

document type:

doktorsavhandling (sammanläggning)

responsible department:

594

Kvinnokliniken - Obstetrik & gynekologi (enhet)

year of publication:

2007

number of pages:

80

language of the thesis:

5

Engelska

serie:

9 Comprehensive Summaries of Uppsala Dissertations from the Faculty of Arts

distributor:

594 Kvinnokliniken - Obstetrik & gynekologi (enhet)

publisher:

594 Kvinnokliniken - Obstetrik & gynekologi (enhet)

disputation:

12 3 medicine doktorexamen | degree of Doctor of Philosophy (Faculty of Medicine) | Doctor
medicinae | Docteur en médecine Välj disputationsämne 2007-05-11 09:15 Rosénsalen Institution
för kvinnors och barns hälsa - Barnsjukhuset Akademiska sjukhuset Ingång 95 Uppsala

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keywords:

Postpartum ultrasound en Free
Uterine artery Doppler en Free
Retained placental tissue en Free
Secondary postpartum hemorrhage en Free
Puerperium en Free
Endometritis postpartum en Free
Cesarean section en Free

paper 1:

Published Ultrasonic evaluation of the uterus and uterine cavity after normal, vaginal delivery.
Ajlana Mulic-Lutvica Misgena Bekuretzion Bakos Oddvar Ove Axelsson paper Ultrasound
Obstet Gynecol 18 491-498 2001

paper 2:

Published Ultrasound finding of an echogenic mass in women with secondary postpartum
hemorrhage is associated with retained placental tissue. www.interscience.wiley.com
DOI:10.1002/uog.2849 Ajlana Mulic-Lutvica Ove Axelsson paper Ultrasound Obstet Gynecol 28
312-319 2006

paper 3:

Published Postpartum ultrasound in women with postpartum endometritis, after cesarean section
and after manual evacuation of the placenta. Ajlana Mulic-Lutvica Ove Axelsson paper Acta
Obstet Gynecol Scand 0001-6349 86 2 210-217 2007

paper 4:

Submitted Longitudinal study of Doppler flow resistance indices of the uterine arteries after
normal vaginal delivery Ajlana Mulic-Lutvica Karin Eurenus Ove Axelsson paper Acta Obstet
Gynecol Scand 2007

paper 5:

Submitted Uterine artery Doppler ultrasound in postpartum women with retained placental tissue.
Ajлана Mulic-Lutvica Karin Eurenus Ove Axelsson paper Ultrasound Obstet Gynecol 2007

title language:

en
Engelska

alternative title language:

sv

main title:

Postpartum Ultrasound

alternative title:

Postpartum Ultraljud

Abstract:

abstract in English:

This study was undertaken to investigate the involutinal changes of the uterus and uterine cavity by ultrasound (US), gray-scale and Doppler, after normal delivery, and to compare with the corresponding findings from women with puerperal complications, particularly retained placental tissue (RPT). The overall design was exploratory and prospective, with the use of descriptive statistics for analysis.

Forty-two women with uncomplicated vaginal term delivery were examined on post-partum days 1, 3, 7, 14, 28 and 56. The AP diameters of the uterus and uterine cavity and morphological findings were recorded. The maximum AP diameters of the uterus and uterine cavity diminished from 92.0 mm on day 1 to 38.9 mm at day 56 and from 15.8 mm at day 1 to 4.0 mm at day 56, respectively. The uterus was most often empty in the early and late puerperium while a mixed echo pattern over the whole cavity was found during mid puerperium (I).

Seventy-nine women with secondary post partum hemorrhage (SPH) were examined on the day they presented with clinical symptoms. US revealed an echogenic mass in the uterine cavity in 17 of 18 patients treated surgically and histology confirmed placental tissue in 14 of these. Sixty-one patients with either an empty cavity or mixed echo pattern had an uneventful puerperal course after conservative treatment (II).

AP diameters and morphological findings for 55 women with endometritis, 28 after caesarean section and 20 after manual evacuation of the placenta overlapped extensively with normal references (III).

The physiological vascular involution studied in 46 women after normal delivery showed that PI and RI indices did not change significantly until day 28 postpartum. The presence of at least one uterine artery notch was found in 13.3% of the women at day 1 and in 90.6% at day 56 postpartum (IV).

PI and RI values were measured and compared with reference values in 20 women with clinical suspicion of RPT who were to undergo surgical evacuation. Mean resistance indices were below the 10th percentile for eight of these 20 women, but overlapping was considerable. Doppler US has limited value as a diagnostic tool for RPT. The absence of a hyper-vascular area

in the myometrium does not exclude RPT but an echogenic mass in the cavity is a sign of RPT (V).