

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

Angelo B. Hooker, M.D.,^{a,b} Humeyra Aydin, M.D.,^b Hans A. M. Brölmann, M.D., Ph.D.,^b and Judith A. F. Huirne, M.D., Ph.D.^b

^a Department of Obstetrics and Gynaecology, Zaans Medisch Centrum, Zaandam; and ^b Department of Obstetrics and Gynaecology, VU University Medical Center, Amsterdam, the Netherlands

Objective: To examine the long-term complications and reproductive outcomes after the management of retained products of conception (RPOC).

Design: Systematic review.

Setting: Not 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 (IUAs) 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. (Fertil Steril® 2016;105:156–64. ©2016 by American Society for Reproductive Medicine.)

Key Words: Retained products of conception, management, long-term complications, intrauterine adhesions, reproductive outcome

Discuss: You can discuss this article with its authors and with other ASRM members at <http://fertstertforum.com/hookera-long-term-outcome-rpoc/>



Use your smartphone to scan this QR code and connect to the discussion forum for this article now.*

* Download a free QR code scanner by searching for "QR scanner" in your smartphone's app store or app marketplace.

Retained products of conception (RPOC) are estimated to complicate approximately 1% of term pregnancies and are probably more common after miscarriage or termination of pregnancy (TOP) (1–4).

Diagnosing RPOC remains a major clinical challenge (5). The existence of RPOC may be suspected based on clinical signs and ultrasound findings, such as the presence of abnormal bleeding, abdominal pain and/or

fever, a persisting dilated cervix, and sonographic appearance of residual placental or fetal tissue in the uterine cavity or cervical canal (1, 6).

The management of women suspected of RPOC is challenging because there are no clearly defined diagnostic criteria, evidence-based guidelines, or treatment protocols, but obtaining an accurate diagnosis is necessary (7). Removal of RPOC is advised to stop bleeding, avoid or eliminate infection, and prevent serious long-term complications, such as intrauterine adhesions

Received June 8, 2015; revised and accepted September 15, 2015; published online October 9, 2015. A.B.H. has nothing to disclose. H.A. has nothing to disclose. H.A.M.B. has nothing to disclose. J.A.F.H. has nothing to disclose.

Reprint requests: Angelo B. Hooker, M.D., Zaans Medical Center, Department of Obstetrics and Gynaecology, Koningin Julianaplein 58, P.O. Box 210, 1500 EE Zaandam, the Netherlands (E-mail: hooker.a@zaansmc.nl).

Fertility and Sterility® Vol. 105, No. 1, January 2016 0015-0282/\$36.00
Copyright ©2016 American Society for Reproductive Medicine, Published by Elsevier Inc.
<http://dx.doi.org/10.1016/j.fertnstert.2015.09.021>

(IUAs) and infertility (1, 8). RPOC are histologically confirmed in only 50%–88% of suspected cases (9–14).

Joseph Asherman described the etiology, frequency, and symptoms of IUAs in 1948, which have since then been known as the Asherman syndrome (15). The terms “IUAs” and “Asherman syndrome” are often used interchangeably, although the syndrome requires signs and symptoms (16). IUAs are thought to develop after trauma to the uterine cavity by destruction of the basal layer, the regenerative reservoir of the endometrium (17–19). In the healing process, there may be fusion between the injured opposing endometrial or myometrial layers and, as a consequence, partial or complete obliteration of the uterine cavity (18, 19).

IUAs can cause menstrual disturbances and infertility, while pregnancy is frequently complicated by miscarriage, ectopic pregnancy, abnormal placentation, fetal growth restriction, fetal anomalies, premature labor and delivery, and postpartum hemorrhage (19–22). Estimates of the incidence of IUAs after surgical treatment for RPOC are limited in number, are complicated by the frequent lack of symptoms, and have yielded varying results.

The most widely used treatment method for RPOC is dilation and sharp, blunt, or suction curettage (D&C), although medical treatment with misoprostol is increasingly being applied. Hysteroscopic resection or evacuation (HR) has emerged as a surgical alternative; retained tissue can be selectively evacuated under vision by loop resection or morcellation (23). Both HR and D&C are safe procedures that have a low rate of short-term complications (6, 10, 13, 24).

We conducted a systematic review to determine the prevalence of IUAs and reproductive outcomes after medical or surgical management in women with suspected RPOC, independent of the pregnancy term.

MATERIALS AND METHODS

This systematic review was conducted in accordance with the Preferred Reporting Items for Systematic Reviews and Meta-Analyses guidelines. Institutional Review Board approval was not obtained; all data were extracted from previously published data.

Search Strategy

We searched the literature for published articles reporting long-term complications, IUAs, and/or reproductive outcome in women with suspected and surgical or medically treated RPOC. The following terms were used in the title or abstract: “retained placenta”, “retained trophoblastic tissue”, “placenta remnant”, “curettage”, “hysteroscopy”, “uterine endoscopy”, “hysteroscopic surgical procedure”, “operative hysteroscopy”, “medical therapy”, “medical management”, and “misoprostol”. The search terms were modified according to the database requirements.

The following electronic databases were searched: MEDLINE (1966 to June 2015), EMBASE (1974 to June 2015), and Cochrane Central Register of Controlled Trials. The reference list of the included studies was also hand searched for additional relevant studies.

Selection Procedure

Studies reporting the prevalence of IUAs and/or reproductive outcome in women suspected and treated for RPOC were considered for inclusion. Original articles had to be published as full papers in peer-reviewed journals; only articles written in English were included. Abstracts of conference presentations or dissertations, unpublished data, case reports, and case series with fewer than 10 participants were not considered for inclusion.

Two authors (A.B.H. and H.A.) independently selected the studies in a two-stage process. First, eligibility was assessed on the basis of the title and abstract. In the second step, examination of the full manuscript was performed to determine study eligibility. We attempted to contact authors when additional information was needed. For publications on the same cohort, only the most up-to-date, complete study with relevant data was included in this review.

Eligibility Criteria and Outcome Measures

RPOC describes residual trophoblastic tissue after miscarriage or TOP in the first and second trimesters or after delivery. Studies that consecutively included women after management for RPOC were considered for inclusion. Only studies in which at least half of a defined cohort of women who had undergone medical treatment with misoprostol or surgical treatment (HR or D&C) for RPOC and were subsequently evaluated hysteroscopically for IUAs, regardless of the presence of symptoms, were included in the assessment of the primary outcome.

The primary outcome was the prevalence, degree, and extent of IUAs. Hysteroscopic evaluation for the presence of IUAs was obligatory for the assessment of the primary outcome. Because of the high frequency of false-positive and diagnostic errors, hysterosalpingography, ultrasonography, and sonohysterography are less suitable for accurate detection of IUAs (21, 24, 25). For the reproductive outcomes, all studies reporting on the reproductive outcome (time to conception, conception rate, ongoing pregnancy/live-birth rate, and miscarriage rate) that consecutively included women, independent of the symptoms or performance of second-look hysteroscopy, were included.

We included women after spontaneous or medically treated miscarriages and after TOP, women after an incomplete D&C for miscarriage or TOP, and women suspected of RPOC undergoing medical or surgical intervention after delivery. Women undergoing manual placental removal immediately after labor were excluded.

Data Extraction

The following information was extracted from the included articles: publication year; study design; inclusion and exclusion criteria; women’s characteristics; indication for treatment; pregnancy preceding RPOC; interval to applied therapy; treatment received; immediate complications; rate, degree, and extent of IUAs; other intrauterine abnormalities recorded during hysteroscopy; duration and loss to follow-up; and number of included women at each stage.

Download English Version:

<https://daneshyari.com/en/article/6178589>

Download Persian Version:

<https://daneshyari.com/article/6178589>

[Daneshyari.com](https://daneshyari.com)