



DISCLAIMER: Results of database and or Internet searches are subject to the limitations of both the database(s) searched, and by your search request. It is the responsibility of the requestor to determine the accuracy, validity and interpretation of the results.

Date: 07 Jun 2017

Sources Searched: Medline, Embase, PubMed

Hysteroscopy and Miscarriage/Hysteroscopy and ERPC

[See full search strategy](#)

1. Evaluation of fertility after operative hysteroscopy to remove retained products of conception

Author(s): Sonnier L.; Torre A.; Broux P.; Fauconnier A.; Huchon C.

Source: European Journal of Obstetrics Gynecology and Reproductive Biology; Apr 2017; vol. 211 ; p. 98-102

Publication Date: Apr 2017

Publication Type(s): Article

Abstract: Evaluation of fertility after operative hysteroscopy to remove retained products of conception. Objective To study fertility after operative hysteroscopy for the management of prolonged trophoblastic retention, and the complications of this procedure. Study design Retrospective cohort in a university hospital. Results 115 patients underwent operative hysteroscopy for the treatment of prolonged post-partum and post-abortum retention between January 2008 and December 2011. Of the 115 patients included in this study, 53 desired a postoperative pregnancy. Using the survival model, the conception rate was 71.1% (95%CI; 58.1-82.9) at 6 months and 83.5% (95%CI; 71.8-92.2) at 1 year. The overall rate of intraoperative complications was 15%. The rate of complications \geq grade 3 was 5%. Logistic regression analysis showed that only retentions of greater than 25 mm were associated with complications generally (aOR = 7.4; 95%CI; 2.3-24.5) and with Clavien-Dindo complications \geq grade 3 (OR = 27.2; 95%CI; 2.8-263). Conclusion The management of prolonged retention by operative hysteroscopy allows the preservation of future fertility. There are more complications when the retentions are >25 mm. Copyright © 2017 Elsevier B.V.

Database: EMBASE

2. MisoREST: Surgical versus expectant management in women with an incomplete evacuation of the uterus after misoprostol treatment for miscarriage: A cohort study

Author(s): Lemmers M.; Verschoor M.A.C.; Ankum W.M.; Huirne J.A.F.; Oude Rengerink K.; Naaktgeboren C.; Bossuyt P.M.; Janssen I.A.H.; Radder C.; Klinkert E.R.; Langenveld J.; van der Voet L.; Siemens F.F.; Bongers M.Y.; van Hooff M.H.; van der Ploeg M.; Sjors F.P.J.; Coppus S.F.P.J.; Mol B.W.J.

Source: European Journal of Obstetrics Gynecology and Reproductive Biology; Apr 2017; vol. 211 ; p. 83-89

Publication Date: Apr 2017

Publication Type(s): Article

Abstract:Objective To assess the effectiveness of curettage versus expectant management in women with an incomplete evacuation of the uterus after misoprostol treatment for first trimester miscarriage. Study design We conducted a multicenter cohort study alongside a randomized clinical trial (RCT) between June 2012 until July 2014. 27 Dutch hospitals participated. Women with an incomplete evacuation after misoprostol treatment for first trimester miscarriage who declined to participate in the RCT, received treatment of their preference; curettage (n = 65) or expectant management (n = 132). A successful outcome was defined as an empty uterus on sonography at six weeks or uneventful clinical follow-up. We furthermore assessed complication rate and (re)intervention rate Results Of the 197 women who declined to participate in the RCT, 65 preferred curettage and 132 expectant management. A successful outcome was observed in 62/65 women (95%) in the surgical group versus 112/132 women (85%) in the expectant group (RR 1.1, 95% CI 1.03-1.2), with complication rates of 6.2% versus 2.3%, respectively (RR 2.7, 95% CI 0.6-12). Conclusion In women with an incomplete evacuation of the uterus after misoprostol treatment, expectant management is an effective and safe option. This finding could restrain the use of curettage in women that have used misoprostol in the treatment of first trimester miscarriage. Copyright © 2017 Elsevier B.V.

Database: EMBASE

3. Assessment of hysteroscopic role in management of women with recurrent pregnancy loss

Author(s): Elsokkary M.; Elshourbagy M.; Labib K.; Ali M.

Source: Journal of Maternal-Fetal and Neonatal Medicine; Apr 2017 ; p. 1-11

Publication Date: Apr 2017

Publication Type(s): Article In Press

Abstract:Objectives: To assess the hysteroscopic value in the management of intrauterine lesion in women with recurrent pregnancy loss. Methods: This study was done in Ain Shams Maternity Hospital after the approval of the research Ethics Committee, during the period between August 2014 and December 2015 where 200 nonpregnant women with a history of three or more consecutive unexplained first and second trimester miscarriages before 20weeks were recruited from recurrent miscarriage clinic. A written informed consent was obtained from all women before participation. Results: This current study was conducted in Ain Shams University Maternity Hospital during the period between August 2014 to May 2015 a total of 200 women with history of recurrent miscarriage were included in the study. Regarding the results of this study the mean age was 30.5(5.7), the mean number of previous abortion 3(3-5) the mean number of the first trimesteric abortion was 2 with range (2-2) the mean number of second trimesteric abortion was 2 with range (1-2). In this study, 88% of patients were nullipara. It was also found that hysteroscopic findings were found in 58.5%. Uterine anomalies was present in 21%, including septate uterus and intrauterine adhesion (IUAs) were present in 12.5%. Endometrial polyps were present in 8.5%, bicornute uterus in 4.5%, unicornuate uterus in 4.5% while submucous myomas were present in 7.5%. It was found that 48.5% need hysteroscopic intervention including 21% need septectomy 12.5% need adhesiolysis, 6.5% need myomectomy while 8.5% need polypectomy. The study found that no statistically significant difference between patients with normal hysteroscopic finding and patients with abnormal hysteroscopic finding as regard age, time of previous abortion and number of previous abortion. But there was statistically significant difference as regard number of previous delivery and abnormal HSG. Conclusions: It appears that hysteroscopy is a useful tool in the diagnosis and treatment of the causes of recurrent miscarriage that can be performed safely without anesthesia in most cases. The prevalence of uterine anomalies in patients with recurrent miscarriages is 54.5%, septate uterus is the most common anomaly and for this reason uterine anomalies should be systematically assessed in patients with recurrent miscarriage. Copyright © 2017 Informa UK Limited, trading as Taylor & Francis Group

Database: EMBASE

4. Hysteroscopic management of life-threatening post-abortion hemorrhage.

Author(s): Calabrese, Stefania; Garuti, Giancarlo

Source: European journal of obstetrics, gynecology, and reproductive biology; Jan 2017; vol. 208 ; p. 109-110

Publication Date: Jan 2017

Publication Type(s): Letter Case Reports

Database: Medline

5. Increased fetal chromosome detection with the use of operative hysteroscopy during evacuation of products for miscarriage

Author(s): Cholkeri-Singh A.; Miller C.E.; Deli K.; Zamfirova I.

Source: Journal of Minimally Invasive Gynecology; 2016; vol. 23 (no. 7)

Publication Date: 2016

Publication Type(s): Conference Abstract

Abstract: Study Objective: To determine if incorporation of hysteroscopy reduced maternal cell contamination when evaluating products of conception for chromosomal abnormalities as a cause of miscarriage. Design: Retrospective chart study. Setting: Private, minimally invasive surgery and infertility practice with academic-community hospital affiliation. Patients: Infertility patients undergoing evacuation of products of conception for documented miscarriages between 2006 and 2016. Intervention: Suction curettage, diagnostic hysteroscopy with curettage or hysteroscopic biopsy with or without curettage followed by chromosomal analysis of products of conception for determination of fetal genetics. Measurements and Main Results: A total of 243 charts were analyzed. Patients were categorized based on surgery performed: Group 1 (n=136)- suction curettage only; Group 2 (n=23)- diagnostic hysteroscopy followed by suction curettage; Group 3 (n=84)- hysteroscopy, biopsy of gestational sac, chorionic villi and/or fetus followed by suction curettage. No significant differences were detected between the groups for BMI, ethnicity, gravida, parity, primary infertility, secondary infertility, spontaneous conception, singleton or multiple gestation, and surgical complications. All miscarriages were diagnosed in the first trimester with ultrasound. Maternal contamination was significantly less in Group 3 (14.3%) versus Group 1 (30.1%) and Group 2 (34.8%), $p=0.016$. Removing all cases of maternal contamination and chromosome analysis not performed, the fetal chromosome detection rate was significantly higher in Group 3 (84.4%) versus Group 1 (66.6%) and Group 2 (61.9%), $p=0.009$. Table 1 shows the comparison between the Groups with chromosome detection. (Table presented) All results reported as p-values; Group 3 had significantly higher abnormal chromosomes detected, lower maternal contamination and higher overall fetal chromosome detection rates. Conclusion: Obtaining fetal genetics can be useful when planning for a future successful pregnancy. Maternal contamination occurred at a higher rate when all products of conception were evacuated with curettage despite use of diagnostic hysteroscopy to identify intracavitary products of conception. The addition of operative hysteroscopy to biopsy the gestational sac, chorionic villi and/or fetus significantly decreased the risk of maternal contamination and increased the detection of fetal chromosomes for genetic analysis without increasing the risk of surgical complications.

Database: EMBASE

6. Comparative study of manual vacuum aspiration and dilatation & evacuation for the surgical management of early miscarriages: A randomized controlled trial

Author(s): Salam R.; Neelofer R.; Naserullah P.

Source: Pakistan Journal of Medical and Health Sciences; 2016; vol. 10 (no. 1); p. 183-185

Publication Date: 2016

Publication Type(s): Article

Abstract:Aim: To compare the efficacy of manual vacuum aspiration with dilatation & evacuation for the management of early miscarriages. Methods: A randomized controlled trial study carried out at SPH Civil Hospital Quetta, over a period of one year from July 2014 to July 2015. Pregnant women at the gestational age less than 12 weeks with the confirmed diagnosis of miscarriage were included in the study and divided into two groups. Women in the Group A, were undergone manual vacuum aspiration and the others in Group B were undergone dilatation and evacuation for the management of incomplete abortion after an informed consent being taken. Comparison of both groups, in terms of efficacy of methods of evacuation was done. Data was collected on prescribed proforma. Mean and standard deviation were calculated for quantitative data. Results: In Group A, Manual Vacuum Aspiration (MVA) efficacy was found in 301(98.6%) patients while in Group B, Dilatation and Evacuation (D&E) efficacy was found in 270(88.5%) patients. Mean gestational age in MVA group was 66.1+/-8.96 days whereas in D&E group was 64.35+/-11.03 days. Conclusion: Manual vacuum aspiration is a more effective method than Dilatation and evacuation in first trimester miscarriages with additional advantage of safety.

Database: EMBASE

7. MisoREST: surgical versus expectant management in women with an incomplete evacuation of the uterus after misoprostol treatment for miscarriage: a randomized controlled trial.

Author(s): Lemmers, M; Verschoor, M A C; Oude Rengerink, K; Naaktgeboren, C; Opmeer, B C; Bossuyt, P M; Huirne, J A F; Janssen, C A H; Radder, C; Klinkert, E R; Langenveld, J; Catshoek, R; Van der Voet, L; Siemens, F; Geomini, P; Van Hooff, M H; Van der Ploeg, J M; Coppus, S F P J; Ankum, W M; Mol, B W J; MisoREST study group

Source: Human reproduction (Oxford, England); Nov 2016; vol. 31 (no. 11); p. 2421-2427

Publication Date: Nov 2016

Publication Type(s): Journal Article

Available in full text at [Human Reproduction](#) - from Oxford University Press ; Collection notes: To access please select Login with Athens and search and select NHS England as your institution before entering your NHS OpenAthens account details.

Abstract:STUDY QUESTIONIs curettage more effective than expectant management in case of an incomplete evacuation after misoprostol treatment for first trimester miscarriage?SUMMARY ANSWERCurettage leads to a higher chance of complete evacuation but expectant management is successful in at least 76% of women with an incomplete evacuation of the uterus after misoprostol treatment for first trimester miscarriage.WHAT IS KNOWN ALREADYIn 5-50% of the women treated with misoprostol, there is a suspicion of incomplete evacuation of the uterus on sonography. Although these women generally have minor symptoms, such a finding often leads to additional curettage.STUDY DESIGN, SIZE, DURATIONFrom June 2012 until July 2014, we conducted a nationwide multicenter randomized controlled trial (RCT). Women who had had primary misoprostol treatment for miscarriage with sonographic evidence of incomplete evacuation of the uterus were randomly allocated to either curettage or expectant management (1:1), using a web-based application.PARTICIPANTS/MATERIALS, SETTING, METHODSWe included 59 women in 27 hospitals; 30 were allocated to curettage and 29 were allocated to expectant management. A successful

outcome was defined as sonographic finding of an empty uterus 6 weeks after randomization. **MAIN RESULTS AND THE ROLE OF CHANCE** Baseline characteristics of both groups were comparable. Empty uterus on sonography or uneventful clinical follow-up was seen in 29/30 women (97%) allocated to curettage compared with 22/29 women (76%) allocated to expectant management (RR 1.3, 95% CI 1.03-1.6) with complication rates of 10% versus 10%, respectively (RR 0.97, 95% CI 0.21-4.4). In the group allocated to curettage, no woman required re-curettage, while two women (6.7%) underwent hysteroscopy (for other or unknown reasons). In the women allocated to expectant management, curettage was performed in four women (13.8%) and three women (10.3%) underwent hysteroscopy. **LIMITATIONS, REASONS FOR CAUTION** Due to a strong patient preference, mainly for expectant management, the targeted sample size could not be included and the trial was stopped prematurely. **WIDER IMPLICATIONS OF THE FINDINGS** In women suspected of incomplete evacuation of the uterus after misoprostol, curettage is more effective than expectant management. However, expectant management is equally safe and prevents curettage for most of the women. This finding could further restrain the use of curettage in the treatment of first trimester miscarriage. **STUDY FUNDING/COMPETING INTERESTS** This study was funded by ZonMw, a Dutch organization for Health Research and Development, project number 80-82310-97-12066. There were no conflicts of interests. **TRIAL REGISTRATION NUMBER** Dutch Trial Register NTR3310, <http://www.trialregister.nl> **TRIAL REGISTRATION DATE:** 27 February 2012. **DATE OF FIRST PATIENT'S ENROLMENT** 12 June 2012.

Database: Medline

8. Hysteroscopic evacuation of retained products of conception.

Author(s): Tam, Teresa; Placek, Jill; Juarez, Lourdes

Source: Journal of obstetrics and gynaecology : the journal of the Institute of Obstetrics and Gynaecology; Nov 2016; vol. 36 (no. 8); p. 1004-1005

Publication Date: Nov 2016

Publication Type(s): Journal Article

Database: Medline

9. Removal of Retained Adherent Placental Remnants Using the Hysteroscopy Endo-Operative System

Author(s): Zhu K.-A.; Huang H.; Xue M.; Subedi J.; Xu D.; Xiao S.; Jamail G.; Zhao W.

Source: Journal of Minimally Invasive Gynecology; Jul 2016; vol. 23 (no. 5); p. 670-671

Publication Date: Jul 2016

Publication Type(s): Article

Abstract: Study Objective: Removal of retained adherent placental remnants (RAPRs) may be challenging using traditional 5Fr or 7Fr hysteroscopic grasping forceps because they are very small. This is particularly true when the retained placental remnant is large. This video demonstrates the advantages of using the Hysteroscopy Endo-Operative System (HEOS), a specially designed operative hysteroscope with a 13Fr working channel, to remove retained placental remnants. Design: Step-by-step explanation of the technique using videos and pictures (educative video) (Canadian Task Force Classification III). Setting: Third Xiangya Hospital of Central South University, Hunan, China. Patient: A 32-year-old woman was diagnosed with RAPRs 5 weeks after the evacuation of retained placenta after a spontaneous abortion at 16 weeks' gestation. Gynecologic examination revealed an anterior 8-week uterus and no tenderness. Serum beta-human chorionic gonadotropin was 150 mIU/L. Sonography revealed an irregular intrauterine mass, 3.5 cm x 3.5 cm x 3 cm in size. Intervention: Removal of RAPRs using HEOS (Sopro-comeg Company, Bordeaux, France). Measurement and Main

Results: The operation time was only 12 minutes. The RAPRs were removed completely and quickly in 1 procedure with no complications. The serum beta-human chorionic gonadotropin titer normalized 1 week after the procedure. This study was approved by the institutional review board of the Third Xiangya Hospital of Central South University. Conclusions: When indicated, removal of RAPRs using HEOS is safe and simple because of its large and strong cold forceps. Additionally, it avoids electrical and thermal injury to the endometrium, which is particularly important in a population that wants to preserve fertility. Copyright © 2016 AAGL.

Database: EMBASE

10. Efficacy of hysteroscopy in improving reproductive outcomes of infertile couples: A systematic review and meta-analysis

Author(s): Di Spiezio Sardo A.; Nappi C.; Di Carlo C.; Spinelli M.; Alviggi C.; De Placido G.; Bifulco G.; Minozzi S.; Pistotti V.

Source: Human Reproduction Update; Jun 2016; vol. 22 (no. 4); p. 479-496

Publication Date: Jun 2016

Publication Type(s): Article

Available in full text at [Human Reproduction Update](#) - from Highwire Press

Available in full text at [Human Reproduction Update](#) - from Oxford University Press ; Collection notes: To access please select Login with Athens and search and select NHS England as your institution before entering your NHS OpenAthens account details.

Abstract:Background: The scientific community has been re-evaluating the clinical relevance of hysteroscopy in the diagnosis and treatment of uterine factors and its role in the infertility work-up, thanks to its potential capability to improve reproductive outcomes and reduce time to pregnancy. Objective and Rationale: The objective of this systematic review and meta-analysis was to assess the efficacy of diagnostic and operative hysteroscopy in improving the live birth rate (LBR) of infertile women, with and without intrauterine abnormalities, at any stage of the infertility work-up. Search Methods: PubMed, Embase, the Cochrane Library and the Clinical Trials Registry using Medical Subject Headings and free text terms were searched up to June 2014, without language or year restrictions. Randomized controlled trials (RCTs) enrolling infertile women with no suspected intrauterine cavity abnormalities and comparing hysteroscopy versus no hysteroscopy at any stage of the diagnostic work-up, but prior to the first attempt of standard IVF or ICSI or after (one or more) failed attempts of IVF/ICSI were included. RCTs enrolling infertile women with intrauterine abnormalities and comparing operative versus diagnostic hysteroscopy were also included. Risk of bias was assessed using the criteria recommended by the Cochrane Collaboration and the overall quality of evidence was assessed using the GRADE approach. Results were pooled by meta-analysis using the random effect model. Outcomes: The primary outcome evaluated was the LBR, while secondary outcomes were pregnancy rate, miscarriage rate and procedure-related complications. Five hundred and eighty-eight records were retrieved after removing duplicates. Nine studies were included, with 2976 participants. Four studies included infertile women with one or more failed IVF/ICSI cycles. Two studies included infertile women who were candidates for their first IVF/ICSI. One study included candidates both for first IVF/ICSI and with one or more failed IVF/ICSI cycles. Two studies included infertile women affected by uterine fibroids and endometrial polyps, who had not received IVF/ICSI nor were candidates. Seven studies were included in the meta-analysis. Comparing hysteroscopy with no hysteroscopy prior to any (first or subsequent) IVF/ICSI attempt in infertile women without intrauterine abnormalities, there was very low-quality evidence that hysteroscopy increased LBR (relative risk (RR) 1.48, 95% confidence interval (CI) 1.20-1.81; three studies with 1088 participants) and moderate quality evidence that it increased pregnancy rate (RR 1.45, 95% CI 1.26-1.67; seven studies, 2545 participants). Results on pregnancy rate were confirmed

in the subgroup analysis of five studies including only women with one or more implantation failures (RR 1.41, 95% CI 1.14-1.75) and three studies where hysteroscopy was performed before the first IVF/ICSI attempt (RR 1.55, 95% CI 1.26-1.91). Comparing operative hysteroscopy for intrauterine abnormalities in infertile women with already diagnosed polyps or fibroids, there was low-quality evidence that operative hysteroscopy increases pregnancy rate (RR 2.13, 95% CI 1.56-2.92). None of the studies comparing operative versus diagnostic hysteroscopy assessed LBR. Wider Implications: Robust and high-quality RCTs are still needed before hysteroscopy can be regarded as a first-line procedure in all infertile women, especially during the basal clinical assessment of the couple, when assisted reproductive treatment is not indicated yet. Copyright © The Author 2016. Published by Oxford University Press on behalf of the European Society of Human Reproduction and Embryology. All rights reserved.

Database: EMBASE

11. The effect of medical versus surgical treatment of spontaneous miscarriage on subsequent in vitro fertilization cycles

Author(s): Tamir R.; Haikin Herzberger E.; Shulman A.; Wiser A.; Allouche S.; Weissman A.; Oberman-Farhi S.; Shalom-Paz E.

Source: Gynecological Endocrinology; Mar 2016; vol. 32 (no. 3); p. 231-233

Publication Date: Mar 2016

Publication Type(s): Article

Abstract:Objective: To evaluate the effect of dilation and curettage (D&C) and misoprostol as treatments for spontaneous miscarriage (SM) on in vitro fertilization (IVF) parameters in the subsequent IVF cycle. Design: Multicenter, retrospective, cohort study. Women treated for SM after IVF treatment with D&C or misoprostol and underwent a subsequent IVF cycle was included. The main outcome measures were ovarian response, endometrial thickness and pregnancy rate in the subsequent IVF cycle after MA. Results: Among 73 patients with miscarriage, 41 had D&C and 32 were given misoprostol. Baseline serum follicle stimulating hormone (FSH) levels and ovarian responses before and after treatment of miscarriage were comparable. No significant differences were observed between the D&C and the misoprostol groups in basal FSH levels, endometrial thickness and parameters of ovarian response in the subsequent IVF cycle. Conclusion: D&C and misoprostol are both effective treatments for IVF patients with miscarriage, without an adverse effect on subsequent IVF treatment outcome. Copyright © 2015 Taylor & Francis.

Database: EMBASE

12. Long-term complications and reproductive outcome after the management of retained products of conception: a systematic review.

Author(s): Hooker, Angelo B; Aydin, Humeyra; Brölmann, Hans A M; Huirne, Judith A F

Source: Fertility and sterility; Jan 2016; vol. 105 (no. 1); p. 156

Publication Date: Jan 2016

Publication Type(s): Journal Article Review

Abstract:OBJECTIVETo examine the long-term complications and reproductive outcomes after the management of retained products of conception (RPOC).DESIGNSystematic review.SETTINGNot applicable.PATIENT(S)Women suspected of RPOC who were subjected to medical therapy with misoprostol or surgical treatment.INTERVENTION(S)An electronic literature search was conducted in June 2015 using MEDLINE, EMBASE, and the Cochrane library. We included clinical trials in which women were consecutively included, independent of their symptoms.MAIN OUTCOME MEASURE(S)The prevalence of intrauterine adhesions (IUA) and reproductive outcomes.RESULT(S)No studies reporting on IUAs or reproductive indicators after medical management with misoprostol were found. We included 10 cohort studies with poor to average methodological quality. Five cohort studies (n = 339) reported IUAs in 22.4% (95% confidence interval, 18.3%-27%) of women hysteroscopically evaluated. Significantly more IUAs were encountered after dilation and curettage (D&C) compared with after hysteroscopic resection (HR): 30% vs. 13%. Incomplete evacuation was encountered in, respectively, 29% and 1% of the D&C and HR cases. Similar conception, ongoing pregnancy, live-birth, and miscarriage rates were reported after D&C and HR in six cohort studies (n = 380), and there was a tendency toward earlier conception after HR. The reproductive outcomes were not reported in relation to IUAs.CONCLUSION(S)HR may be a preferable surgical treatment in women suspected of RPOC; fewer IUAs and incomplete evacuations are encountered, while similar reproductive outcomes were reported compared with D&C. Confirmation of the observed effects is required, and trials evaluating medical treatment with misoprostol as well as expectant management are urgently needed.

Database: Medline

13. Removal of retained adherent placental remnants using hysteroscopy endo-operative system (HEOS)

Author(s): Xu D.; Xue M.; Wang L.; Jamail G.; Guan X.

Source: Journal of Minimally Invasive Gynecology; 2015; vol. 22 (no. 6)

Publication Date: 2015

Publication Type(s): Conference Abstract

Abstract:Objective: Removal of retained adherent placental remnants (RAPR) may be challenging using regular 5 Fr or 7 Fr hysteroscopic grasping forceps as they are very small. This is particularly true when the retained placental remnant is large. This video demonstrates the advantages of using HEOS, a specially designed operative hysteroscope with a 13 Fr working channel, to remove retained placental remnants. Setting: Third Xiangya Hospital of Central South University. Patient(s): A 32 years old woman diagnosed with RAPR 5 weeks after evacuation of retained placenta following spontaneous abortion at 16 weeks gestation. Intervention: Removal of RAPR using HEOS. Measurement and Main results: The RAPR was removed completely and quickly in one procedure with no complications. Conclusions: When indicated, removal of RAPR using HEOS is safe and simple while avoiding electrical injury.

Database: EMBASE

14. Hysteroscopic Evacuation of Retained Products of Conception: Two Case Reports and a Systematic Literature Review.

Author(s): Tam, T; Placek, J; Juarez, L

Source: Journal of minimally invasive gynecology; 2015; vol. 22 (no. 6S); p. S46

Publication Date: 2015

Publication Type(s): Journal Article

Database: Medline

15. Hysteroscopy for treating subfertility associated with suspected major uterine cavity abnormalities

Author(s): Bosteels J.; Kasius J.; Weyers S.; Broekmans F.J.; Mol B.W.; D'Hooghe T.M.

Source: The Cochrane database of systematic reviews; 2015; vol. 2

Publication Date: 2015

Publication Type(s): Article

Abstract:BACKGROUND: Observational studies suggest higher pregnancy rates after the hysteroscopic removal of endometrial polyps, submucous fibroids, uterine septum or intrauterine adhesions, which are detectable in 10% to 15% of women seeking treatment for subfertility.OBJECTIVES: To assess the effects of the hysteroscopic removal of endometrial polyps, submucous fibroids, uterine septum or intrauterine adhesions suspected on ultrasound, hysterosalpingography, diagnostic hysteroscopy or any combination of these methods in women with otherwise unexplained subfertility or prior to intrauterine insemination (IUI), in vitro fertilisation (IVF) or intracytoplasmic sperm injection (ICSI).SEARCH METHODS: We searched the Cochrane Menstrual Disorders and Subfertility Specialised Register (8 September 2014), the Cochrane Central Register of Controlled Trials (The Cochrane Library 2014, Issue 9), MEDLINE (1950 to 12 October 2014), EMBASE (inception to 12 October 2014), CINAHL (inception to 11 October 2014) and other electronic sources of trials including trial registers, sources of unpublished literature and reference lists. We handsearched the American Society for Reproductive Medicine (ASRM) conference abstracts and proceedings (from January 2013 to October 2014) and we contacted experts in the field.SELECTION CRITERIA: Randomised comparisons between operative hysteroscopy versus control in women with otherwise unexplained subfertility or undergoing IUI, IVF or ICSI and suspected major uterine cavity abnormalities diagnosed by ultrasonography, saline infusion/gel instillation sonography, hysterosalpingography, diagnostic hysteroscopy or any combination of these methods. Primary outcomes were live birth and hysteroscopy complications. Secondary outcomes were pregnancy and miscarriage.DATA COLLECTION AND ANALYSIS: Two review authors independently assessed studies for inclusion and risk of bias, and extracted data. We contacted study authors for additional information.MAIN RESULTS: We retrieved 12 randomised trials possibly addressing the research questions. Only two studies (309 women) met the inclusion criteria. Neither reported the primary outcomes of live birth or procedure related complications. In women with otherwise unexplained subfertility and submucous fibroids there was no conclusive evidence of a difference between the intervention group treated with hysteroscopic myomectomy and the control group having regular fertility-oriented intercourse during 12 months for the outcome of clinical pregnancy. A large clinical benefit with hysteroscopic myomectomy cannot be excluded: if 21% of women with fibroids achieve a clinical pregnancy having timed intercourse only, the evidence suggests that 39% of women (95% CI 21% to 58%) will achieve a successful outcome following the hysteroscopic removal of the fibroids (odds ratio (OR) 2.44, 95% confidence interval (CI) 0.97 to 6.17, P = 0.06, 94 women, very low quality evidence). There is no evidence of a difference between the comparison groups for the outcome of miscarriage (OR 0.58, 95% CI 0.12 to 2.85, P = 0.50, 30 clinical

pregnancies in 94 women, very low quality evidence). The hysteroscopic removal of polyps prior to IUI can increase the chance of a clinical pregnancy compared to simple diagnostic hysteroscopy and polyp biopsy: if 28% of women achieve a clinical pregnancy with a simple diagnostic hysteroscopy, the evidence suggests that 63% of women (95% CI 50% to 76%) will achieve a clinical pregnancy after the hysteroscopic removal of the endometrial polyps (OR 4.41, 95% CI 2.45 to 7.96, $P < 0.00001$, 204 women, moderate quality evidence). **AUTHORS' CONCLUSIONS:** A large benefit with the hysteroscopic removal of submucous fibroids for improving the chance of clinical pregnancy in women with otherwise unexplained subfertility cannot be excluded. The hysteroscopic removal of endometrial polyps suspected on ultrasound in women prior to IUI may increase the clinical pregnancy rate. More randomised studies are needed to substantiate the effectiveness of the hysteroscopic removal of suspected endometrial polyps, submucous fibroids, uterine septum or intrauterine adhesions in women with unexplained subfertility or prior to IUI, IVF or ICSI.

Database: EMBASE

16. Operative hysteroscopy versus vacuum aspiration for incomplete spontaneous abortion (HYPER): study protocol for a randomized controlled trial.

Author(s): Huchon, Cyrille; Koskas, Martin; Agostini, Aubert; Akladios, Cherif; Alouini, Souhail; Bauville, Estelle; Bourdel, Nicolas; Fernandez, Hervé; Fritel, Xavier; Graesslin, Olivier; Legendre, Guillaume; Lucot, Jean-Philippe; Matheron, Isabelle; Panel, Pierre; Raiffort, Cyril; Fauconnier, Arnaud

Source: Trials; Aug 2015; vol. 16 ; p. 363

Publication Date: Aug 2015

Publication Type(s): Comparative Study Randomized Controlled Trial Multicenter Study Journal Article

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

Available in full text at [Trials](#) - from BioMed Central

Abstract: **BACKGROUND** Incomplete spontaneous abortions are defined by the intrauterine retention of the products of conception after their incomplete or partial expulsion. This condition may be managed by expectant care, medical treatment or surgery. Vacuum aspiration is currently the standard surgical treatment in most centers. However, operative hysteroscopy has the advantage over vacuum aspiration of allowing the direct visualization of the retained conception product, facilitating its elective removal while limiting surgical complications. Inadequately powered retrospective studies reported subsequent fertility to be higher in patients treated by operative hysteroscopy than in those treated by vacuum aspiration. These data require confirmation in a randomized controlled trial comparing fertility rates between women undergoing hysteroscopy and those undergoing vacuum aspiration for incomplete spontaneous abortion. **METHODS** After providing written informed consent, 572 women with incomplete spontaneous abortion recruited from 15 centers across France will undergo randomization by a centralized computer system for treatment by either vacuum aspiration or operative hysteroscopy. Patients will not be informed of the type of treatment that they receive and will be cared for during their hospital stay in accordance with standard practices at each center. The patients will be monitored for pregnancy or adverse effects by a telephone conversation or questionnaire sent by e-mail or post over a period of two years. In cases of complications, failure of the intervention or diagnosis of uterine cavity disease, patient care will be left to the discretion of the medical center team. **DISCUSSION** If our hypothesis is confirmed, this study will provide evidence that the use of operative hysteroscopy can increase the number of pregnancies continuing beyond 22 weeks of gestation in the two-year period following incomplete spontaneous abortion without increasing the incidence of morbidity and peri- and postoperative complications. The standard surgical treatment of this condition would thus be modified. This study

would therefore have a large effect on the surgical management of incomplete spontaneous abortion. TRIAL REGISTRATION ClinicalTrials.gov Identifier: NCT02201732 ; registered on 17 July 2014.

Database: Medline

17. Molecular analysis of products of conception obtained by hysteroembryoscopy from infertile couples.

Author(s): Campos-Galindo, Inmaculada; García-Herrero, Sandra; Martínez-Conejero, José Antonio; Ferro, Jaime; Simón, Carlos; Rubio, Carmen

Source: Journal of assisted reproduction and genetics; May 2015; vol. 32 (no. 5); p. 839-848

Publication Date: May 2015

Publication Type(s): Journal Article

Available in full text at [Journal of Assisted Reproduction and Genetics](#) - from ProQuest

Available in full text at [Journal of Assisted Reproduction and Genetics](#) - from National Library of Medicine

Available in full text at [Journal of Assisted Reproduction and Genetics](#) - from Springer Link Journals

Abstract: **PURPOSE** To analyze the molecular cytogenetic data obtained from products of conception (POC) obtained by selective biopsy of first trimester miscarriages and to estimate the rate of chromosomal anomalies in miscarriages from pregnancies achieved by natural conception (NC) or by assisted reproductive technology (ART) interventions. **METHODS** We used KaryoLite™ BoBs™ (PerkinElmer LAS, Wallac, Turku, Finland) technology to analyze 189 samples from ART or NC pregnancies. **RESULTS** All POC were successfully evaluated. A higher incidence of chromosomal abnormalities was observed in POC after ART using the patient's own oocytes than from NC pregnancies (62.7% vs. 40.6%; $p < 0.05$). The lowest incidence of chromosomal abnormalities was observed in POCs ART using donor eggs from women younger than 35 years (12.8%). No statistical differences in the percentage of abnormal miscarriages were observed in correlation with sperm concentration: a sperm concentration less than 5 million/mL produced 75% abnormal results and a concentration higher than 5 million/mL produced 51%. **CONCLUSIONS** POC analysis is essential to determine the cause of pregnancy loss. Using culture-independent molecular biology techniques to analyze POCs avoids limitations such as growth failure and reduces the time required for analysis. Selective biopsy of fetal tissue by hysteroembryoscopy avoids the risk of misdiagnosis due to maternal cell contamination. Our results show that maternal age, sperm quality, and ART-assisted pregnancies are risk factors for abnormal gestations.

Database: Medline

18. Intrauterine adhesions after hysteroscopic treatment for retained products of conception: What are the risk factors?

Author(s): Barel O.; Krakov A.; Pansky M.; Vaknin Z.; Halperin R.; Smorgick N.

Source: Fertility and Sterility; Mar 2015; vol. 103 (no. 3); p. 775-779

Publication Date: Mar 2015

Publication Type(s): Article

Abstract:Objective To assess the prevalence and risk factors for intrauterine adhesions (IUAs) after hysteroscopic treatment of retained products of conception (RPOC). Design Retrospective cohort study. Setting Gynecologic endoscopy unit. Patient(s) A total of 167 women referred to our institution from 2009 to 2013. Intervention(s) Operative hysteroscopy for treatment of RPOC and office hysteroscopic follow-up to assess for IUA. Main Outcome Measure(s) We investigated demographic characteristics, obstetrics parameters, and surgical variables to evaluate which factors could be associated with IUA formation. Result(s) Of 167 women treated for RPOC, 84 (50.3%) had undergone a follow-up hysteroscopic evaluation after the operative hysteroscopy and were included in the study. Intrauterine adhesions were found in 16 cases (19.0%), of which only 3 (3.6%) were severe adhesions. Multivariate analysis showed that the presence of IUA was associated with RPOC after cesarean section (5 of 10 [50.5%] developed IUA, vs. 7 of 49 [14.3%] after vaginal delivery). Intrauterine adhesions were also found in 4 of 23 women (17.4%) undergoing hysteroscopy for RPOC after abortion. Patient age, gravidity, parity, and the interval between the index pregnancy and treatment for RPOC were not associated with postoperative IUA. Conclusion(s) Hysteroscopic treatment for RPOC had a 3.6% incidence of severe intrauterine adhesions formation in this descriptive series. Women with RPOC occurring after delivery by cesarean section are particularly at risk for development of IUA. Copyright © 2015 American Society for Reproductive Medicine.

Database: EMBASE

19. Hysteroscopy for Infertile Women: A Review

Author(s): Cholkeri-Singh A.; Sasaki K.J.

Source: Journal of Minimally Invasive Gynecology; Mar 2015; vol. 22 (no. 3); p. 353-362

Publication Date: Mar 2015

Publication Type(s): Review

Abstract:Hysteroscopy is widely performed in infertile women. A review of peer-reviewed, published literature from the PubMed database on uterine intracavitary pathology, proximal tubal occlusion, failed invitro fertilization procedures, and first trimester miscarriages of infertile women was performed to examine the importance, feasibility, and success rates of diagnostic and operative hysteroscopy when evaluating and treating these conditions. Copyright © 2015 AAGL.

Database: EMBASE

20. Manual vacuum aspirator: A safe and effective tool for decentralization of post miscarriage care

Author(s): Tasnim N.; Fatima S.; Mahmud G.

Source: Journal of the College of Physicians and Surgeons Pakistan; 2014; vol. 24 (no. 11); p. 815-819

Publication Date: 2014

Publication Type(s): Article

Available in full text at [Journal of the College of Physicians and Surgeons Pakistan](#) - from Free Access Content

Abstract:Objective: To compare the efficacy and safety of Manual Vacuum Aspiration (MVA) performed as outpatient versus inpatient procedure in terms of success rate, blood loss, hospital stay and procedure related complications. Study Design: A quasi-experimental study. Place and Duration of Study: Maternal and Child Health Centre (MCHC), Unit-I, Pakistan Institute of Medical Sciences (PIMS), Islamabad, from December 2009 to December 2010. Methodology: Cases with early pregnancy failure (incomplete, missed and an embryonic) at gestational age less than 12 weeks were allocated to MVA as outpatient or elective procedure performed in the operation theatre. Studied variables were noted as above. Results: A total of 177 women were eligible for study, out of whom 78 underwent MVA as outpatient procedure and 99 as indoor procedure. The baseline characteristics were comparable in both groups except significantly high multipara in the indoor group. Complete evacuation was achieved in 96.1% in outpatient vs. 79.7% in indoor cases ($p=0.001$). Outpatient group had a shorter hospital stay (median 3 hours, IQR-1 vs. 10 hours, IQR-4; $p < 0.001$), though the median hospital cost was less but statistically insignificant (Rs. 800, IQR-25 vs. 735, IQR-1265; $p=0.728$). Blood loss was comparable in both groups (median 60 ml, IQR-20 vs. 60 ml-IQR-30; $p=0.350$). There were two uterine perforations noted in the inpatient group (2.02%) vs. none in outpatient setting. Conclusion: Outpatient based manual vacuum aspiration is a safe and effective tool for management of early pregnancy loss. A decentralized approach proved useful in reducing hospital stay.

Database: EMBASE

21. Influence of hysteroscopic metroplasty on reproductive outcome in patients with infertility and recurrent pregnancy loss.

Author(s): Tofoski, Gligor; Antovska, Vesna

Source: Prilozi (Makedonska akademija na naukite i umetnostite. Oddelenie za medicinski nauki); 2014; vol. 35 (no. 2); p. 95-103

Publication Date: 2014

Publication Type(s): Journal Article

Abstract:INTRODUCTIONPatients with congenital uterine anomalies (CUA) have decreased reproductive potential and an unfavourable reproductive outcome compared to the population with normal uterine cavity. Patients with untreated CUA have a higher abortion rate, higher foetal loss rate and decreased live birth rate. Hysteroscopic metroplasty is a standard, safe and minimally invasive method for the treatment of correctible types of congenital uterine anomalies. The aim of the study was to analyse the reproductive outcome in certain groups of patients with CUA and infertility, before and after hysteroscopic metroplasty.MATERIAL AND METHODSWe analyzed 115 patients on whom 129 hysteroscopic metroplasty interventions were performed at the University Clinic of Obstetrics and Gynaecology in Skopje over a oneyear period, between 01.01.2011 and 31.12.2011. Patients and their reproductive outcome were monitored over a two-year period and the same group served as a control group, taking into account their previous reproductive history before and after metroplasty. Statistical analysis was performed using the Chi-square test and $p <$

0.05 was considered to be statistically significant. **RESULTS** The most common CUA were types 5b and 6, represented by 83.3%. In a follow-up period of two years, there were 55 patients with previous foetal loss treated by hysteroscopic metroplasty, and 31 of them had pregnancies. There was a statistically significant decrease of abortion rate from 88.5% to 19.3%, and a significant increase in term delivery rate from 2.3% to 71%. **CONCLUSION** Hysteroscopic metroplasty significantly improves the reproductive outcome in patients with previous foetal loss.

Database: Medline

22. A randomised controlled trial of expectant management versus surgical evacuation of early pregnancy loss.

Author(s): Nadarajah, Ravichandran; Quek, Yek Song; Kuppannan, Kaliammah; Woon, Shu Yuan; Jeganathan, Ravichandran

Source: European journal of obstetrics, gynecology, and reproductive biology; Jul 2014; vol. 178 ; p. 35-41

Publication Date: Jul 2014

Publication Type(s): Randomized Controlled Trial Journal Article

Abstract: **OBJECTIVE** To show whether a clinically significant difference in success rates exists between expectant and surgical management of early pregnancy loss. **STUDY DESIGN** Randomised controlled trial comparing expectant versus surgical management of early pregnancy loss over a 1-year period from 1st January to 31st December 2009 at Sultanah Aminah Hospital, Johor Bahru. Pregnant women with missed or incomplete miscarriages at gestations up to 14 weeks were recruited in this study. The success rate in the surgical group was measured as curettage performed without any complications during or after the procedure, while the success rate in the expectant group was defined as complete spontaneous expulsion of products of conception within 6 weeks without any complication. **RESULTS** A total of 360 women were recruited and randomised to expectant or surgical management, with 180 women in each group. There was no statistically significant difference in the success rate between the groups and between the different types of miscarriage. With expectant management, 131 (74%) patients had a complete spontaneous expulsion of products of conception, of whom 106 (83%) women miscarried within 7 days. However, the rates of unplanned admissions (18.1%) and unplanned surgical evacuations (17.5%) in the expectant group were significantly higher than the rates (7.4% and 8% respectively) in the surgical group. The complications in both groups were similar.

Database: Medline

23. Vaginal misoprostol versus vaginal surgical evacuation of first trimester incomplete abortion: Comparative study

Author(s): Shokry M.; Fathalla M.; Hussien M.; Eissa A.A.

Source: Middle East Fertility Society Journal; Jun 2014; vol. 19 (no. 2); p. 96-101

Publication Date: Jun 2014

Publication Type(s): Article

Abstract:Objectives The aim of this study is to assess the effectiveness and acceptability of using vaginal misoprostol for management of first trimester spontaneous incomplete abortion as an alternative to direct vaginal surgical evacuation in our setting. Methods This is a prospective comparative study performed on 147 patients with first trimester incomplete abortion between 8 and 12 weeks requesting medical management. They were divided into two groups according to patients' choice; group (I) received misoprostol tablet 400 mcg (Cytotec, Serono) every 4 h for a maximum of three doses while group (II) underwent surgical vaginal evacuation directly under general anesthesia. Only 54 patients in group I and 51 patients in group II completed their follow up and included in the analysis. Results Although vaginal surgical evacuation was successful in solving the problem in 100% of cases, misoprostol was successful in 79.6% ($p = 0.0006$). The overall satisfaction was slightly higher in the surgical group but almost equal percentage of both groups mentioned that they will recommend the method to a friend. No serious side effects or complications were reported in the misoprostol group. The incidence of excessive post-abortive bleeding was more in the misoprostol group than in the surgical evacuation group ($p = 0.0336$). Also endometrium using transvaginal ultrasonography was significantly thicker in the misoprostol group than in group II ($p = 0.0071$) but with no clinical importance as it was not associated with severe vaginal bleeding necessitating medical or surgical interventions. Conclusion Although vaginal surgical evacuation is more effective than misoprostol in solving the problem still medical treatment is effective and acceptable especially when surgical management is not available or risky or patients refuse to do surgical management. © 2013 Production and hosting by Elsevier B.V.

Database: EMBASE

24. Expectant versus surgical management of first-trimester miscarriage: A randomised controlled study

Author(s): Al-Ma'ani W.; Solomayer E.-F.; Hammadeh M.

Source: Archives of Gynecology and Obstetrics; May 2014; vol. 289 (no. 5); p. 1011-1015

Publication Date: May 2014

Publication Type(s): Article

Available in full text at [Archives of Gynecology and Obstetrics](#) - from Springer Link Journals

Abstract:Introduction: The aim of this study is to compare the efficacy and safety of expectant management with surgical management of first-trimester miscarriage. Methods: This randomised prospective study was conducted in the Gynaecology Department at University of Saarland Hospital, Germany between February 2011 and April 2012. A total of 234 women were recruited following diagnosis of the first-trimester incomplete or missed miscarriage and randomised into two groups: 109 women were randomised to expectant management (group I), and 125 women to surgical management (group II). All women were examined clinically and sonographically during the follow-up appointments at weekly intervals for up to 4 weeks as appropriate. The outcome measures were: efficacy, short-term complications and duration of vaginal bleeding and pain. Results: Of 234 eligible women, 17 were lost to follow-up, and the remaining 217 women were analysed. The baseline characteristics were similar in both groups. The total success rate at 4 weeks was lower for expectant than for surgical management (81.4 vs 95.7 %; $P = 0.0029$). The type of miscarriage was a

significant factor affecting the success rate. For missed miscarriage, the success rates for expectant versus surgical management were 75 and 93.8 %, respectively. For women with incomplete miscarriage, the rates were 90.5 and 98 %. No differences were found in the number of emergency curettages between the two study groups. The duration of bleeding was significantly more in the expectant than the surgical management (mean 11 vs 7 days; $P < 0.0001$). The duration of pain was also more in the expectant than the surgical group (mean 8.1 vs 5.5 days; $P < 0.0001$). The total complication rates were similar in both groups (expectant 5.9 % vs surgical group 6.1 %; $P = 0.2479$). However, the pelvic infection was significantly lower in the expectant than the surgical group (1.9 vs 3.5 %, respectively; $P = 0.0146$). Conclusion: Expectant management of clinically stable women with first-trimester miscarriage is safe and effective and avoids the need for surgery and the subsequent risk of anaesthesia in about 81.4 % of cases, and has lower pelvic infection rate than surgical curettage. However, surgical management is more successful, and with a shorter duration of bleeding and pain. Therefore, the patient's preference should be considered in the counselling process. © 2013 Springer-Verlag.

Database: EMBASE

25. Pregnancy loss managed by cervical dilatation and curettage increases the risk of spontaneous preterm birth

Author(s): Mccarthy F.P.; Khashan A.S.; Rahma M.B.; O'donoghue K.; Kenny L.C.; North R.A.; Poston L.; Walker J.J.; Baker P.N.; Dekker G.; Mccowan L.M.E.

Source: Obstetrical and Gynecological Survey; Mar 2014; vol. 69 (no. 3); p. 137-138

Publication Date: Mar 2014

Publication Type(s): Note

Available in full text at [Obstetrical & gynecological survey](#). - from Ovid

Database: EMBASE

26. An alternative approach for removal of placental remnants: hysteroscopic morcellation.

Author(s): Hamerlynck, Tjalina W O; Blikkendaal, Mathijs D; Schoot, Benedictus C; Hanstede, Miriam M F; Jansen, Frank Willem

Source: Journal of minimally invasive gynecology; 2013; vol. 20 (no. 6); p. 796-802

Publication Date: 2013

Publication Type(s): Journal Article

Abstract:STUDY OBJECTIVETo evaluate our initial experience with hysteroscopic morcellation for removal of placental remnants.DESIGNRetrospective case series (Canadian Task Force classification II-3).SETTINGUniversity hospital and 2 teaching hospitals.PATIENTSWomen with histologic confirmation of placental remnants after miscarriage, termination of pregnancy, or delivery.INTERVENTIONFrom January 2005 to May 2010, hysteroscopic morcellation was used for removal of placental remnants. Retrospective review of medical records was performed.MEASUREMENTS AND MAIN RESULTSAnalysis of 105 procedures was performed. In 99 procedures (94.3%), placental remnants were removed successfully at the first approach, and 90 procedures (85.7%) were without any adverse events. In 6 patients (5.7%), uterine perforation occurred, in 4 during cervical dilation and in 2 during the hysteroscopic procedure. Postoperatively, 3 patients had fever, 1 had hemorrhage, and 1 had abdominal pain. Routine second-look hysteroscopy in 23 patients revealed mild intrauterine adhesions in 1 patient (4.4%).CONCLUSIONHysteroscopic morcellation seems to be an effective technique for management of placental remnants. Future studies comparing various surgical treatment methods are needed to define factors that influence

the ability to obtain the safest and most complete removal of placental remnants because this remains a challenging pregnancy-related condition.

Database: Medline

27. Hysteroscopic morcellator used in the diagnosis and evacuation of retained products of conception

Author(s): Tam T.; Estes S.J.

Source: Journal of Gynecologic Surgery; Dec 2013; vol. 29 (no. 6); p. 332-335

Publication Date: Dec 2013

Publication Type(s): Article

Abstract:Background: Retained products of conception (RPOC) cause patients to have many symptoms that are often confusing to diagnose and treat. Surgical intervention with dilation and curettage, or hysteroscopic resection utilizing a resectoscope, is commonly performed. Case: A 32-year-old gravida 3, para 3, presented at Penn State Milton S. Hershey Medical Center, Hershey, PA, after a failed hysteroscopic removal of an intrauterine mass at a prior institution. The patient had persistent vaginal bleeding, pelvic discomfort, and dyspareunia after an uncomplicated cesarean delivery. Results: Successful removal of the large endometrial mass was accomplished with a hysteroscopic morcellator under ultrasound guidance. Pathology revealed necrotic placental tissue and chronic endometritis. As of this writing, the patient is doing well with normal menstrual cycles. Conclusions: This is the first case to describe a hysteroscopic morcellator used to assist with the removal of retained products of conception. Hysteroscopic morcellation is a safe and effective method used to completely remove retained products of conception. (J GYNECOL SURG 29:332) © Copyright 2013, Mary Ann Liebert, Inc. 2013.

Database: EMBASE

28. Hysteroscopic removal of retained products of conception for repeat and delayed procedures

Author(s): Raykova H.

Source: Gynecological Surgery; Oct 2013; vol. 10

Publication Date: Oct 2013

Publication Type(s): Conference Abstract

Available in full text at [Gynecological Surgery](#) - from ProQuest

Available in full text at [Gynecological Surgery](#) - from Springer Link Journals

Abstract:Our study evaluates the role of operative hysteroscopy in women presenting with clinical and ultrasound evidence of retained products of conception following previous surgical management of miscarriage or postpartum. Introduction: Traditionally, retained products of conception are managed with uterine curettage. The blind nature of the procedure carries risk of uterine perforation, incomplete evacuation and need for repeat evacuation. The adhesions formation in the uterine cavity is as high as 40% with repeat evacuation. Material and Methods: We present a study of 30 women who had retained tissues either post curettage or postpartum over period of 3 years. We used the wire loop of the resectoscope to mechanically scrap the pregnancy tissues without the use of electricity unless the products are densely adherent. Results: 23 women had previous D&C after miscarriage and 7 had retained products postpartum. In 4 cases products were retained for >4 weeks. One of our patients had a bicornuate uterus. All patients did very well postoperatively and had no complications. Discussion: The hysteroscope allows excellent direct visualization of the uterine cavity and the location of the retained tissues. This helps minimising the

risk of uterine perforation and also ensuring the procedure is complete. We believe that hysteroscopic resection also reduces the risk of Asherman's syndrome.

Database: EMBASE

29. Office hysteroscopy in case with no apparent cause of recurrent miscarriage according to RCOG guidelines, is it necessary? A prospective cohort study

Author(s): Abdelmoty H.I.; Youssef A.M.; Fouda U.M.; Saleh W.F.; Ragab W.S.

Source: Fertility and Sterility; Sep 2013; vol. 100 (no. 3)

Publication Date: Sep 2013

Publication Type(s): Conference Abstract

Abstract:OBJECTIVE: To detect the prevalence of congenital and acquired uterine abnormalities in cases with no apparent cause of recurrent miscarriage according to RCOG guidelines by using office hysteroscopy. DESIGN: Prospective Cohort study. MATERIALS AND METHODS: Two hundred and twenty four patients with 2 or more consecutive pregnancy losses with no apparent cause of recurrent abortion according to RCOG guidelines (i.e. patients with no recognized medical or gynecological disorders e.g., antiphospholipid syndrome, inherited thrombophilias, thyroid dysfunction, diabetes, paternal chromosomal abnormalities, polycystic ovary syndrome, luteal phase defect, hyperprolactinaemia and with normal transvaginal ultrasonography or Hysterosalpingography studies) were enrolled into this prospective study. They underwent outpatient office hysteroscopy. RESULTS: Previously unidentified congenital and acquired uterine abnormalities were detected in 88 patients (39.29%). CONCLUSION: When presenting with recurrent pregnancy loss, office hysteroscopy offers a safe, simple, and accurate procedure that aids in the diagnosis and management of intrauterine defects that may contribute to recurring pregnancy losses. This supports its routine use in the initial assessment of such cases.

Database: EMBASE

30. Surgical versus expectant management in women with an incomplete evacuation of the uterus after treatment with misoprostol for miscarriage: The MisoREST trial

Author(s): Verschoor M.A.C.; Lemmers M.; Hajenius P.J.; van Meurs H.S.; Mol B.W.J.; Ankum W.M.; Hendriks D.J.; Huirne J.A.F.; Bossuyt P.M.; Graziosi G.C.M.; van Hooff M.A.H.; Opmeer B.C.; van Tulder M.W.; Bouwma L.; Catshoek R.; Geomini P.; Klinkert E.R.; Langenveld J.; Nieboer T.E.; van der Ploeg J.M.; Radder C.M.; Spinder T.; van der Voet L.F.

Source: BMC Pregnancy and Childbirth; May 2013; vol. 13

Publication Date: May 2013

Publication Type(s): Article

Available in full text at [BMC Pregnancy and Childbirth](#) - from BioMed Central

Available in full text at [BMC Pregnancy and Childbirth](#) - from National Library of Medicine

Available in full text at [BMC Pregnancy and Childbirth](#) - from ProQuest

Abstract:Background: Medical treatment with misoprostol is a non-invasive and inexpensive treatment option in first trimester miscarriage. However, about 30% of women treated with misoprostol have incomplete evacuation of the uterus. Despite being relatively asymptomatic in most cases, this finding often leads to additional surgical treatment (curettage). A comparison of effectiveness and cost-effectiveness of surgical management versus expectant management is lacking in women with incomplete miscarriage after misoprostol. Methods/Design: The proposed study is a multicentre randomized controlled trial that assesses the costs and effects of curettage

versus expectant management in women with incomplete evacuation of the uterus after misoprostol treatment for first trimester miscarriage. Eligible women will be randomized, after informed consent, within 24 hours after identification of incomplete evacuation of the uterus by ultrasound scanning. Women are randomly allocated to surgical or expectant management. Curettage is performed within three days after randomization. Primary outcome is the sonographic finding of an empty uterus (maximal diameter of any contents of the uterine cavity < 10 millimeters) six weeks after study entry. Secondary outcomes are patients' quality of life, surgical outcome parameters, the type and number of re-interventions during the first three months and pregnancy rates and outcome 12 months after study entry. Discussion: This trial will provide evidence for the (cost) effectiveness of surgical versus expectant management in women with incomplete evacuation of the uterus after misoprostol treatment for first trimester miscarriage. Trial registration: Dutch Trial Register: NTR3110. © 2013 Verschoor et al.; licensee BioMed Central Ltd.

Database: EMBASE

31. Recurrent pregnancy loss and office hysteroscopy

Author(s): Bastu E.; Alanya S.; Yumru H.; Ergun B.

Source: Human Reproduction; 2012; vol. 27

Publication Date: 2012

Publication Type(s): Conference Abstract

Available in full text at [Human Reproduction](#) - from Oxford University Press ; Collection notes: To access please select Login with Athens and search and select NHS England as your institution before entering your NHS OpenAthens account details.

Available in full text at [Human Reproduction](#) - from Highwire Press

Abstract: Introduction: Office hysteroscopy (OH) has become the gold standard in the evaluation of intracavitary pathologies. It has several advantages for the patient such as being a practical procedure, not requiring general anesthesia and being relatively pain free. OH is widely used in the evaluation and treatment of infertility, but lately its usage has spread in the recurrent pregnancy loss (RPL) cases as well. RPL can be defined as three miscarriages or more until the 20th week of pregnancy. In our Clinic, medical evaluation starts after two miscarriages in which fetal cardiac activity has been seen. Patients with a history of two or more RPL are scanned for thrombophilic and immunologic factors, karyotype analysis, endocrine diseases etc. When such factors are ruled out, OH is used to evaluate the patient for intracavitary pathologies. Mullerian malformations and intracavitary pathologies may occur more frequently in RPL patients. OH does not only provide a tool to evaluate intracavitary pathologies effectively, but also enable to treat some of them surgically. Studies show that OH has a positive influence on successful pregnancy rates. In this study, our aim was to analyze the evaluation and treatment efficacy of OH on successful pregnancy rates. Materials and Methods: Patients that had two or more pregnancy losses have been included in this study that did not have a previous live birth. Results of their hysterosalpingogram (HSG) and transvaginal ultrasonography of pelvis were analyzed. Then etiological analysis of thrombophilia was carried out, including scanning for protein C, protein S, antithrombin III, homocysteine, APC-R, factor V Leiden mutation, prothrombin gene mutation, immunologic assays (anticardiolipin IgG, IgM, lupus anticoagulant), karyotype, hormone profile, thyroid function and glycated hemoglobin (HbA1c). 125 patients, who were ruled out for thrombophilia, karyotype anomalies, immunologic factors, endocrine diseases, were chosen for the study. OH was performed the day after the menstrual period ended. Intracavitary pathologies were evaluated. Uterine septum, sub-septum, arcuate uterus and bicornis uterus were regarded as congenital anomalies, while polyps, adhesions, submucosal tumors were regarded as acquired anomalies. After OH, pregnancy rates of all the patients were analyzed. Results: HSG results revealed normal uterine anatomy in 69 patients

(55.2%), uterine anomalies in 56 patients (%44.8). OH results revealed normal uterine anatomy in 44 patients (35.2%), while intracavitary pathologies in 81 patients (64.8%). The most frequently seen intracavitary pathology was the uterine septum (27 patients). 17 patients with uterine septum were treated during OH. Rest of the 10 patients and the other intrauterine pathologies (four patients with endometrial polyp, two patients with Asherman syndrome, one patient with submucosal myoma) were treated with hysteroscopy under general anesthesia. Uterus arcuatus was defined as pathology. During OH, uterine fundus was minimally dissected with micro-scissors in these 47 patients. After the treatment 70 patients tried to become pregnant and 40 patients had a positive beta-hCG. Out of these 40 patients, 22 patients (55%) had an uterine anomaly treated with OH. 13 out of 22 patients (%59) had an ongoing pregnancy (>20 weeks). Out of the 40 patients, 18 (%45) had normal uterine anatomy. 12 out of 18 patients (%66) had an ongoing pregnancy. Conclusion: When HSG and OH are compared, OH has a higher sensitivity. With OH, pathologies, which cannot be identified with HSG, may be detected. Our findings also show that OH may be a vital evaluation and treatment tool in RPL patients. When pathology is detected and treated with OH, ongoing pregnancy rates show an increase. Furthermore, due to the increase in the pregnancy rate of patients with normal uterine cavity, usage of OH in such cases strengthen the hysteroscopy induced endometrium injury argument.

Database: EMBASE

32. Hysteroscopy in recurrent pregnancy losses: When to start evaluation of uterine cavity

Author(s): Seckin B.; Sarikaya E.; Sargin Oruc A.; Celen S.; Cicek N.

Source: Human Reproduction; 2012; vol. 27

Publication Date: 2012

Publication Type(s): Conference Abstract

Available in full text at [Human Reproduction](#) - from Oxford University Press ; Collection notes: To access please select Login with Athens and search and select NHS England as your institution before entering your NHS OpenAthens account details.

Available in full text at [Human Reproduction](#) - from Highwire Press

Abstract:Introduction: Assessment of hysteroscopic findings in patients with two or more miscarriages and to investigate the relationship between the frequency of uterine anomalies and the number of miscarriages. Material and Methods: Two hundred sixty-five patients with more than two consecutive miscarriages were evaluated by hysteroscopy. Patients were divided into three groups according to number of miscarriages: Group 1 (two miscarriages, n = 151), Group 2 (three miscarriages, n = 69) and Group 3 (four or more miscarriages, n = 45). Analysis of congenital (arcuate uterus, septate uterus, unicornuate uterus) and acquired uterine anomalies (intrauterine adhesions, polyp and submucosal myoma) were performed. The hysteroscopic results were compared between the groups and the distribution of the findings in relation to the previous deliveries and the patients' age was investigated. Results: One hundred fifty-two patients (57.4%) showed normal findings on hysteroscopy. Seventy-six patients (28.6%) had congenital anomalies: 43 (16.2%) had a septate uterus, 30 (11.3%) had an arcuate uterus and 3 (1.1%) had an unicornuate uterus. Thirty-seven patients (14.0%) had acquired anomalies: 18 (6.8%) had intrauterine adhesions, 17 (6.4%) had endometrial polyps and 2 (0.8%) had submucousal myoma. No significant differences were found between the groups with regard to both congenital and acquired uterine anomalies. The distribution of anomalies did not differ according to the history of previous delivery and age. Conclusions: The frequency and distribution uterine anomalies are similar in patients with two or more consecutive miscarriages. Diagnostic hysteroscopy can be recommended after two miscarriages.

Database: EMBASE

33. Office hysteroscopic findings in patients with two, three, and four or more, consecutive miscarriages

Author(s): Seckin B.; Sarikaya E.; Oruc A.S.; Celen S.; Cicek N.

Source: European Journal of Contraception and Reproductive Health Care; Oct 2012; vol. 17 (no. 5); p. 393-398

Publication Date: Oct 2012

Publication Type(s): Article

Abstract: Objectives To assess hysteroscopic findings in patients with two, three, and four or more, consecutive miscarriages, and to compare the prevalence of uterine abnormalities between women with different numbers of such miscarriages. Methods Two hundred and sixty-five women with two or more consecutive miscarriages were enrolled in the study. Patients were divided into three groups according to the number of their miscarriages: Group 1 (two miscarriages, n 151), Group 2 (three miscarriages, n 69), and Group 3 (four or more miscarriages, n 45). All participants underwent a diagnostic hysteroscopy. Congenital (arcuate uterus, septate uterus, unicornuate uterus) and acquired uterine abnormalities (intrauterine adhesions, polyp and submucous myoma) were recorded. The hysteroscopic results were compared between the groups. Results No anomalies were detected in 152 patients (57%), whereas 43 (16%) had a septate uterus, 30 (11%) an arcuate uterus, three (1%) a unicornuate uterus, 18 (7%) intrauterine adhesions, 17 (6 %) endometrial polyps, and two (1%) a submucous myoma. No significant differences were found between the groups with regard to either congenital or acquired uterine abnormalities. Conclusions Patients with two, three, and four or more consecutive miscarriages have a similar prevalence of uterine anatomical abnormalities. Diagnostic hysteroscopy should be carried out after two such miscarriages. © 2012 The European Society of Contraception and Reproductive Health.

Database: EMBASE

34. Expectant care versus surgical treatment for miscarriage.

Author(s): Nanda, Kavita; Lopez, Lauren M; Grimes, David A; Peloggia, Alessandra; Nanda, Geeta

Source: The Cochrane database of systematic reviews; Mar 2012 (no. 3); p. CD003518

Publication Date: Mar 2012

Publication Type(s): Meta-analysis Research Support, U.s. Gov't, Non-p.h.s. Journal Article Review

Available in full text at [Cochrane Library, The](#) - from John Wiley and Sons

Abstract: BACKGROUND Miscarriage is a common complication of early pregnancy that can have both medical and psychological consequences such as depression and anxiety. The need for routine surgical evacuation with miscarriage has been questioned because of potential complications such as cervical trauma, uterine perforation, hemorrhage, or infection. OBJECTIVE To compare the safety and effectiveness of expectant management versus surgical treatment for early pregnancy failure. SEARCH METHODS We searched the Cochrane Pregnancy and Childbirth Group's Trials Register (9 February 2012), the Cochrane Central Register of Controlled Trials (The Cochrane Library 2011, Issue 4 of 4), PubMed (2005 to 11 January 2012), POPLINE (inception to 11 January 2012), LILACS (2005 to 11 January 2012) and reference lists of retrieved studies. SELECTION CRITERIA Randomized trials comparing expectant care and surgical treatment (vacuum aspiration or dilation and curettage) for miscarriage were eligible for inclusion. DATA COLLECTION AND ANALYSIS Two review authors assessed trial quality and extracted data. We contacted study authors for additional information. For dichotomous data, we calculated the Mantel-Haenszel risk ratio (RR) with 95% confidence interval (CI). For continuous data, we computed the mean difference (MD) and

95% CI. We entered additional data such as medians into 'Other data' tables. **MAIN RESULTS** We included seven trials with 1521 participants in this review. The expectant-care group was more likely to have an incomplete miscarriage by two weeks (RR 3.98; 95% CI 2.94 to 5.38) or by six to eight weeks (RR 2.56; 95% CI 1.15 to 5.69). The need for unplanned surgical treatment was greater for the expectant-care group (RR 7.35; 95% CI 5.04 to 10.72). The mean percentage needing surgical management in the expectant-care group was 28%, while 4% of the surgical-treatment group needed additional surgery. The expectant-care group had more days of bleeding (MD 1.59; 95% CI 0.74 to 2.45). Further, more of the expectant-care group needed transfusion (RR 6.45; 95% CI 1.21 to 34.42). The mean percentage needing blood transfusion was 1.4% for expectant care compared with none for surgical management. Results were mixed for pain. Diagnosis of infection was similar for the two groups (RR 0.63; 95% CI 0.36 to 1.12), as were results for various psychological outcomes. Pregnancy data were limited. Costs were lower for the expectant-care group (MD -499.10; 95% CI -613.04 to -385.16; in UK pounds sterling). **AUTHORS' CONCLUSION** Expectant management led to a higher risk of incomplete miscarriage, need for unplanned (or additional) surgical emptying of the uterus, bleeding and need for transfusion. Risk of infection and psychological outcomes were similar for both groups. Costs were lower for expectant management. Given the lack of clear superiority of either approach, the woman's preference should be important in decision making. Pharmacological ('medical') management has added choices for women and their clinicians and has been examined in other reviews.

Database: Medline

35. Comparison of manual vacuum aspiration, and dilatation and curettage in the treatment of early pregnancy failure

Author(s): Farooq F.; Javed L.; Mumtaz A.; Naveed N.

Source: Journal of Ayub Medical College, Abbottabad : JAMC; 2011; vol. 23 (no. 3); p. 28-31

Publication Date: 2011

Publication Type(s): Article

Abstract: To compare the efficacy, safety and cost effectiveness of Manual Vacuum Aspiration (MVA) with dilatation and curettage (DNC) in the management of early pregnancy failure. One hundred patients of spontaneous abortion, incomplete or missed, with gestational age <12 weeks were included in the study. Using a Random Number Table, these patients were assigned to undergo either DNC or MVA. The distribution of age, parity and gestational age was similar in both groups. The mean duration of procedure was significantly higher ($p < 0.0001$) in DNC (8.98 +/- 2.64 minutes) as compared to 5.88 +/- 2.43 minutes in MVA. The duration of hospital stay was significantly lower ($p < 0.0001$) in MVA group (3.48 +/- 1.2 hours) as compared to 7.42 +/- 1.93 minutes in DNC group. Similarly the cost of procedure was also significantly lower ($p = 0.0001$) in MVA group (PKR 1410 +/- 243.4) compared to PKR 3460 +/- 908.24 in DNC group. MVA is as effective as conventional dilatation and curettage for treatment of early pregnancy failure while it causes less blood loss, is less time consuming, requires a shorter hospital stay and thus costs less. It does not require general anaesthesia and complication rate is less than dilatation and curettage.

Database: EMBASE

36. Post-abortion hysteroscopy: a method for early diagnosis of congenital and acquired intrauterine causes of abortions.

Author(s): Cogendez, Ebru; Dolgun, Zehra Nihal; Sanverdi, Ilhan; Turgut, Abdulkadir; Eren, Sadiye

Source: European journal of obstetrics, gynecology, and reproductive biology; May 2011; vol. 156 (no. 1); p. 101-104

Publication Date: May 2011

Publication Type(s): Comparative Study Journal Article

Abstract:OBJECTIVE Recurrent pregnancy loss is often defined as three or more consecutive pregnancy losses but there are no strict criteria for initiation of investigations after a miscarriage. We compared the frequency of uterine anomalies diagnosed by hysteroscopy following one, two and three or more miscarriages. STUDY DESIGN In our study 151 patients underwent diagnostic hysteroscopy following a missed or an incomplete abortion. Uterine septum, subseptum, arcuate uterus, and uterine hypoplasia are classified as congenital uterine anomalies and polyps, synechia, and submucous myomas are classified as acquired uterine abnormalities. RESULTS 151 Patients were enrolled in the study. The pregnancy numbers of the patients varied between 1 and 12. Sixty nine (46%) of the patients had one miscarriage, 42 (28%) had two miscarriages and 40 (26%) had three or more miscarriages. Diagnostic hysteroscopy revealed normal uterine cavity in 61.1% of the patients, congenital uterine anomalies in 20.4% and acquired uterine pathologies in 18.5%. Among the congenital anomalies, 14 (9.3%) were uterine septum, 10 (6.6%) were subseptate uterus, 4 (2.6%) were arcuate uterus and 3 (1.9%) were uterine hypoplasia. Among acquired abnormalities 14 (9.3%) were uterine synechia, 12 (7.9%) were endometrial polyps, and 2 (1.3%) were submucous myoma. Among patients who had one miscarriage 64.1% had a normal uterine cavity, 18.2% had congenital abnormalities and 17.7% had acquired uterine pathologies. Of patients with two miscarriages, 52% had a normal uterine cavity, 21.9% had congenital anomalies and 26.1% had acquired uterine pathology. In the three or more miscarriage group, 58.4% had normal uterine cavity, 25.3% had congenital anomalies, and 16.3% had acquired uterine pathology. We did not find any statistically significant difference between the number of miscarriages and pathologic diagnostic hysteroscopy findings. CONCLUSIONS Post-abortion office hysteroscopy is a simple and efficient tool in the early diagnosis of congenital and acquired uterine pathologies. Diagnostic hysteroscopy can be performed after the first miscarriage in order to determine congenital and acquired uterine pathologies, with regard to the patient's age and anxiety level.

Database: Medline

37. The role of hysteroscopy in the investigation and management of patients with recurrent miscarriage

Author(s): McCauley M.; Hunter D.; Benson G.

Source: Irish Journal of Medical Science; Apr 2011; vol. 180

Publication Date: Apr 2011

Publication Type(s): Conference Abstract

Available in full text at [Irish Journal of Medical Science](#) - from Springer Link Journals

Abstract: A prospective study of a population with a diagnosis of recurrent miscarriage was conducted to determine the investigations, managements and outcomes of patients with normal and abnormal uteri. All patients presenting with three or more consecutive pregnancy losses were offered screening with serum investigations and hysteroscopy. Those taking up hysteroscopy were included in the study. 40 patients were identified with a mean age of 36 years. The mean number of miscarriages was four. 93% tolerated hysteroscopy without anaesthesia, but 3/40 (7%) required general anaesthesia to complete the procedure. One patient had a unicornuate uterus. Three others had uterine septa extending to greater than 1/3 length of the cavity. All three elected to have treatment by septa resection and also received aspirin, folate and clexane. Two of these patients have subsequently delivered (twice each by Caesarean section) and the third is currently 10 weeks pregnant. In the group with normal uteri, 30/36 (83%) became pregnant and were treated with aspirin, folate and clexane. The positive outcome rate in this group was 90% (27/30). Hysteroscopy without general anaesthetic is a well tolerated procedure that should be included in the investigative pathway for patients with recurrent miscarriage. In this study 4/40 (10%) patients had an identified uterine abnormality of which three had their abnormality corrected with hysteroscopic resection. All subsequently became pregnant.

Database: EMBASE

38. "See and treat" hysteroscopy after missed abortion.

Author(s): Kuzel, David; Horak, Petr; Hrazdirova, Lucie; Kubinova, Kristyna; Sosna, Ondrej; Mara, Michal

Source: Minimally invasive therapy & allied technologies : MITAT : official journal of the Society for Minimally Invasive Therapy; Jan 2011; vol. 20 (no. 1); p. 14-17

Publication Date: Jan 2011

Publication Type(s): Research Support, Non-u.s. Gov't Journal Article

Abstract: A prospective study was conducted on the incidence of intrauterine pathology after missed abortion diagnosed and treated by hysteroscopy. A hysteroscopy was performed in 100 women four to 12 weeks after a dilatation and curettage for missed abortions. Uterine malformations were found in 12 patients, intrauterine adhesions in seven and submucous myoma in two cases. As a side finding four cases of asymptomatic retained products of conception were found. Most cases of the intrauterine pathology were treated instantly by hysteroscopy, "see and treat" regimen was preferred. Post-missed abortion-hysteroscopy is a simple and useful method for early diagnosis and treatment of congenital and acquired intrauterine pathology.

Database: Medline

39. The use of a hysteroscopic resectoscope for repeat evacuation of retained products of conception procedures: A case series

Author(s): Nicopoullos J.D.M.; Treharne A.; Raza A.; Richardson R.

Source: Gynecological Surgery; May 2010; vol. 7 (no. 2); p. 163-166

Publication Date: May 2010

Publication Type(s): Article

Available in full text at [Gynecological Surgery](#) - from ProQuest

Available in full text at [Gynecological Surgery](#) - from Springer Link Journals

Abstract:The blind nature of the surgical management of retained products of conception allows for a significant risk of uterine perforation or the need for repeat evacuation and subsequent morbidity due to a failed procedure. These risks may be increased postpartum or at a repeat surgical procedure. We present a case series of five patients with clinical, sonographic, or histological diagnosis of retained products of conception following either failed surgical evacuation or postpartum. All were treated surgically without complication using the loop of a saline hysteroscopic resectoscope to allow removal under direct vision of retained tissue. © Springer-Verlag 2010.

Database: EMBASE

Strategy 217700

#	Database	Search term	Results
1	Medline	(hysteroscop*).ti,ab	5767
2	Medline	exp HYSTEROSCOPY/	4166
3	Medline	(1 OR 2)	6681
4	Medline	(miscarriage*).ti,ab	10606
5	Medline	exp "ABORTION, INCOMPLETE"/ OR exp "ABORTION, SPONTANEOUS"/	35670
6	Medline	(4 OR 5)	41455
7	Medline	(3 AND 6)	394
8	EMBASE	exp HYSTEROSCOPY/	10060
9	EMBASE	(hysteroscop*).ti	5163
10	EMBASE	(8 OR 9)	10780
11	EMBASE	(miscarriage*).ti,ab	17809
12	EMBASE	exp "SPONTANEOUS ABORTION"/	35300
13	EMBASE	(11 OR 12)	39925
14	EMBASE	(10 AND 13)	676
15	EMBASE	*"SPONTANEOUS ABORTION"/	11247
16	EMBASE	*HYSTEROSCOPY/	4191
17	EMBASE	(15 AND 16)	26
18	EMBASE	(13 AND 16)	196

19	EMBASE	18 [DT FROM 2011] [English language]	102
20	EMBASE	("Evacuation of Retained Products of Conception" OR ERPC).ti,ab	181
21	EMBASE	(16 AND 20)	4
22	Medline	("Evacuation of Retained Products of Conception" OR ERPC).ti,ab	114
23	Medline	(3 AND 22)	4
24	EMBASE	(8 AND 20)	10
25	EMBASE	**"SPONTANEOUS ABORTION"/su	179
26	Medline	exp "ABORTION, INCOMPLETE"/su	118
27	PubMed	(miscarriage OR "pregnancy loss" OR "spontaneous abortion*").ti,ab	43986
28	PubMed	(hysteroscop*).ti,ab	6852
30	PubMed	("Evacuation of Retained Products of Conception" OR ERPC).ti,ab	164
31	PubMed	(27 OR 30)	44098
32	PubMed	(28 AND 31)	504
33	EMBASE	("evacuation of products").ti,ab	16
35	EMBASE	(16 AND 33)	2
36	EMBASE	("incomplete evacuation").ti,ab	598
37	EMBASE	(8 AND 36)	5

38	Medline	("evacuation of products").ti,ab	5
39	Medline	("incomplete evacuation").ti,ab	342
40	Medline	(38 OR 39)	347
41	Medline	(3 AND 40)	2