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OB/GYN role in Spina Bifida



What is the OB/GYN Role in spina bifida?

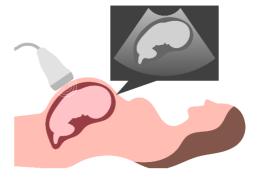
Prenatal care involves several procedures and tests to monitor the health of the developing fetus. These include:

1. Blood tests: The ACOG recommends a blood test between 15 and 20 weeks of pregnancy to check for neural tube defects in the baby. This test measures AFP levels in the mother's blood. High AFP levels might mean the baby has a higher risk of neural tube defects, so more tests may be needed.



What is the OB/GYN Role in spina bifida?

2. Prenatal ultrasound: Ultrasound imaging, which uses sound waves, is routinely performed between 16 to 18 weeks of pregnancy. It allows healthcare providers to visualize the fetus, detect ONTDs like spina bifida, and examine other organs and body systems.



What is the OB/GYN Role in spina bifida?

- 3. Amniocentesis: This procedure involves taking a small sample of amniotic fluid with a needle to check for genetic problems and neural tube defects in the baby. The fluid is tested to look for these issues, but it might not find small or closed defects.
- 4. Additional tests: An ultrasound scan of the kidneys and bladder may be performed to assess their health.

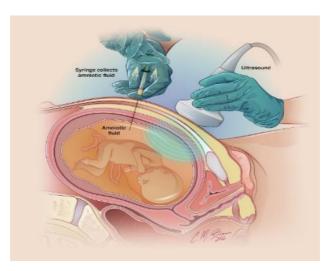


Image 1: Ultrasound guided amniocentesis.

Delivery:

The procedure should be done in a specialized center with neonatal ICU and pediatric neurosurgery. C-section is often preferred, especially for myelomeningocele, although it might not improve outcomes. The reason is to reduce the risk of infection and spinal cord damage.

Postnatal care includes:

Delivery:

1. Complete Physical Examination:

- Lumbar skin dimple or tuft of hair: These physical signs may indicate a hidden spinal defect.
- Associated malformations: Other birth defects may occur alongside spina bifida occulta, such as abdominal wall defects.
- Neurological deficits: Children with spina bifida occulta may experience muscle weakness, spasticity, or abnormal reflexes.
- Signs of hydrocephalus: In some cases, spina bifida occulta can lead to hydrocephalus, which is characterized by a bulging fontanelle, enlarged head, and downward gaze.

Delivery:

2. General management:

- The defect is covered with sterile compresses.
- Administration of prophylactic antibiotics.

3. Diagnostic imaging:

Mild cases of spina bifida that weren't found during pregnancy can sometimes be detected after birth using ultrasounds, X-rays, MRIs, or CT scans. These scans can provide a better view of the spinal cord and vertebrae.



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Resources and references:

All pictures used from Canva.com

- https://www.choc.org/orthopaedics/neuromuscular-diseaseprogram/spina-bifida-clinic/spina-bifida-diagnosis/
- 2) https://www.moh.gov.sa/en/awarenessplateform/VariousTopics/Pages/SpinaBifida.aspx
- 3) <a href="https://fetalmedicine.org/education/fetal-abnormalities/spine/open-spina-bifida#:~:text=Ultrasound%20diagnosis%3A&text=In%20the%20transverse%20scan%2C%20the,%2Dwalled%20cyst)%20or%20myelomeningocele.
- 4) https://www.moh.gov.sa/en/awarenessplateform/VariousTopics/Pages/SpinaBifida.aspx
- 5) https://www.rileychildrens.org/health-info/amniocentesis
- 6) https://www.ninds.nih.gov/health-information/disorders/spina-bifida#:~:text=Mild%20cases%20of%20spina%20bifida,to%20look%20at%20the%20spine.

Review and Audit:

The content of this booklet has been reviewed by consultants in the Department of Neurosurgery at King Fahad University Hospital.

Department of Neurosurgery Health awareness unit IAU-24-604

