IS-65  The Simplified Edinburgh Postnatal Depression Scale (EPDS) for antenatal depression: Is it valid measure for pre-screen?

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Objective: Systems for efficient screening of women with depressive symptoms during pregnancy are needed. The purpose of our study is to design the simplified depression scale and assess the validity as a pre-screen for antenatal depression. Methods: 476 pregnant women in the third trimester of gestation, who had received antenatal care at Seoul St. Mary's Hospital from July 2009 to June 2010, were included in the study. Aims and procedures were explained to participants, confidentiality was guaranteed and written consent was obtained. Edinburgh Postnatal Depression Scale (EPDS) was completed while waiting for their prenatal medical appointment, and scored by one researcher. The subjects were randomly divided into two groups, 240 of training set and 236 of validation set. The correlation between each item and the total score of EPDS was analyzed with the training set. The simplified questionnaire was designed with two items which scored high correlation coefficients and cross-validated with the validation set. The statistical analyses were performed by Pearson correlation analysis and stepwise multiple regression with SAS 9.1. Results: 32 of 240 pregnant women in training set (13.3%) scored more than 12 points which was the cut-off value to define the depressive symptoms by EPDS. Pearson correlation coefficients between each item and the total score were high in item 7 (0.69, sleeping disturbance) and item 8 (0.70, sadness or misery). As the result of cross-validation, sensitivity was 93.0% and specificity was 90.7%. The positive/negative predictive values were 69.0%/98.3%. Area under the receiver operating characteristic curve analysis suggested that the simplified questionnaire with 2 items had diagnostic validity. Conclusion: Major impediment to low rates of depression case finding is the difficulty in the administration of depression screening in busy clinical setting. The simplified EPDS can be efficient instrument to rule out depression during pregnancy. A diagnostic interview follow-up of women screening positive is still required.

IS-66  Application of real-time fusion imaging of MRI and ultrasonography for antenatal diagnosis of placental abnormalities

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[Objective] Recently developed ultrasonographic device equipped with real-time fusion imaging (RTFI) with previously obtained CT or MR images has enabled real-time comparison of different imaging modalities with instant and better understanding of the anatomy and pathology, obstetric application. Although RTFI is not applicable for fetal imaging, it would be particularly useful for the diagnosis of placental abnormalities. We report our experiences in RTFI in the cases with placental abnormalities. [Methods] After obtaining informed consent, MRI was employed for the diagnosis of placental abnormalities. Real-time fusion imaging using GE Health Care LOGIQ E9 equipped with volume navigation technique was undertaken along with ultrasonographic examination and MRI. [Results] we have four obstetric cases in which RTFI was employed with successful results. Case 1: amniotic sheets, case 2: diamniotic dichorionic twin with large placental lake, case 3: intramural leiomyoma in the posterior wall of the pregnant uterus, and case 4: suspected for placenta increta after previous isthmic wedge resection of the uterus for isthmic pregnancy. [Conclusion] It is suggested that newly developed RTFI has a promising capabilities of virtual reconstruction of the images obtained with two different imaging modalities, and might help precise diagnosis of the placental pathologies.

IS-67  Body stalk anomaly screened by increased fetal nuchal translucency: a case report

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[Introduction] Body stalk anomaly is a rare congenital anomaly with a series of similar clinical manifestations and poor prognosis. Here we report a case of body stalk anomaly that initially exhibited increased fetal nuchal translucency detected by a first-trimester ultrasound scan. [Case Report] The patient was referred to our institution because of increased nuchal translucency at a 12-week ultrasonographic fetal scan. Detailed two-dimensional ultrasound examinations revealed that the fetus displayed multiple abnormalities characteristic of the body stalk anomaly syndrome including abdominal wall defect, kyphoscoliosis, facial defect, deformities of the lower limbs, and a short umbilical cord. Most of these abnormalities were also detected by three-dimensional ultrasound. A diagnosis of body stalk anomaly was made. After a thorough counseling detailing the prognosis, an informed choice was made by the couple to terminate the pregnancy. All of the abnormalities were confirmed after the delivery of the fetus at 13 weeks. [Conclusions] Obstetricians should be aware that cases with increased fetal nuchal translucency might include major anomalies such as body stalk anomaly.