

**OC36.08****Just images: Prenatal diagnosis of the primary congenital lymphedema**

H. Werner<sup>1</sup>, P. Daltro<sup>1</sup>, R. C. Domingues<sup>1</sup>, T. M. Fazecas<sup>1</sup>, L. Pereira<sup>1</sup>, C. P. S. P. Werner<sup>2</sup>

<sup>1</sup>CDPI, Brazil, <sup>2</sup>CPDT, Brazil

Primary congenital lymphedema is an autosomal dominant disease with incomplete penetrance and incidence in 1:33.000 newborn. The anomalies found are due to dysgenesis of lymphatic microvessels. The existence of an insolated edema can be clearly detected by ultrasound. We present here a case diagnosed during a third trimester routine ultrasound examination. A 18-year-old woman, pregnant 1, 0 was referred to our unit for a routine ultrasound during her 26th week of gestation. 3.5 MHz and 3D probes were used to scan the fetus and to identify the edema in the left inferior limb as well as a reduction of limb motility. In the attempt of better clarifying the ultrasound image, a maternal abdomen magnetic resonance exam was performed for fetal anatomy study. The resonance was carried out in the 29th week of gestation and it showed on T2-weighted images an edema in the left limb, confirming the ultrasound findings. The remaining fetal anatomy was normal. The prenatal care had no significant problems until the 39th week of gestation, when a cesarian section was done. A male infant weighing 3.150 g with normal karyotype was born. A postnatal assessment confirmed the previous diagnosis of primary congenital lymphedema. Despite having been described over a hundred years ago, little is still known about the developmental regulation of the lymphatic system, and little progress has been made in understanding the mechanisms causing lymphedema. Present in one or both legs, the lymphedema persists throughout life but does not seem to affect longevity.

**SUPPLEMENTARY MATERIAL ON THE INTERNET (IMAGE)**

<http://www.interscience.wiley.com/jpages/0960-7692/suppmat/index.html>

**OC36.09****Just images: Amniotic sac protrusion through a myometrial defect at 22 weeks: ultrasonographic and MRI diagnosis**

L. Gucciardo, M.-H. Billieux, E. Antonelli, O. Irion

Geneva University Hospitals, Switzerland

If prior cesarean section is the main provider of scarred uterus, gynecologic interventions, such as myomectomy, hysteroscopy, or surgical abortion are also associated with uterine ruptures. The incidence of silent perforations following surgical evacuation of pregnancy is reported to occur in 0.05 to 0.64%.

We present ultrasonographic and MRI findings in a case of amniotic sac protrusion through a myometrial defect, after a history of operative curettage.

A 29-year-old woman, G9, P4 (3 D&C, 4 vaginal deliveries, 1 D&C) came to our emergency unit at 22 weeks' gestation for acute continuous abdominal pain. Examination revealed a diffusely tender abdomen without peritonitis signs. Pelvic status was normal. Abdominal ultrasound showed a single viable fetus with corresponding biometry. Drastic decrease of amniotic fluid during vaginal scan led to a second abdominal ultrasound control. The emergence of a right anechogenic latero-uterine structure of 80 × 90 mm was observed, with a suspicion of membranes' protrusion through a myometrial wall defect.

The dynamic evolution of the image motivated a MRI which confirmed a myometrial defect with membranes' herniation containing fetal limbs. A surgical interruption was performed with a corporeal uterotomy. A diagnosis of myometrial fistula with fixated

right salpinx in the uterine cavity through the defect was made. No case of pregnancy with preexisting myometrial fistula has been previously published.

Occult uterine perforation are rare but can lead to dramatic consequences. Despite no predicting method can help in the evaluation of these high risk situations, pregnant patients with history of uterine surgery need a closer follow-up.

**SUPPLEMENTARY MATERIAL ON THE INTERNET (IMAGE)**

<http://www.interscience.wiley.com/jpages/0960-7692/suppmat/index.html>

**OC37.01****Is it safe to perform uterine curettage in women with no signs of an intra-uterine pregnancy on transvaginal ultrasound?**

G. Condous<sup>1</sup>, E. Kirk<sup>1</sup>, Z. Haider<sup>1</sup>, C. Lu<sup>2</sup>, S. Van Huffel<sup>2</sup>, D. Timmerman<sup>3</sup>, T. Bourne<sup>1</sup>

<sup>1</sup>St George's Hospital Medical School, UK, <sup>2</sup>Department of Electrical Engineering (ESAT), K.U. Leuven, Belgium, <sup>3</sup>Department of Obstetrics and Gynaecology, University Hospital Gasthuisberg, K.U. Leuven, Belgium, Belgium

**Background:** To assess whether women with pregnancies of unknown location (PULs) can safely undergo uterine curettage (UC). **Methods:** Protocol 1) was developed based on use of UC as diagnostic tool to differentiate ectopic pregnancy (EP) from miscarriage in women with no signs of intra-uterine pregnancy (IUP) on ultrasound. 1) was weighted to ensure that no cases of viable IUP were terminated. 1) was developed on retrospective analysis ( $n = 500$ ). Protocol 1): stable PULs with serum hCG > or = 2000 U/L and progesterone < 45 nmol/L at 0 hr, or women with serum hCG < 2000 U/L and an hCG ratio (hCG 48 hr/hCG 0 hr) < or = 1.15. 1) was tested prospectively ( $n = 505$ ). Results were compared to established protocols for use of UC as diagnostic tool to classify location of PULs. Protocol 2, American Society Reproductive Medicine (ASRM) recommends that UC performed at hCG > 2400 U/L; Protocol 3 advises UC at hCG > 2000 U/L or when initial hCG < 2000 U/L with an hCG ratio < 1.35; Protocol 4 advises UC with an hCG ratio < 1.50. Number of viable IUPs that would have potential terminations of pregnancy (TOPs) was recorded.

**Results:** 1005/12572 (8.0%) women classified as PULs. Training set 500 PULs: 277(55.4%) failing PULs, 176(35.2%) IUPs and 47(9.4%) EPs. Test set 505: 256(50.7%) failing PULs, 205(40.6%) IUPs and 44(8.7%) EPs. When developing protocol 1),  $n = 500$ , 294 UCs would have been performed, resulting in no TOPs. When 1) was tested prospectively,  $n = 505$ , 273 UCs resulted in no TOPs. The other 3 protocols were tested on  $n = 1005$ . 2), 36 UCs resulted in three TOPs; 3), 611 UCs resulted in seven TOPs; 4) 617 UCs resulted in three TOPs.

**Conclusions:** Currently ASRM guidelines will lead to clinicians potentially performing inadvertent TOPs in the PUL population. These guidelines are based on the view that all IUPs in this group will be failing in any event. This is not correct and in our opinion a review of ASRM guidelines is urgently required in order to avoid further damage to wanted pregnancy.