

20.06.2013

Press Release

LETO: A novel ultrasound marker for early prenatal diagnosis of open spina bifida

The Fetal Medicine Unit of LETO Maternity in association with the research team of the Fetal Medicine Unit of Attikon University Hospital, has developed and currently implements a new screening test based on the ultrasound examination of the fetal brain. This allows for the early diagnosis of severe abnormalities of the neural tube in the first trimester of pregnancy.

Spina bifida is a serious congenital disorder in which there is an opening usually at the end of the spine resulting in damage of the spinal cord and the nerves passing through it. Babies born with spina bifida often develop mental retardation and face severe physical disabilities. Approximately 1-2 in 1,000 embryos suffer from this condition, which is usually detected in the fifth month of pregnancy, through the detailed Level 2 ultrasound.

Dr Athena Souka, head of the Ultrasound and Fetal Medicine Unit of LETO Maternity Hospital, noted, "This new test is performed during the 11-13 week ultrasound examination, which is a routine screening test for fetal chromosomal and structural abnormalities offered to all pregnant women. Screening for spina bifida is based on the ascertainment of the presence of the normal four-line view in the posterior part of the fetal brain. This normal view is disrupted in the majority of fetuses with neural tube defects, where only three instead of four lines are visualized. Failure to obtain the normal view prompts detailed early examination of the spine and consequently early diagnosis of the problem."

LETO Hospital's CEO, Mr Leonidas Papadopoulos, highlighted the significance of boosting research activities and implementing innovative methods, so as to ensure top level healthcare services during prenatal screening.