMES (888-663-4637)
www.marchofdimes.com

Support groups

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