

so timely relaparotomy with subtotal abdominal hysterectomy performed. The diagnosis of placenta percreta was confirmed by histopathology exam.

**Conclusion:** Ultrasound in labor ward should not be underestimated. It helps to diagnose potentially life threatening conditions therefore allowing to anticipate the complications and to optimize the management. Even basic ultrasound equipment currently used in most of labor wards may serve as valuable diagnostic tool.

### P34.18 Chorangiocarcinoma in a term placenta, a rare placental tumor

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**Introduction:** To report a case of “chorangiocarcinoma” (a malignant placental neoplasm developing in chorioangioma) an extremely rare entity.

**case report:** A 23 year old primigravida presented on the 6<sup>th</sup> week of gestation with severe condylomatous spread involving the perineum and vulva. Her past medical and family history was unremarkable. The condylomata were treated with repeated fulgurations. Elevated maternal serum Alpha-fetoprotein was found on a routine triple test (2.06 MOM), Beta-HCG levels were normal. Fetal morphology, biometry and velocimetry were normal, in the placenta the ultrasound exam discovered a thickened lesion of 5–6 cm resembling appearance of an infarct with hyperechogenic and hypoechogenic areas without hypervascularisation.

Active labor started on the 37<sup>th</sup> week of gestation and a Cesarean Section was performed due to the severe perineal condylomata. The child was born weighing 2610 gr with Apgar scores 9/9 and normal physical examination. The placenta contained a solid mass with brown discoloration. Histological sections revealed a term placenta with an angomatous lesion consistent with chorangioma. Within the chorangioma, there were multiple nodules of malignant epithelial tumor with central necrosis with high mitotic index. The malignant cells and surrounding chorangiomatous tissue are strongly positive for beta HCG weakly positive for hPL and negative for PLAP.

All function tests were normal. Maternal serum  $\beta$ -HCG levels dropped to negative values one month after delivery. Whole body Computed tomography (CT) scan was normal. The fetal brain and abdominal ultrasound and chest x ray were negative for metastasis lesions. Neither fetus nor mother had evidence of metastasis.

**Conclusion:** Sonographers should consider chorangiocarcinoma in the differential diagnosis of placental lesions

## P35: EARLY PREGNANCY

### P35.01 Hitting the target but missing the point- the fatal flaw of ectopic pregnancy research

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**Objective:** To ascertain the number of publications about ectopic pregnancy diagnosis in the context of maternal mortality rates over the last 20yrs.

**Methods:** Medline searches were performed using the keywords ectopic pregnancy, ultrasound and HCG. Searches were combined

for ectopic pregnancy and ultrasound, ectopic pregnancy and HCG, and ectopic pregnancy and ultrasound and HCG. Maternal mortality rates from ectopic pregnancy in the UK were obtained from the triennial report “Why Mothers Die”.

**Results:** The mortality rate per 100,000 maternities for 1988–1990 was 0.48. The same figure for 2003–2005 was 0.47. Many of these deaths are due to substandard care and issues of clinical judgement are repeatedly highlighted. Between 1985 and 2005 there were 605 publications about ectopic pregnancy and ultrasound, 733 publications about ectopic pregnancy and HCG and 197 publications about ectopic pregnancy and ultrasound and HCG.

**Conclusion:** There is clearly a lot of research into the diagnosis of ectopic pregnancy, particularly in relation to use of diagnostic technology. This appears to be making no significant impact on the maternal mortality rate from ectopic pregnancy. One possible explanation for this is that the potential benefits of improved technology and increasing knowledge have been cancelled out by an over-reliance on investigations at the expense of clinical judgement and skill.

### P35.02 Choriocarcinoma of the cervix in an ectopic cervical pregnancy

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Cervical choriocarcinoma is an extremely rare disease, which can easily be misdiagnosed as an abortion, a benign or malignant lesion of the cervix and even cervical pregnancy. We present a case of cervical choriocarcinoma in a patient to whom an ectopic cervical pregnancy was diagnosed by transvaginal ultrasound.

**Case report:** A 35-year-old woman had experienced genital bleeding for 7 weeks when she attended her physician. The patient's serum level of  $\beta$ -subunit human chorionic gonadotrophin at 5.2 week's gestation was 8890 UI/ml. Transvaginal ultrasonography showed no evidence of a gestational sac. At 6 week's gestation, the serum level of  $\beta$ -hCG rose up to 12 800 UI/ml and a second transvaginal ultrasonography was still negative. At 15 week's gestation, the level of  $\beta$ -hCG was 11 700 UI/ml and the TV ultrasonography showed a small cyst in the cervix, just below the scar cesarean section. This part of the cervix also showed increased diameter and less echogenicity. These images were reported as a probable ectopic cervical pregnancy. At 16 week's gestation, the  $\beta$ -hCG was 18 500 UI/ml. An abdominal hysterectomy was decided. A diagnosis of cervical choriocarcinoma limited to the uterine cervix was made by pathology.

**Discussion:** Gestational choriocarcinoma occurs in the uterine corpus and rarely in the cervix because of abnormal placental implantation. In the other hand, the abnormal implantation at the level of the scar pregnancy is an increasing pathology because the increase number of cesarean section. The diagnosis of an ectopic pregnancy is sometimes difficult to make, and cervical localization is often one of them. The combination of these three pathologies has not been published up to date. We report a case of an ectopic cervical pregnancy, with scar cesarean section insertion and choriocarcinoma, with good results up to the moment

### P35.03 Comparative first-trimester, three-dimensional transvaginal ultrasound volumetry in normal and missed IVF pregnancies

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**Background:** Along with two-dimensional measurements, three-dimensional measurements of embryonic structures may have prognostic value for embryonic development.

**Objective:** The aim of this study was to compare three-dimensional ultrasound volumetry of intrauterine contents in cases of normal and missed IVF pregnancies.

**Material and Methods:** Three-dimensional volumetric data were collected from a total of 54 patients with first-trimester singleton pregnancies after IVF and measured by VOCAL software.

**Results:** Among 54 patients, 33 women had an ongoing IVF pregnancy and 21 had a missed miscarriage. There were no significant differences in age or gestational age between groups.

Both gestational sac volume (GSV) and embryo volume (EV) proved to be statistically different in both groups ( $P < 0.05$ ). The mean GSV, as measured by three-dimensional sonography, was  $17.27 \pm 2.11$  ml in normal IVF pregnancies and  $2.48 \pm 0.43$  ml in missed IVF pregnancies. The mean EV was  $1.43 \pm 0.18$  ml in normal IVF pregnancies versus  $0.08 \pm 0.05$  ml in missed miscarriages. No statistically significant difference was found when yolk sac volumes (YSV) of normal and abnormal pregnancies were compared ( $0.10 \pm 0.04$  versus  $0.13 \pm 0.03$  ( $P > 0.05$ )), though as a rule enlarged YSV was found to be a marker of poor prognosis.

However EV/GSV, YSV/GSV and YSV/EV ratios turned out to be statistically different in those groups of patients (EV/GSV =  $0.084 \pm 0.007$  versus  $0.031 \pm 0.015$ , YSV/GSV =  $0.016 \pm 0.009$  versus  $0.071 \pm 0.022$ , YSV/EV =  $0.260 \pm 0.134$  versus  $27.721 \pm 13.632$  ( $P < 0.05$ )).

**Conclusion:** Three-dimensional ultrasound volumetry of intrauterine contents in IVF pregnancies does not seem to improve the diagnosis of miscarriage, however, its potential to predict pregnancies that will fail and determine the appropriate management regime for individual patients merits further research.

#### P35.04 Ultrasound diagnosis (3D ultrasound) and the treatment of non-tubal ectopic pregnancies

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**Objective:** Management of non-tubal ectopic gestations remains an inadequately explored clinical field due to the rarity of the presentations. We present diagnosis and management in our institution. A major disadvantage of two-dimensional pelvic ultrasonography is its inability to reconstruct the uterine coronal axis.

**Methods:** We reviewed all cases presenting with extra-tubal nidations in our institute, eight cases are presented including five interstitial, two cervical, and one C-section scar pregnancy.

**Results:** There is numerous treatment regimens reported for this condition, both surgical and medical. The advances in minimal access techniques and imaging modalities have resulted in novel fertility preserving endoscopic procedures. The patients received methotrexate and surgical treatment either initially or delayed surgery. The difficulties in diagnosis and treatment are discussed.

**Conclusions:** A high index of suspicion is essential, combined with meticulous review of clinical findings and imaging modalities to make an accurate diagnosis. Treatment with the least invasive method, either by minimal access techniques, non-invasive radiological procedures or medical treatment should be encouraged.

#### P35.05 Does the laterality of Corpus Luteum influence the Viability of Pregnancy?

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**Objective:** This study was conducted to observe the relationship between the laterality of ovulation and the viability of pregnancy.

**Methods:** This is a retrospective observational study. The results of trans vaginal ultrasound performed in all women attending pregnancy termination services at a tertiary level teaching hospital in London were analyzed.

**Results:** Over a period of 2 years a total of 3042 patients attended the services. In 1555 patients Corpus luteum was visualized and its side was documented. 953 (61.4%) patients had right sided and 602 (38.6%) had left sided corpus luteum. In 109 patients an attempt was made to see the corpus luteum but not visualized. The corpus luteum was either not seen or the result not recorded In 1364 patients.

Results showed no significant difference either in the percentage of normal pregnancy (90.1%: 89.9%) or in the miscarriage (7.3%: 8.3%) even though the right sided corpus luteum was significantly higher.

**Conclusions:** It has been found that a predominant right sided ovulation exists in human being as has been reported in the past. There was no statistically significant difference between the laterality of corpus luteum and viability of pregnancy.

#### P35.06 Intramural Pregnancy with a past history of artificial abortion - A case report

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Intramural ectopic pregnancy is very rare and the incidence is less than 1% of ectopic pregnancy. We present a case report of a 37-year-old woman with a complication of adenomyosis and a past history of an artificial abortion. She came to our hospital with a symptom of lower abdominal pain and a small amount of vaginal bleeding. Transvaginal Ultrasound revealed 3.3 cm of gestational sac in the uterus which had no growth for the last 9 days. Although we performed dilatation and curettage, we couldn't reach gestational sac. Pathologic examination revealed pregnant changes of the endometrium, but no fetal elements were found with serum hCG level of 21 392 mIU/mL. With magnetic resonance imaging and transvaginal ultrasound, we identified the gestational sac in the anterior uterine wall, which located 5 mm below the surface of uterus behind the bladder. At laparotomy, a 3 cm mass in diameter was found intramurally and resected successfully. Serum hCG level dropped down to 237.6 mIU/mL after a week. Pathologic examination revealed chorionic villi. This patient was discharged from the hospital a week after the operation with no complications. Intramural pregnancy was diagnosed and treated successfully.

#### P35.07 A case of large myometrial defect after Methotrexate for cesarean scar ectopic pregnancy

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Cesarean scar pregnancy may develop if the blastocyst enters a microscopic tract in the uterine scar of a previous cesarean section and implants in the deficient anterior uterine wall. Although it is still a rare entity, the incidence of caesarean section scar pregnancy has been increasing over the last decade. The available evidence does not favour any particular mode of treatment, but initial management with local or systemic Methotrexate (MTX) is the most common treatment and can be combined with suction curettage.