Case report

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MAGNETIC RESONANCE IMAGING DIAGNOSIS OF AN OPEN SPINA BIFIDA DEFECT

Milan Stefanović[1,2], Vesna Stokanović[3], Predrag Vukomanović[1,2], Vanja Dimitrov[2], Aleksa Stefanović[2]

Spinal neural tube defects are a group of disorders that allude to spina bifida, anencephaly, interspinal lipoma, congenital dermal sinus, simple tethered cord and other diseases that can cause neurological problems such as motor and/or sensory disorders and urinary and/or fecal incontinence. Usually, they can be diagnosed with a combined interpretation of alpha fetoprotein and ultrasound imaging. However, sometimes the ultrasound image quality is poor and necessitates the use of a higher resolution imaging technique – magnetic resonance imaging.

A woman in her 18th week of pregnancy was scheduled for a routine prenatal check-up. Upon examination, a mild, yet, suspicious lemon sign of the fetus's cranium had been observed. The sagittal view of the fetus's spine was normal, however the transversal view of the spine could not be assessed. The complete ultrasound examination was of lower quality due to fetal and maternal factors. Thus, a decision for a fetal MRI had been made. The MRI scan confirmed an open spina bifida.

Since MRI scanning is a greater tool than ultrasound, whenever it isn't possible to conclusively diagnose a neural tube defect via ultrasound for any reason, an obstetrician should opt for an MRI scan to confirm the condition.

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