

Date of Search: 02/12/2016

Sources Searched: Medline, Embase, DynaMed

[See full search strategy](#)

Perinatal outcomes in women with subchorionic hematoma: A systematic review and meta-analysis

Author(s): Tuuli M.G.; Norman S.M.; Odibo A.O.; MacOnes G.A.; Cahill A.G.

Source: Obstetrics and Gynecology; May 2011; vol. 117 (no. 5); p. 1205-1212

Publication Date: May 2011

Available in print at [Patricia Bowen Library and Knowledge Service West Middlesex university Hospital](#) - from Obstetrics and Gynecology

Available in full text at [Obstetrics and Gynecology](#) - from Ovid

Abstract:Objective: To estimate the association between subchorionic hematoma and adverse perinatal outcomes. Data sources: MEDLINE, EMBASE, and the Cochrane Library. Methods of study selection: We searched English language publications from January 1981 to August 2010 for cohort and case-control studies evaluating subchorionic hematoma and perinatal outcomes. The primary outcome was pregnancy loss (spontaneous abortion and stillbirth). Secondary outcomes were abruption, preterm premature rupture of membranes, preterm delivery, pre-eclampsia, and small for gestational age. Pooled odds ratios (ORs) were calculated from random effects models. TABULATION, INTEGRATION, Results: Seven studies including 1,735 women with subchorionic hematoma and 70,703 controls met inclusion criteria. Subchorionic hematoma was associated with an increased risk of spontaneous abortion (from 8.9% to 17.6%; pooled OR 2.18, 95% confidence interval [CI] 1.29-3.68) and stillbirth (from 0.9% to 1.9%, pooled OR 2.09, 95% CI 1.20-3.67). The number needed to harm was 11 for spontaneous abortion and 103 for stillbirth, meaning one extra spontaneous abortion is estimated to occur for every 11 women with subchorionic hematoma diagnosed and one extra stillbirth occurs for every 103 women with subchorionic hematoma diagnosed. Women with subchorionic hematoma were also at increased risk of abruption (from 0.7% to 3.6%, pooled OR 5.71, 95% CI 3.91-8.33), preterm delivery (from 10.1% to 13.6%, pooled OR 1.40, 95% CI 1.18-1.68), and preterm premature rupture of membranes (from 2.3% to 3.8%, pooled OR 1.64, 95% CI 1.22-2.21), but not small for gestational age (OR 1.69, 95% CI 0.89-3.19) or pre-eclampsia (OR 1.47, 95% CI 0.37-5.89). The numbers needed to harm were 34, 28, and 69 for abruption, preterm delivery, and preterm premature rupture of membranes, respectively. Conclusion: Subchorionic hematoma is associated with an increased risk of early and late pregnancy loss, abruption, and preterm premature rupture of membranes. © 2011 The American College of Obstetricians and Gynecologists.

Database: EMBASE

Subchorionic hematoma (SCH) and adverse perinatal outcomes: Systematic review and meta-analysis

Author(s): Tuuli M.; Norman S.; Odibo A.; Macones G.; Cahill A.

Source: American Journal of Obstetrics and Gynecology; Jan 2011; vol. 204 (no. 1)

Publication Date: Jan 2011

Abstract:OBJECTIVE: The relationship between SCH and adverse perinatal outcomes is unclear. We performed a systematic review and meta-analysis evaluating the association between SCH and adverse perinatal outcomes. STUDY DESIGN: Medline, Embase and the Cochrane Library were searched without language restrictions from January 1981 (year of the first reports of intra-uterine hematoma on ultrasound) to June 2010 for cohort and case-control studies evaluating the relationship between subchorionic hematoma and adverse perinatal outcomes. The primary outcome was pregnancy loss (spontaneous abortion [SAB] and stillbirth). Secondary outcomes were placental abruption, premature rupture of membranes (PPROM), preterm delivery (PTD), preeclampsia and small for gestational age (SGA) at birth. Pooled odds ratios were calculated from a random effects model. Heterogeneity was assessed using I² for heterogeneity and I². Publication bias was evaluated using funnel plots with Egger's tests. RESULTS: Seven studies, including 1,735 women with SCH and 70,703 controls, met inclusion criteria. SCH was associated with a significantly increased risk of SAB (OR 2.18, 95 % CI 1.29 - 3.68) and stillbirth (OR 2.09, 95%CI 1.20 - 3.67) (Figure 1). There was evidence of statistical heterogeneity among studies for SAB (X² p=0.045, I²=58.8 %) but not for stillbirth (X² p=0.311, I² =16.1%). There was no evidence of publication bias for either outcome (Egger's test p=0.607 and 0.334). Women with SCH were also at a significantly increased risk of abruption (5.71,95 % CI 3.91 - 8.33), PPRM (1.64, 95% CI 1.22 - 2.21) and PTD (1.40, 95% CI 1.18 - 1.68), but not SGA (1.69, 95% CI 0.89 - 3.19) or preeclampsia (1.47, 95% CI 0.37 - 5.89). CONCLUSIONS: SCH is associated with an increased risk of pregnancy loss, abruption, PPRM and PTD.(Figure presented).

Database: EMBASE

Early subchorionic bleed (SCB) in assisted reproductive technology (ART) pregnancies does not influence birth weight

Author(s): Nervi L.; Bergh P.A.; Molinaro T.A.

Source: Fertility and Sterility; Sep 2016; vol. 106

Publication Date: Sep 2016

Abstract:OBJECTIVE: Determine the impact of SCB in the first trimester on birth weight in ART pregnancies DESIGN: Retrospective cohort study MATERIALS AND METHODS: Records from 8,636 patients treated between January 2000 and April 2015 in a single IVF center were analyzed. All patients underwent in vitro fertilization (IVF) with blastocyst transfer, conceived, and were discharged at approximately 8 weeks of pregnancy. Pregnant patients who reported vaginal bleeding or who had a SCB visualized with transvaginal ultrasound were included as the study group with low birth weight as the primary outcome. Baseline demographics were compared between groups using chi square and t-tests. Logistic regression was performed to control for confounders. This study was powered to detect a 3% difference between groups. RESULTS: 31.4% (2,715) of 8,636 patients had a SCB. The mean oocyte age for those with SCB was significantly lower than for those without SCB (33.1 vs 33.3, p=0.02). The mean number of embryos replaced and number of fetuses was significantly higher for those with SCB. These differences were not clinically significant. In fresh cycles, those with SCB had a significantly higher peak estradiol and progesterone than those without SCB. Transfer type (fresh vs. frozen), preimplantation genetic screening (PGS), and high body mass index (BMI) (BMI > 30) were shown to have no significant effect on rates of SCB. SCB significantly increased the risk of having a child of low birth weight (LBW) (22.6% vs 19.7%, p<0.001). However,

when analyzing only those pregnant with a singleton, SCB trended towards but did not have a significant impact on LBW ($p=0.06$). SCB did not significantly increase the risk of LBW in pregnancies with multiple gestation ($p=0.9$), but the incidence of SCB was higher in twin pregnancies (29.1% vs 34.8%, $p<0.0001$). Interestingly, patients who had fresh transfers had a significantly higher rate of delivering a child with LBW than those who had frozen transfers (26.0% vs 15.4%, $p<0.001$). There was no significant association between SCB and LBW after controlling for possible confounders with logistic regression. **CONCLUSIONS:** These data suggest that first trimester SCB in ART patients has little to no effect on the incidence of LBW. Twin pregnancies may be at a higher risk for SCB. While more studies are warranted, the results of this study may be used to reassure patients regarding the clinical significance of first-trimester SCB on pregnancy outcome after IVF.

Database: EMBASE

First-trimester bleeding and twin pregnancy outcomes after in vitro fertilization

Author(s): Eaton J.L.; Zhang X.; Kazer R.R.

Source: Fertility and Sterility; Jul 2016; vol. 106 (no. 1); p. 140-143

Publication Date: Jul 2016

Abstract:Objective To examine the association between first-trimester bleeding and live-birth rates in twin pregnancies conceived with in vitro fertilization (IVF). Design Retrospective cohort study. Setting Academic infertility practice. Patient(s) Women with two gestational sacs on first-trimester ultrasound after transfer of fresh embryos derived from autologous oocytes between January 1, 1999, and December 31, 2010. Intervention(s) None. Main Outcome Measure(s) Live-birth rate. Result(s) Sixty-five women reported vaginal bleeding, and 288 did not. The baseline characteristics were similar between the two groups, except for an increased prevalence of subchorionic hematoma in women with first-trimester vaginal bleeding (26.2% vs. 1.7%). Live-birth rates were similar between women with bleeding and those with no bleeding (87.7% vs. 91.7%, adjusted odds ratio [OR] 0.73; 95% confidence interval [CI], 0.31-1.73). Two hundred eighty-eight women gave birth to live twins. Among the women who delivered twins, those with first-trimester bleeding had an increased risk of low birth weight of at least one twin (75.0% vs. 59.7%). The association between bleeding and low birth weight persisted after controlling for possible confounders with logistic regression (adjusted OR 2.33, 95% CI, 1.14-4.74). Conclusion(s) Live-birth rates are high in IVF twin gestations, regardless of the presence of first-trimester bleeding. Among women giving birth to IVF twins, however, first-trimester bleeding is associated with increased odds of low birth weight. Copyright © 2016 American Society for Reproductive Medicine

Database: EMBASE

Subchorionic hematomas are increased in early pregnancy in women taking low-dose aspirin

Author(s): Truong A.; Sayago M.M.; Kutteh W.H.; Ke R.W.

Source: Fertility and Sterility; May 2016; vol. 105 (no. 5); p. 1241-1246

Publication Date: May 2016

Abstract:Objective To determine the frequency of subchorionic hematomas (SCH) in first-trimester ultrasound examinations of patients with infertility and recurrent pregnancy loss (RPL) and in patients from a general obstetric population. To determine if the method of assisted reproduction utilized or the use of anticoagulants, such as heparin and aspirin (ASA), influenced frequency of SCH. Design Prospective, cohort study. Setting Fertility clinic and general obstetrics clinic. Patient(s) Five hundred and thirty-three women who were pregnant in the first-trimester. Interventions Not applicable. Main Outcome Measure(s) Frequencies of subchorionic hematomas in women based on

diagnosis, use of anticoagulants, and fertility treatment. Result(s) SCH were identified in 129/321 (40.2%) in the study group compared to 23/212 (10.9%) in the control group. Fertility diagnosis and the use of heparin did not appear to affect the frequency of SCH in the first trimester; however, SCH occurred at an almost four-fold increase in patients taking ASA compared to those not taking ASA, regardless of fertility diagnosis or method of fertility treatment. Conclusion(s) The use of ASA may be associated with an increased risk of developing a SCH during the first trimester. The increased frequencies of SCH in pregnancies of patients attending a fertility clinic compared to women from a general obstetrical practice was highly correlated with the use of ASA. Copyright © 2016 American Society for Reproductive Medicine, Published by Elsevier Inc.

Database: EMBASE

The effect of first trimester subchorionic hematoma on pregnancy outcomes in patients underwent IVF/ICSI treatment

Author(s): Zhou J.; Wu M.; Wang B.; Hou X.; Wang J.; Chen H.; Zhang N.; Hu Y.; Sun H.

Source: Journal of Maternal-Fetal and Neonatal Medicine; Apr 2016 ; p. 1-5

Publication Date: Apr 2016

Available in full text at [Journal of Maternal-Fetal and Neonatal Medicine, The](#) - from Taylor & Francis

Abstract:Objective: The aim of this retrospective cohort study was to assess the effect of subchorionic hematoma (SCH) on pregnancy outcomes in IVF/ICSI patients. Methods: We retrospectively analyzed 1097 pregnancies achieved by in vitro fertilization and embryo transfer (IVF-ET) or frozen-thawed embryo transfers (FETs) between January 2013 and June 2013 at the IVF center of Nanjing Drum Tower Hospital. The prevalence of SCH was 12.1% in this group (133/1097). We compared the pregnancy outcomes between the SCH group and non-SCH group, while the risk factors for SCH were also evaluated. Results: There was no significant difference between SCH group and non-SCH group with regard to patients' age, spouse's age, endometrial thickness, miscarriage rate (5.6% versus 6.2%, $p>0.05$), second trimester fetus loss rate (5.6% versus 7.7%, $p>0.05$) or live birth rate (89.5% versus 86.1%, $p>0.05$). While the birth weight in singleton pregnancy in SCH group was significant lower (3207.8 \pm 595.7g versus 3349.2 \pm 59.7g, $p=0.03$). SCH was more common in fresh embryo transfer patients than that in FET patients (16.6% versus 5.1%, $p<0.01$), fresh embryo transfer was a high risk for SCH with OR 3.67, 95% CI: 2.28-5.90. Conclusion: We concluded that SCH was associated with lower birth weight in singleton pregnancy, but SCH did not increase pregnancy loss rate in IVF/ICSI patients, and fresh embryo transfer may contribute to SCH onset. Copyright © 2016 Informa UK Limited, trading as Taylor & Francis Group.

Database: EMBASE

The relationship between first-trimester subchorionic hematoma, cervical length, and preterm birth.

Author(s): Palatnik, Anna; Grobman, William A

Source: American journal of obstetrics and gynecology; Sep 2015; vol. 213 (no. 3); p. 403

Publication Date: Sep 2015

Abstract:The objective of the study was to evaluate the association between a sonographically diagnosed subchorionic hematoma (SCH) in the first trimester and subsequent midtrimester cervical length and preterm birth. In this cohort study, 512 women with an SCH on their first-trimester ultrasound were compared with 1024 women without a first-trimester SCH. All women underwent routine transvaginal cervical length measurement between 18 and 22 weeks. Women with multifetal gestation, cerclage, or a uterine anomaly were excluded. A multivariable linear regression was

performed to assess the independent association of SCH with cervical length, and a logistic regression was done to determine whether the presence of SCH was associated with preterm birth independent of the cervical length. In a univariable analysis, the presence of a SCH was significantly associated with a shorter mean cervical length as well as a cervical length less than the 10th percentile (4.27 cm vs 4.36 cm, $P = .038$; 1.9% vs 0.5%, $P = .006$, respectively). Preterm birth also was more common in women with an SCH (12.5% vs 7.3%, $P = .001$). Even after adjusting for potentially confounding factors, a significant negative association existed between the presence of an SCH and cervical length (centimeters) (linear regression coefficient, -0.08; 95% confidence interval, -0.17 to -0.005). In a multivariable regression, SCH remained associated with preterm birth, even with cervical length entered into the equation as a covariate (adjusted odds ratio, 1.58; 95% confidence interval, 1.09-2.32). First-trimester SCH is associated with both a shorter cervical length and preterm birth. Our data suggest, however, that mechanisms other than cervical shortening may be involved in preterm birth among women with SCH. Copyright © 2015 Elsevier Inc. All rights reserved.

Database: Medline

The effects of subchorionic hematoma on pregnancy outcome in patients with threatened abortion

Author(s): Sukur Y.E.; Goc G.; Ozmen B.; Atabekoglu C.S.; Koc A.; Soylemez F.; Kose O.; Acmaz G.

Source: Journal of the Turkish German Gynecology Association; 2014; vol. 15 (no. 4); p. 239-242

Publication Date: 2014

Available in full text at [Journal of the Turkish German Gynecological Association](#) - from National Library of Medicine

Available in full text at [Journal of The Turkish German Gynecological Association](#) - from ProQuest

Abstract:Objective: To assess the effects of ultrasonographically detected subchorionic hematomas on pregnancy outcomes in patients with vaginal bleeding within the first half of pregnancy. Material and Methods: Patients diagnosed with threatened abortion due to painless vaginal bleeding and who were followed up in an in-patient service during the first vaginal bleeding between January 2009 and December 2010 were included in this retrospective cohort study. Patients were divided into two groups according to the presence of subchorionic hematoma. Miscarriage rates and pregnancy outcomes of ongoing pregnancies were compared between the groups. Results: There were no statistically significant differences between the groups regarding demographic parameters, including age, parity, previous miscarriage history, and gestational age at first vaginal bleeding. While 13 of 44 pregnancies (29.5%) with subchorionic hematoma resulted in miscarriage, 25 of 198 pregnancies (12.6%) without subchorionic hematoma resulted in miscarriage ($p=.010$). The gestational age at miscarriage and the duration between first vaginal bleeding and miscarriage were similar between the groups. The outcome measures of ongoing pregnancies, such as gestational week at delivery, birth weight, and delivery route, were also similar between the groups. Conclusion: Ultrasonographically detected subchorionic hematoma increases the risk of miscarriage in patients with vaginal bleeding and threatened abortion during the first 20 weeks of gestation. However, it does not affect the pregnancy outcome measures of ongoing pregnancies. Copyright © 2014 by the Turkish-German Gynecological Education and Research Foundation.

Database: EMBASE

First-trimester bleeding and twin pregnancy outcomes following in vitro fertilization (IVF)

Author(s): Eaton J.L.; Zhang X.; Kazer R.R.

Source: Reproductive Sciences; Mar 2014; vol. 21 (no. 3)

Publication Date: Mar 2014

Abstract:INTRODUCTION: The risk of first-trimester bleeding is increased in pregnancies conceived with in vitro fertilization (IVF). Early bleeding in IVF singleton pregnancies is associated with adverse pregnancy outcomes; however, the clinical significance in IVF twin pregnancies is unknown. The main objective of this study was to determine the relationship between first-trimester bleeding and live birth rate in IVF twin gestations. METHODS: We retrospectively identified all women with transfer of fresh embryos derived from autologous oocytes between January 1, 1999 and December 30, 2010 with two gestational sacs identified on firsttrimester ultrasound. Only first cycles were included. Low birth weight (LBW) was defined as 2 test or Fisher's exact test, and continuous variables with the Student's t-test. Logistic regression adjusted for potential confounders and the presence of subchorionic hematoma (SCH). A two-tailed P-value of <0.05 was considered significant. RESULTS: Three hundred fifty-three women met inclusion criteria. Baseline characteristics are listed in Table 1. (Table Presented) Live birth rates were similar between those with bleeding vs. no bleeding (87.7% vs. 91.7%); there was no significant association after adjusting for potential confounders and the presence of SCH (adjusted OR 0.73, 95% CI =0.31-1.73). Among women who delivered twins, those with bleeding were more likely to have at least one LBW infant (75.0% vs. 59.7%, adjusted OR 2.33, 95% CI 1.14-4.74). CONCLUSIONS: This study demonstrated no association between first-trimester bleeding and live birth rate in IVF twin gestations. Among women giving birth to twins, the odds of at least one LBW infant was two-fold higher in pregnancies complicated by early bleeding.

Database: EMBASE

Placental mesenchymal dysplasia associated with antepartum hemorrhage, subchorionic hematoma, and intrauterine growth restriction

Author(s): Chen C.-P.; Wang T.-Y.; Hsu C.-Y.; Su J.-W.; Chern S.-R.; Wang W.; Su Y.-N.

Source: Taiwanese Journal of Obstetrics and Gynecology; Mar 2013; vol. 52 (no. 1); p. 154-156

Publication Date: Mar 2013

Available in full text at [Taiwanese Journal of Obstetrics and Gynecology](#) - from Free Access Content

Database: EMBASE

Outcome of pregnancy complicated by threatened abortion

Author(s): Dongol A.; Mool S.; Tiwari P.

Source: Kathmandu University Medical Journal; 2011; vol. 9 (no. 33); p. 41-44

Publication Date: 2011

Abstract:Background Threatened abortion is the most common complication in the first half of pregnancy. Most of these pregnancies continue to term with or without treatment. Spontaneous abortion occurs in less than 30% of these women. Threatened abortion had been shown to be associated with increased incidence of antepartum haemorrhage, preterm labour and intra uterine growth retardation. Objective This study was to assess the outcome of threatened abortion following treatment. Methods This prospective study was carried out in Dhulikhel Hospital - Kathmandu University Hospital from January 2009 till May 2010. Total 70 cases of threatened abortion were selected, managed with complete bed rest till 48 hrs of cessation of bleeding, folic

acid supplementation, uterine sedative, and hormonal treatment till 28 weeks of gestation. Ultrasonogram was performed for diagnosis and to detect the presence of subchorionic hematoma. Patients were followed up until spontaneous abortion or up to delivery of the fetus. The measures used for the analysis were maternal age, parity, gestational age at the time of presentation, previous abortions, presence of subchorionic hematoma, complete abortion, continuation of pregnancy, antepartum hemorrhage, intrauterine growth retardation and intrauterine death of fetus. Results Out of 70 cases subchorionic haematoma was found in 30 (42.9%) cases. There were 12 (17.1%) patients who spontaneously aborted after diagnosis of threatened abortion during hospital stay, 5 (7.1%) aborted on subsequent visits while 53 (75.8%) continued pregnancy till term. Among those who continued pregnancy intrauterine growth retardation was seen in 7 (13.2%), antepartum hemorrhage in 4 (7.5%), preterm premature rupture of membrane in 3 (5.66%) and IUD in 3 (5.66%). Spontaneous abortion was found more in cases with subchorionic hematoma of size more than 20 cm². Conclusion In cases of threatened abortion with or without the presence of subchorionic hematoma, prognostic outcome is better following treatment with bed rest, uterine sedatives, folic acid supplementation and hormonal treatment.

Database: EMBASE

Early subchorionic hematoma (SCH) detected by first trimester ultrasound in fertile and subfertile women

Author(s): Rosenbluth E.M.; Flagg J.K.; Whitlow N.R.; Ryan G.L.

Source: Fertility and Sterility; Sep 2011; vol. 96 (no. 3)

Publication Date: Sep 2011

Abstract:OBJECTIVE: To determine the incidence of early SCH and subsequent pregnancy outcomes in fertile and subfertile women. DESIGN: Prospective cohort. MATERIALS AND METHODS: Unscreened women presenting for routine first trimester sonography were consented and short medical histories were obtained. Gestational ages were determined by using routine sonography and ovulatory/menstrual history. Women with a gestational age of 9 weeks or less were included. An interim analysis was performed using clinical and historical data. RESULTS: Of the 126 women who met inclusion criteria 41 (32.5%) had an ultrasound detected subchorionic hematoma. There were no significant differences in the number of SCH in the fertile (27/69, 39%) versus sub-fertile (24/57, 42%) women. The size of SCH also did not differ between these groups (1.08 cm³ vs 1.60 cm³). The sub-fertile group was significantly older than the fertile group (33.2 vs. 29.9 years P<.001). In the subfertile group SCH rates did not differ between those receiving only medication (2/11, 18%), intrauterine insemination (9/16, 56%) or IVF (13/30, 43%). There were no differences in the rate of vaginal bleeding in those with and without SCH (8/51, 16% and 19/75, 25% P=0.20). CONCLUSION: Prior studies have suggested that the incidence of SCH in the first trimester is 1.3% (Ball et al., 1996) to 3.1% (Nagy et al., 2003). However, we have found that SCH is a much more common than previously reported. This likely represents an improvement in ultrasound technology/ resolution rather than a true clinical increase. Although it is reassuring that even invasive modes of conception (insemination, IVF) do not change the rate of SCH, the clinical significance of early SCH is unknown. This study is powered to detect adverse pregnancy outcomes and these women will be followed until delivery to answer this question. The subsequent findings will be extremely helpful in counseling our patients about expectations after receiving a first trimester diagnosis of SCH.

Database: EMBASE

Subchorionic haematoma and endocannabinoid levels: Can they predict miscarriage

Author(s): Bambang K.N.; Lam P.M.; Taylor A.H.; Konje J.C.

Source: Reproductive Sciences; Mar 2011; vol. 18 (no. 3)

Publication Date: Mar 2011

Abstract: Introduction: The endocannabinoid, Arachidonylethanolamine (AEA) and Oleylethanolamine (OEA) are thought to be key ligands in modulating early pregnancy. We have previously shown that elevated AEA levels are associated with miscarriage. The presence of subchorionic haematoma has been associated with an increased risk of miscarriage. Specifically, there has been work to show that the size of haematoma is linked with miscarriage risk. Therefore our aim was to determine whether the presence of subchorionic haematoma on early pregnancy ultrasound was related to an elevated plasma AEA or OEA level. Methods: Plasma levels of AEA and OEA were measured in 37 healthy pregnant women between 6-12 weeks gestation presenting to the EPAU with threatened miscarriage and a subchorionic haematoma using UPLC-MS/MS. These were related to pregnancy outcome defined as spontaneous miscarriage or a pregnancy progressing beyond 24 weeks. The size of the haematoma was measured by ultrasound. Results: Of the 37 women fitting our criteria, 6 went on to have a miscarriage. Using an AEA level of 0.59 nM as a cutoff, a single plasma AEA measurement provided a sensitivity of 67% and a specificity of 55%. This was similar when using OEA levels. When OEA level was combined with the size of subchorionic haematoma on ultrasound, this increased to a sensitivity of 100% and a specificity of 64% with an AUC of 0.7955. (Table presented) USS: ultrasound, AUC: area under the receiver operator characteristic curve Conclusion: In this small study, we are able to demonstrate that there is a relationship between OEA level, size of haematoma and pregnancy outcome. This is not the case with AEA level, alone or combined with ultrasound findings. The study is limited by the small number of participants but we are replicating this in a larger and more diverse population. Plasma OEA levels and the presence of haematoma of a certain size on ultrasound has the potential of improving prediction of pregnancy outcome in women presenting with threatened miscarriage.

Database: EMBASE

OP28.08: Clinical significance of sub chorionic hematoma: comparison between diagnosis in the first and second trimester.

Author(s): Hershkovitz, R; Dahan, M; Frieger, M; Mazor, M

Source: Ultrasound in obstetrics & gynecology : the official journal of the International Society of Ultrasound in Obstetrics and Gynecology; Oct 2010; vol. 36 ; p. 135

Publication Date: Oct 2010

Available in full text at [Ultrasound in Obstetrics and Gynecology](#) - from John Wiley and Sons

Available in full text at [Ultrasound in Obstetrics and Gynecology](#) - from John Wiley and Sons

Available in full text at [Ultrasound in Obstetrics and Gynecology](#) - from Wiley-Blackwell Free Backfiles NHS

Available in full text at [Ultrasound in Obstetrics and Gynecology](#) - from John Wiley and Sons

Database: Medline

Risk factors for subchorionic hematoma and poor pregnancy outcome

Author(s): Gelber S.; Chasen S.; Jong K.

Source: American Journal of Obstetrics and Gynecology; Dec 2009; vol. 201 (no. 6)

Publication Date: Dec 2009

Abstract:OBJECTIVE: Subchorionic hematoma is associated with adverse perinatal outcome. We sought to determine both risk factors for development of subchorionic hematoma, as well as risks associated with poor perinatal outcomes for patients with the condition. STUDY DESIGN: We performed a case-control study of patients seen in the ultrasound unit at a tertiary care center between 2003 and 2008. A computerized database was used to identify patients with ultrasound evidence of a subchorionic hematoma. We identified two controls for each case who were the same gestational age and had an ultrasound performed on the same day. Statistical analysis was performed with Mann-Whitney U and Fisher's exact test. A p-value of <0.05 was considered significant. RESULTS: We identified 176 patients with a subchorionic hematoma and 321 controls. Assisted reproductive technologies (ART) were significantly associated with subchorionic hematoma. [26% vs 11%. P<0.01]. However, age was not independently associated with an increased risk of subchorionic hematoma [mean +/- SD; cases:34.7+/-5.2 vs.controls: 34.4+/- 4.5]. There was a trend toward anticoagulation being associated with increased risk of hematoma [cases: 6.8% vs. controls: 3.4%; p = 0.067]. The presence of a hematoma was significantly associated with preterm delivery (cases 18% vs controls 7% p<0.01) and PPROM (8% vs 3%; p<0.05). These risks were not increased in patients with a hematoma who had vaginal bleeding compared to those in which the finding was incidental. There was no association with IUGR; however this was an uncommon outcome. Furthermore, for patients with a subchorionic hematoma, invasive testing for aneuploidy was not associated with an increase in preterm birth or PPROM. CONCLUSION: ART is a risk factor for subchorionic hematoma. Although the presence of a subchorionic hematoma increases the risk of preterm birth and PPROM, patients have a generally favorable outcome. Given the risk of bleeding with anticoagulation and the trend seen in this study, a prospective study of this risk factor may be warranted.

Database: EMBASE

Subchorionic hematomas in IVF pregnancies are not a risk factor for subsequent miscarriage

Author(s): McCoy T.W.; Drake C.E.; Nakajima S.T.

Source: Fertility and Sterility; Sep 2009; vol. 92 (no. 3)

Publication Date: Sep 2009

Abstract:OBJECTIVE: Subchorionic hematomas (SH) are not an uncommon finding on ultrasound (U/S) and often result in more frequent monitoring which increases cost and may heighten anxiety. This study sought to examine the incidence of SH detected by U/S in the first trimester of pregnancies conceived through IVF, and to determine if their presence was a significant risk factor for subsequent miscarriage. DESIGN: Retrospective record review of all clinical pregnancies with first trimester ultrasounds and known pregnancy outcome conceived through IVF in our Fertility Center from January 2003 through August 2008. MATERIALS AND METHODS: Patients who conceive through IVF undergo an initial U/S at 4-5 weeks following embryo transfer (6-7 wks gestational age). U/S records and IVF outcomes were cross-referenced to identify patients who had at least a clinical pregnancy (cardiac activity on U/S). Clinical pregnancies were identified in 405 cycles by 372 patients. Complete records with known outcomes were available in 346 cycles (85%). RESULTS: Of 346 clinical pregnancies, 329 (93.4%) resulted in a live birth. SH were detected in 99 of 346 (28.6%) pregnancies. Of these only 5 (5.1%) ultimately ended in complete pregnancy loss. The rate of fetal loss in patients with SH did not differ from those without (10/99, 10.1% with SH; 31/247, 12/5% without SH). The incidence of SH did not significantly differ between singletons (60/211, 28.4%),

twins (37/123, 30.1%) or triplets (2/12, 16.7%), nor was it related to patient age. Spontaneous reduction of a multiple gestation occurred in 22 cases (16.3% of all multiples, 14.6% of twins, 33.3% of triplets) and was not related to SH. **CONCLUSIONS:** Subchorionic hematomas are a common ultrasound finding during the first trimester. The finding of a SH, however, does not carry with it an increased rate of spontaneous abortion or other adverse fetal outcome ($p=0.632$). More frequent monitoring or other intervention is not necessary and may only add to the cost and patient anxiety.

Database: EMBASE

Placental haematomas in early pregnancy

Author(s): Johns J.; Jauniaux E.

Source: British Journal of Hospital Medicine; Jan 2007; vol. 68 (no. 1); p. 32-35

Publication Date: Jan 2007

Abstract: A common ultrasound finding in women with threatened miscarriage is a subchorionic bleed or intrauterine haematoma. This review examines the available data on the incidence and clinical significance of these haematomas.

Database: EMBASE

Pregnancy outcome of threatened abortion with subchorionic hematoma: possible benefit of bed-rest?

Author(s): Ben-Haroush, Avi; Yogev, Yariv; Mashiach, Reuven; Meizner, Israel

Source: The Israel Medical Association journal : IMAJ; Jun 2003; vol. 5 (no. 6); p. 422-424

Publication Date: Jun 2003

Abstract: Bleeding in the first trimester of pregnancy is a common phenomenon, associated with early pregnancy loss. In many instances a subchorionic hematoma is found sonographically. To evaluate the possible benefit of bed-rest in women with threatened abortion and sonographically proven subchorionic hematoma, and to examine the possible relationship of duration of vaginal bleeding, hematoma size, and gestational age at diagnosis to pregnancy outcome. The study group consisted of 230 women of 2,556 (9%) referred for ultrasound examination because of vaginal bleeding in the first half of pregnancy, who were found to have a subchorionic hematoma in the presence of a singleton live embryo or fetus. All patients were advised bed-rest at home; 200 adhered to this recommendation for the duration of vaginal bleeding (group 1) and 30 continued their usual lifestyle (group 2). All were followed with repeated sonograms at 7 day intervals until bleeding ceased, the subchorionic hematoma disappeared, or abortion occurred. The groups were compared for size of hematoma, duration of bleeding, and gestational age at diagnosis in relation to pregnancy outcome (spontaneous abortion, term or preterm delivery). The first bleeding episode occurred at 12.6 +/- 3.4 weeks of gestation (range 7-20 weeks) and lasted for 28.8 +/- 19.1 days (range 4-72 days). The women who adhered to bed-rest had fewer spontaneous abortions (9.9% vs. 23.3%, $P = 0.006$) and a higher rate of term pregnancy (89 vs. 70%, $P = 0.004$) than those who did not. There was no association between duration of vaginal bleeding, hematoma size, or gestational age at diagnosis of subchorionic hematoma and pregnancy outcome. Fewer spontaneous abortions and a higher rate of term pregnancy were noted in the bed-rest group. However, the lack of randomization and retrospective design of the outcome data collection preclude a definite conclusion. A large prospective randomized study is required to confirm whether bed-rest has a real therapeutic effect.

Database: Medline

Sonography of pregnancies with first-trimester bleeding and a small intrauterine gestational sac without a demonstrable embryo

Author(s): Falco P.; Zagonari S.; Gabrielli S.; Bevini M.; Pilu G.; Bovicelli L.

Source: Ultrasound in Obstetrics and Gynecology; Jan 2003; vol. 21 (no. 1); p. 62-65

Publication Date: Jan 2003

Available in full text at [Ultrasound in Obstetrics and Gynecology](#) - from John Wiley and Sons

Available in full text at [Ultrasound in Obstetrics and Gynecology](#) - from John Wiley and Sons

Available in full text at [Ultrasound in Obstetrics and Gynecology](#) - from Wiley-Blackwell Free Backfiles NHS

Available in full text at [Ultrasound in Obstetrics and Gynecology](#) - from John Wiley and Sons

Abstract:Objective: This was a prospective observational cohort study to evaluate the outcome and prognostic criteria of pregnancies with first-trimester bleeding and a gestational sac < 16 mm without a demonstrable embryo. Methods: Criteria for admission into the study included: (1) first-trimester bleeding; (2) a transvaginal scan performed upon admission demonstrating a single intrauterine gestational sac with a mean diameter < 16 mm and without a demonstrable embryo. The outcome variable was miscarriage, defined as pregnancy loss prior to 22 weeks. The following explanatory variables were considered: maternal age, menstrual age, size of the gestational sac, presence or absence of the yolk sac and subchorionic hematoma, and beta-human chorionic gonadotropin levels. The relationship of these variables with pregnancy failure was analyzed by stepwise logistic regression. Results: Of 50 patients, 32 (64%) underwent miscarriage. The receiver-operating characteristics (ROC) curve of the size of the gestational sac demonstrated a high level of statistical significance (area under the ROC curve 0.9080, $P < 0.000001$) and stepwise logistic regression revealed that this was the only variable independently correlated with the subsequent occurrence of miscarriage. Discussion: It is commonly accepted that in pregnant patients with first-trimester bleeding, demonstration by transvaginal ultrasound of an intrauterine gestational sac < 16 mm without an embryo may be compatible with a viable pregnancy. Our results suggest that in general this finding is associated with a poor outcome, with miscarriage occurring in two-thirds of patients. When the sac is small for gestational age, the risk of miscarriage is greatly increased. In the present series, a gestational sac diameter less than - 1.34 standard deviations of the mean was associated with pregnancy failure in over 90% of cases. Copyright © 2002 ISUOG. Published by John Wiley & Sons, Ltd.

Database: EMBASE

Effects of bleeding on uteroplacental, umbilicoplacental and yolk-sac hemodynamics in early pregnancy

Author(s): Mkikallio K.; Tekay A.; Jouppila P.

Source: Ultrasound in Obstetrics and Gynecology; 2001; vol. 18 (no. 4); p. 352-356

Publication Date: 2001

Available in full text at [Ultrasound in Obstetrics and Gynecology](#) - from John Wiley and Sons

Available in full text at [Ultrasound in Obstetrics and Gynecology](#) - from John Wiley and Sons

Available in full text at [Ultrasound in Obstetrics and Gynecology](#) - from Wiley-Blackwell Free Backfiles NHS

Available in full text at [Ultrasound in Obstetrics and Gynecology](#) - from John Wiley and Sons

Abstract:Objective: To determine the influence of vaginal bleeding with or without a persisting subchorionic hematoma on uteroplacental, umbilicoplacental and yolk-sac hemodynamics in early

pregnancy. Design: Twenty-six consecutive patients with vaginal bleeding entered this longitudinal study 1-3 days after the beginning of vaginal bleeding and were re-examined every 1-2 weeks. In three cases vaginal bleeding occurred at the 5th completed gestational week, in 13 at the 7th week, in nine at the 8th week and in one case at the 10th week. A subchorionic hematoma was identified in one case at the 5th week, in nine cases at the 7th week, in nine cases at the 8th week, and in seven cases at the 10th week. Four pregnancies ended in miscarriage. Blood velocity waveforms of uterine, arcuate, radial, spiral, umbilical, chorionic and yolk-sac arteries were obtained by transvaginal pulsed Doppler ultrasound and peak systolic velocities, time-averaged maximum velocities and pulsatility indices were calculated. The results were compared with our earlier observations in normal pregnancy obtained with a similar study protocol. Results: At the 7th week, radial artery pulsatility-index values (mean (SD)) were higher in pregnancies with vaginal bleeding (1.84 (0.59); P=0.04) and in pregnancies with a subchorionic hematoma (1.96 (0.63); P=0.03) than in normal pregnancies (1.40 (0.46)). The pulsatility-index values of uterine, arcuate, spiral, umbilical and chorionic arteries did not differ between the groups. Vaginal bleeding with or without a subchorionic hematoma at the 8th week did not affect any of the measured parameters. Persistence of the subchorionic hematoma until the 10th week did not affect uterine, arcuate, radial, spiral, umbilical or chorionic artery hemodynamics. Yolk-sac hemodynamic parameters did not differ between the groups. Conclusions: Vaginal bleeding with or without a sub-chorionic hematoma is associated with increased radial artery impedance at the 7th week of pregnancy. Persistence of the subchorionic hematoma does not affect utero- and umbilicoplacental circulation.

Database: EMBASE

Massive subchorionic hematoma (Breus' mole) complicated by intrauterine growth retardation.

Author(s): Nishida, N; Suzuki, S; Hamamura, Y; Igarashi, K; Hayashi, Z; Sawa, R; Yoneyama, Y; Asakura, H; Kawabata, K; Shima, Y; Shin, S; Araki, T

Source: Journal of Nippon Medical School = Nippon Ika Daigaku zasshi; Feb 2001; vol. 68 (no. 1); p. 54-57

Publication Date: Feb 2001

Abstract:We present here a case of massive subchorionic hematoma complicated by intrauterine growth retardation and oligohydramnios diagnosed at 22 weeks' gestation. The patient was managed with the following medications: (1) tocolysis with ritodrine infusion, (2) 10% maltose infusion therapy (1500mL/day), (3) antibiotic infusion (cefotaxim sodium, 2 g/dayx7) and (4) kampo therapy with Saiei-to until delivery. At 33 weeks and 0 days' gestation, a female baby weighing 1,342 g was delivered without complication by caesarean section. During surgery, an escape of about 500~600 g of dark brown blood with no clots was noted from the subchorionic space of the placenta. Examination of the placenta showed a large fibrosis with well-defined margins on the fetal surface.

Database: Medline

Prognostic importance of subchorionic hematoma in threatened abortion

Author(s): Karateke A.; Tugrul S.; Ozarpaci C.; Gurbuz A.

Source: Marmara Medical Journal; 1996; vol. 9 (no. 2); p. 57-61

Publication Date: 1996

Abstract:Objective: This study was devised to determine the value of sonographically detected subchorionic hematoma in the prediction of the outcomes of threatened abortion. Methods: Thirty-six cases of threatened abortion with subchorionic hematoma made up the study group and the

control group consisted of 20 cases of threatened abortion. The patients were followed prospectively until 20 weeks of gestations. Results: The difference between the incidence of abortion in two groups was not significant ($p = 0.4955$). In the study group, there was not any significant difference in volumes of subchorionic hematoma between the cases resulting in abortion and the cases displaying a normal pregnancy course ($p = 0.1983$). Relative volume of subchorionic hematoma (subchorionic hematoma volume/gestational sac volume) in the cases displaying a normal pregnancy course and those resulting in abortion was 20.83% +/- 8.1% and 32.25% +/- 8.8%, respectively, and this difference was found to be significant ($p = 0.0015$). Conclusion: It is suggested that in the cases of threatened abortion neither the presence nor the volume of subchorionic hematoma was important in determining the prognosis of cases, though the relative volume of subchorionic hematoma was found to be a better prognostic parameter predicting the outcome of threatened abortions.

Database: EMBASE

Subchorionic hematomas in early pregnancy: Clinical outcome and blood flow patterns

Author(s): Kurjak A.; Schulman H.; Zudenigo D.; Kupesic S.; Kos M.; Goldenberg M.

Source: Journal of Maternal-Fetal Medicine; 1996; vol. 5 (no. 1); p. 41-44

Publication Date: 1996

Abstract: A case control study of 59 women with subchorionic hematomas compared to 135 normally pregnant. Transvaginal ultrasound was used to image the pregnancy, and identify the site and size of the hematomas. Color flow Doppler was used to calculate velocity indices of the spiral arteries. More spontaneous abortions occurred in women with subchorionic hematomas (SCH). There was general correlation between gestational age, velocity indices, and hematoma size. There were 10 spontaneous abortions in the study group (17%) versus 9 (6.5%) in the controls ($P = 0.02$). Hematoma size did not affect outcome, but site did. Most hematomas associated with abortion were found in the corpus or fundus of the uterus, not in the supracervical area ($P = 0.03$). The presence of a hematoma did not affect the frequency of preterm delivery. In conclusion, subchorionic hematomas in early pregnancy are associated with an increased risk of spontaneous abortion. Flow disturbances are seen in the spiral arteries, but these are probably secondary effects. The critical factor is site of hematoma, not volume.

Database: EMBASE

Subchorionic hematoma in threatened abortion: Sonographic evaluation and significance

Author(s): Al-Nuaim L.; Chowdhury N.; Adelusi B.

Source: Annals of Saudi Medicine; Nov 1996; vol. 16 (no. 6); p. 650-653

Publication Date: Nov 1996

Available in full text at [Annals of Saudi Medicine](#) - from Free Access Content

Abstract: In a study of 92 women with subchorionic hematoma evaluated with sonographic scan in King Khalid University Hospital, it was found that the mean ages and live births of patients who carried their pregnancies to viability were higher when compared with the patients who aborted. There was a statistically significant association between the gestational age at diagnosis of subchorionic hematoma and the size of the hematoma. There was, however, no statistically significant association found between the gestational age at diagnosis, size and site of the hematoma and the outcome of pregnancy. It was concluded that subchorionic hematoma which appear either in the second trimester, or are larger, or located in the lower uterine segment, may be

associated with higher rates of abortion or preterm deliveries. Nevertheless, there is no statistically significant impact of these on the outcome of pregnancy.

Database: EMBASE

Subchorionic hemorrhage in first-trimester pregnancies: Prediction of pregnancy outcome with sonography

Author(s): Bennett G.L.; Benacerraf B.R.; Bromley B.; Lieberman E.

Source: Radiology; Sep 1996; vol. 200 (no. 3); p. 803-806

Publication Date: Sep 1996

Available in full text at [Radiology](#) - from Free Access Content

Abstract: PURPOSE: To determine the effects of subchorionic hematoma size, gestational age, and maternal age on pregnancy outcome in patients with vaginal bleeding in the first trimester of pregnancy. MATERIALS AND METHODS: A retrospective review was performed with ultrasound images obtained in 516 patients with vaginal bleeding, a live fetus, and a subchorionic hematoma in the first trimester. Hematoma size was graded according to the percentage of the chorionic sac circumference elevated by the hematoma. Patients were also classified according to gestational age and maternal age. Logistic regression analysis was used to determine the effect of each variable on pregnancy outcome. RESULTS: The overall spontaneous abortion rate was 9.3% (48 of 516 patients). The rate nearly doubled when the separation was large (18.8%) compared with small and moderate hematomas (7.7% and 9.2%, respectively). A large separation was found to be associated with an almost threefold increase in risk of spontaneous abortion. The spontaneous abortion rate was approximately twice as high for women aged 35 years or older versus younger women (13.8% and 7.3%, respectively) and for women with bleeding at 8 weeks gestation or less compared with those with bleeding at greater than 8 weeks gestation (13.7% vs 5.9%). CONCLUSION: For women with a subchorionic hematoma that is sonographically identified, fetal outcome is dependent on size of the hematoma, maternal age, and gestational age.

Database: EMBASE

Subchorionic hematoma: a review.

Author(s): Pearlstone, M; Baxi, L

Source: Obstetrical & gynecological survey; Feb 1993; vol. 48 (no. 2); p. 65-68

Publication Date: Feb 1993

Abstract: A review of the English literature on subchorionic hematoma (SCH) is presented. Fourteen studies are reviewed. The incidence of SCH varied greatly among studies from 4 to 48 per cent. Small SCH tend to be more common in the first trimester and appear to pose no added risk to the ongoing pregnancy. Conversely, SCH in the second trimester often are larger and may be associated with an increased risk of preterm delivery. The etiology of these hematomas remains unclear. Pathological changes that might contribute to their formation are reviewed. Larger studies with controls, including data on the incidence of SCH in a population of normal obstetric patients are needed.

Database: Medline

Relationship of first-trimester subchorionic bleeding detected by color Doppler ultrasound to subchorionic fluid, clinical bleeding, and pregnancy outcome

Author(s): Dickey R.P.; Olar T.T.; Curole D.N.; Taylor S.N.; Matulich E.M.

Source: Obstetrics and Gynecology; 1992; vol. 80 (no. 3); p. 415-420

Publication Date: 1992

Abstract:We analyzed retrospectively the incidence of subchorionic fluid and embryonic death in 2116 consecutive patients evaluated with abdominal ultrasound and 783 patients evaluated with vaginal ultrasound. These women were examined during the first 12 postmenstrual weeks and had conceived as a result of infertility treatment. In addition, we analyzed the relationship of subchorionic bleeding to subchorionic fluid in 230 patients evaluated with color Doppler ultrasound and the relationship of subchorionic bleeding to clinical bleeding, precipitating factors, pregnancy outcome, and the karyotypes of abortuses. In single gestational sac pregnancies, subchorionic fluid was found equally often in women scanned with vaginal or color Doppler ultrasound, and less often with abdominal ultrasound ($P < .0001$). Embryonic death was increased only in patients with large amounts of subchorionic fluid observed on abdominal ultrasound. Color Doppler ultrasound revealed subchorionic bleeding in 87 of 235 ultrasound scans (37%) and in 48 of 102 patients (47%) when subchorionic fluid was present. Subchorionic bleeding was associated with moderate or large amounts of subchorionic fluid ($P = .041$), with precipitating events ($P < .0001$), and with clinical bleeding ($P = .001$). It was occult in ten of 48 patients (21%). Embryonic death occurred equally often in women with no fluid and in those with subchorionic fluid, with and without subchorionic bleeding. Abortuses were karyotypically abnormal in an equal proportion of cases with subchorionic bleeding, subchorionic fluid, and no fluid. These findings indicate that subchorionic fluid and subchorionic bleeding are common findings in early pregnancy and are not associated with embryonic death unless they are accompanied by clinical bleeding.

Database: EMBASE

Prevalence and significance of subchorionic hemorrhage in threatened abortion: A sonographic study

Author(s): Pedersen J.F.; Mantoni M.

Source: American Journal of Roentgenology; 1990; vol. 154 (no. 3); p. 535-537

Publication Date: 1990

Available in full text at [American Journal of Roentgenology](#) - from Free Access Content

Abstract:We performed a prospective study to determine the prevalence and significance of subchorionic hematomas in patients with symptoms of threatened abortion. The study comprised 342 pregnant women who had vaginal bleeding in weeks 9-20 of pregnancy and a live fetus shown with sonography. Sonograms showed a subchorionic hematoma in 62 patients (18%). The average size of the hematoma was 20 ml (range, 2-150 ml). The rate of spontaneous abortion was the same in patients with and without hematoma, seven (11%) of 62 and 28 (10%) of 280, respectively. There was no association between abortion rate and hematoma size. The rate of premature delivery was the same in patients with and without hematoma, seven (11%) of 62 and 32 (11%) of 280, respectively. There was no association between the rate of premature delivery and hematoma size. Subchorionic hematomas are common and insignificant sonographic findings in patients with vaginal bleeding in weeks 9-20 of pregnancy.

Database: EMBASE

Subchorionic haematoma and prognosis of threatened abortion

Author(s): Camprincoli S.; Capucci P.; Selva S.

Source: Journal of Foetal Medicine; 1989; vol. 9 (no. 1); p. 20-22

Publication Date: 1989

Abstract:The authors studied 54 patients admitted with diagnosis of threatened abortion. The gestational age of these pregnancies ranged from 7 to 13 weeks. Ultrasonic scanning revealed subchorionic haematoma in 14 cases (25.9%). The patients, who presented the pathology had the worst trends of the pregnancy, both the incidence of abortion (15% sv 28.5%) and the frequency of 'small for date' (30% sv. 2.9%). The ultrasonic scanning of subchorionic haematoma and its evolution (evidence of organization) appeared an important prognostic index in the patients who presented this pathology.

Database: EMBASE

Sonography in early pregnancy: the significance of subchorionic hemorrhage.

Author(s): Bloch, C; Altchek, A; Levy-Ravetch, M

Source: The Mount Sinai journal of medicine, New York; Sep 1989; vol. 56 (no. 4); p. 290-292

Publication Date: Sep 1989

Abstract:Among 31 pregnant women with first-trimester bleeding, all were found on sonographic study to have subchorionic hemorrhage with a living fetus. Twenty-six went on to normal term pregnancies. Two had premature labor at 31 and 32 weeks. Three had first-trimester missed abortions. No correlation was found between volume of subchorionic bleeding and prognosis. The prognosis of the pregnancy in this group of 31 women with first-trimester bleeding and sonographic evidence of subchorionic hemorrhage and fetal cardiac activity was 80% favorable.

Database: Medline

Placental abruption and subchorionic hemorrhage in the first half of pregnancy: US appearance and clinical outcome

Author(s): Sauerbrei E.E.; Pham D.H.

Source: Radiology; 1986; vol. 160 (no. 1); p. 109-112

Publication Date: 1986

Available in full text at [Radiology](#) - from Free Access Content

Abstract:In 30 pregnant patients who experienced vaginal bleeding between 10 and 20 weeks gestation, subchorionic hematomas were demonstrated on ultrasound examination. In 18 patients (60%), the margin of the placenta was separated from the uterine wall. In 15 patients the outcome was favorable (full-term delivery of normal infant) and in 15 patients the outcome was unfavorable (seven preterm births, four stillbirths, three spontaneous abortions, one therapeutic abortion). The major prognostic factor related to pregnancy outcome was the volume of the hematoma and, to a lesser extent, the relative volume of the hematoma (volume of hematoma divided by volume of gestational sac). For a volume less than 60 ml, the outcome tended to be favorable, and for a relative volume less than 0.4, the outcome tended to be favorable.

Database: EMBASE

Subchorionic bleeding in threatened abortion: Sonographic findings and significance

Author(s): Goldstein S.R.; Subramanyam B.R.; Raghavendra B.N.; Horii S.C.; Hilton S.

Source: American Journal of Roentgenology; 1983; vol. 141 (no. 5); p. 975-978

Publication Date: 1983

Available in full text at [American Journal of Roentgenology](#) - from Free Access Content

Abstract: Fifty-six patients with clinical threatened abortion were evaluated by sonography. In six patients, fetal cardiac activity was absent at or beyond 9 weeks of gestation, and fetal death was confirmed in all six cases. In the other 50 patients, fetal cardiac activity was present at or beyond 9 weeks of gestation. In 10 (20%) of these 50 patients, subchorionic bleeding was present in various degrees, appearing sonographically as an extrachorionic crescentic anechoic or complex collection. The final outcome in the 50 patients with fetal cardiac activity was as follows: In the absence of subchorionic bleeding, 100% of the pregnancies progressed to term; in the presence of subchorionic bleeding the positive outcome was reduced to 80%. In addition to signs of fetal life on sonography, subchorionic bleeding is an important factor affecting the outcome of gestations in patients with clinical threatened abortion.

Database: EMBASE

Strategy 91859

#	Database	Search term	Results
1	Medline	("subchorionic hematoma*" OR "subchorionic haematoma*" OR "subchorionic bleed*" OR "sub chorionic hematoma*" OR "sub chorionic haematoma*").ti,ab	86
2	Medline	("first trimester" OR "1st trimester" OR "1 st trimester").ti,ab	19318
3	Medline	exp "PREGNANCY TRIMESTER, FIRST"/	14115
4	Medline	("first trimester" OR "1st trimester" OR "1 st trimester").ti,ab OR exp "PREGNANCY TRIMESTER, FIRST"/	25786
5	Medline	("subchorionic hematoma*" OR "subchorionic haematoma*" OR "subchorionic bleed*" OR "sub chorionic hematoma*" OR "sub chorionic haematoma*").ti,ab AND (("first trimester" OR "1st trimester" OR "1 st trimester").ti,ab OR exp "PREGNANCY TRIMESTER, FIRST"/)	27
6	EMBASE	("subchorionic hematoma*" OR "subchorionic haematoma*" OR "subchorionic bleed*" OR "sub chorionic hematoma*" OR "sub chorionic haematoma*").ti,ab	132
7	EMBASE	("first trimester" OR "1st trimester" OR "1 st trimester").ti,ab	27241
8	EMBASE	exp "PREGNANCY TRIMESTER, FIRST"/	35595

9	EMBASE	("first trimester" OR "1st trimester" OR "1 st trimester").ti,ab OR exp "PREGNANCY TRIMESTER, FIRST"/	43148
10	EMBASE	("subchorionic hematoma*" OR "subchorionic haematoma*" OR "subchorionic bleed*" OR "sub chorionic hematoma*" OR "sub chorionic haematoma*").ti,ab AND (("first trimester" OR "1st trimester" OR "1 st trimester").ti,ab OR exp "PREGNANCY TRIMESTER, FIRST"/)	50
11	EMBASE	((("subchorionic hematoma*" OR "subchorionic haematoma*" OR "subchorionic bleed*" OR "sub chorionic hematoma*" OR "sub chorionic haematoma*").ti,ab AND (("first trimester" OR "1st trimester" OR "1 st trimester").ti,ab OR exp "PREGNANCY TRIMESTER, FIRST"/)) [English language]	48
12	EMBASE	*CHORION/	1541
13	EMBASE	*HEMATOMA/	11683
14	EMBASE	((("first trimester" OR "1st trimester" OR "1 st trimester").ti,ab OR exp "PREGNANCY TRIMESTER, FIRST"/) AND *CHORION/ AND *HEMATOMA/	6