Date: 2 January 2018
Sources: Medline, Embase.

Postplacental Intrauterine Device Insertion after Caesarean Section

See full search strategy

1. Society of Family Planning Guidelines: Postplacental insertion of intrauterine devices.

Author(s): Whitaker, Amy K; Chen, Beatrice A

Source: Contraception; Jan 2018; vol. 97 (no. 1); p. 2-13

Publication Date: Jan 2018

Publication Type(s): Journal Article Review

PubMedID: 28987293

URL: http://www.contraceptionjournal.org/article/S0010-7824(17)30473-0/pdf

Abstract: Postplacental intrauterine device (IUD) placement, defined as IUD placement within 10 min after delivery of the placenta, is an appealing strategy for increasing access to postpartum IUDs because it does not require a separate postpartum visit. These guidelines present an evidence-based assessment of postplacental IUD placement after vaginal and cesarean delivery. Postplacental IUD insertion is safe and does not have higher risks of complications than interval insertion. Most studies find that the risk of IUD expulsion is higher after postplacental insertion than after interval insertion for both vaginal and cesarean deliveries. Most studies find higher rates of expulsion after vaginal delivery than after cesarean delivery. However, expulsion rates vary widely across studies, without clear evidence about the factors that may influence expulsion. In settings where replacement of expelled IUDs is available, patient populations with low rates of return for the postpartum visit are most likely to benefit from provision of postplacental IUD placement with appropriate counseling about risks and benefits.

Database: Medline

2. Insertion of intrauterine devices after cesarean section: a systematic review update.

Author(s): Goldstuck, Norman D; Steyn, Petrus S

Source: International journal of women's health; 2017; vol. 9 ; p. 205-212

Publication Date: 2017

Publication Type(s): Journal Article Review

PubMedID: 28458581

Available at International journal of women's health - from Europe PubMed Central - Open Access

Available at International journal of women's health - from Free Medical Journals . com

Abstract:BACKGROUNDWomen who undergo a cesarean section (CS) are in a unique position to receive the intrauterine contraceptive device (IUD). They may also want to use the IUD as a long-acting reversible contraceptive method provided the IUD is safe and effective in the presence of a CS scar.SEARCH STRATEGYWe researched and reviewed the MEDLINE, POPLINE, Google Scholar, and ClinicalTrials.gov databases from January 1968 to June 2015.SELECTION CRITERIAEligible studies reported event rates or practical problems relating to IUD usage in post-placental or interval insertion (>90 days) after CS. Studies with ≥20 subjects were included.DATA COLLECTION AND ANALYSISAnalysis of eligible data collected from the search followed the PRISMA guidelines.MAIN RESULTSTwelve eligible studies of post-placental IUD insertion after CS included four randomized controlled trials of post-placental versus delayed insertion. Women randomized to delayed insertion were less likely to receive a device. Six studies examined the problem of missing IUD threads at follow-up with only 30%-60% presence of strings observed.CONCLUSIONThe IUD is a long-acting reversible contraceptive method that is suitable for use in all women undergoing CS. The problems of device expulsion, missing threads at follow-up, and the tendency of increased puerperal bleeding need to be solved. Solutions are proposed.

Database: Medline

3. Six-week retention after postplacental copper intrauterine device placement

Author(s): Colwill A.C.; Schreiber C.A.; Sammel M.D.; Sonalkar S.

Source: Contraception; 2017

Publication Date: 2017

Publication Type(s): Article In Press

Abstract: Objectives: We sought to evaluate the 6-week clinical outcomes (intrauterine device [IUD] retention, recognized expulsions, ability to visualize or palpate strings, and need for ultrasound evaluation) in women who received a TCu380A postplacental IUD (PPIUD) after vaginal (VD) or cesarean delivery (CD). Study design: We conducted a retrospective cohort study to examine the 6-week retention of TCu380A IUDs placed within 10 min of placental delivery in VD (n=137) and CD (n=73). We used Student's t test and Wilcoxon rank sum tests for continuous data and Pearson chi 2 test and Fisher's Exact Test for categorical data. Results: Of the 169 women who had follow-up, 151 (89.3%) retained their IUD at 6 weeks (95% CI 84.7%-93.9%). All women who underwent CD retained their IUD at 6 weeks postpartum (56/56), whereas 95/113 (84% [95% CI 76.0%-90.3%]) who underwent VD retained their original IUD (p

Database: EMBASE

4. Effect of fixation suture of the intrauterine contraceptive device at cesarean section on the continuity of trans-cesarean post-partum contraception

Author(s): Ariadi; Aulia A.

Source: Research Journal of Obstetrics and Gynecology; 2017; vol. 10 (no. 2); p. 17-21

Publication Date: 2017

Publication Type(s): Article

Available at Research Journal of Obstetrics and Gynecology - from Free Medical Journals . com

Abstract: Background and Objective: The intrauterine device (IUD) is one of the safe and effective methods for long-term temporary contraceptive. Unfortunately, IUD also has a risk of expulsion. This study aims to observe the expulsion rate of intrauterine contraceptive device (IUD) which was inserted with sutured and non-sutured models on trans-cesarean section procedure and their effects on the continuity of trans-cesarean post-partum contraception. Methodology: This is an experimental study with the method of post-test control group design to determine the differences of expulsion rate between sutured and non-sutured models of trans-cesarean IUD insertion conducted at Dr. M. Djamil General Hospital in Padang, Dr. Reksodiwiryo Military Hospital in Padang and Painan District Hospital. The results of this study were analyzed using the Fisher's exact test in the SPSS program version 15 (IBM Inc.) and the p-value Copyright © 2017 Ariadi et al.

Database: EMBASE

5. Visibility of Strings After Postplacental Intracesarean Insertion of CuT380A and Cu375 Intrauterine Contraceptive Device: A Randomized Comparative Study

Author(s): Agarwal K.; Dewan R.; Mittal P.; Aggarwal A.

Source: Journal of Obstetrics and Gynecology of India; Oct 2017; vol. 67 (no. 5); p. 324-329

Publication Date: Oct 2017

Publication Type(s): Article

Available at Journal of Obstetrics and Gynecology of India - from SpringerLink

Abstract: Objectives: To compare the incidence of visible strings after postplacental intracesarean insertion of Cu375 and CuT380A intrauterine contraceptive devices (IUD). Methods: This was a prospective, randomized comparative study. A total of 100 women fulfilling the inclusion and exclusion criteria underwent postplacental intracesarean insertion of either Cu375 IUD or CuT380A IUD. Women were followed up at 1, 6 weeks and 3 months after IUD insertion and were questioned about IUD expulsion or removal at each visit. The cervix was inspected to visualize the IUD strings. Data were analyzed by Chi-square test. Results: At 6-week follow-up, 97.9% women in group A versus 41.7% women in group B had strings visible at the cervical os and at 3 months 100% women in group A versus only 47.9% women in group B (p Copyright © 2017, Federation of Obstetric & Gynecological Societies of India.

Database: EMBASE

6. Routine provision of intrauterine contraception at elective cesarean section in a national public health service: a service evaluation.

Author(s): Heller, Rebecca; Johnstone, Anne; Cameron, Sharon T

Source: Acta obstetricia et gynecologica Scandinavica; Sep 2017; vol. 96 (no. 9); p. 1144-1151

Publication Date: Sep 2017

Publication Type(s): Journal Article

PubMedID: 28590560

Abstract:INTRODUCTIONWe conducted a prospective health service evaluation to assess the feasibility and acceptability of routinely offering insertion of intrauterine contraception at cesarean section in a maternity setting in the UK.MATERIAL AND METHODSOne month before scheduled cesarean section, women were sent information about postpartum contraception including the option of insertion of an intrauterine contraception at cesarean. Women choosing intrauterine contraception (copper intrauterine device or levonorgestrel intrauterine system) were followed up in person at six weeks, and telephone contact was made at three, six and 12 months postpartum. Our main outcome measures were uptake of intrauterine contraception and complications by six weeks. Secondary outcomes were continuation and satisfaction with intrauterine contraception at 12 months.RESULTS120/877 women opted to have intrauterine contraception (13.7%), of which 114 were fitted. By six weeks, there were seven expulsions (6.1%). The expulsion rate by one year was 8.8%. There were no cases of uterine perforations and one case of infection (0.8%). Follow-up rates were 82.5% at 12 months, and continuation rates with intrauterine contraception at 12 months were 84.8% of those contacted. At 12 months, 92.7% of respondents asked were either 'very' or 'fairly' happy with their intrauterine contraception.CONCLUSIONSRoutine provision of intrauterine contraception at elective cesarean for women in a public maternity service is feasible and acceptable to women. It is associated with good uptake and good continuation rates for the first year. This could be an important strategy to increase use of intrauterine contraception and prevent short inter-pregnancy intervals and unintended pregnancies.

Database: Medline

7. Immediate postpartum intrauterine device and implant program outcomes: a prospective analysis.

Author(s): Eggebroten, Jennifer L; Sanders, Jessica N; Turok, David K

Source: American journal of obstetrics and gynecology; Jul 2017; vol. 217 (no. 1); p. 51

Publication Date: Jul 2017

Publication Type(s): Journal Article

PubMedID: 28342716

Abstract:BACKGROUNDIn-hospital placement of intrauterine devices and contraceptive implants following vaginal and cesarean delivery is increasingly popular and responds to maternal motivation for highly effective postpartum contraception. Immediate postpartum intrauterine device insertion is associated with higher expulsion than interval placement, but emerging evidence suggests that the levonorgestrel intrauterine device may have a higher expulsion rate than the copper intrauterine device.OBJECTIVEThis study evaluated in-hospital provision, expulsion, and 6-month continuation of immediate postpartum copper T380 intrauterine devices, levonorgestrel intrauterine devices, and contraceptive implants.STUDY DESIGNWe offered enrollment in this prospective observational trial to women presenting to the University of Utah labor and delivery unit from October 2013 through February 2016 who requested an intrauterine device or implant for postpartum contraception during prenatal care or hospitalization at the time of delivery. Following informed consent, participants completed questionnaires prior to hospital discharge and at 3 and 6 months postpartum. Data on expulsions at 6 months were validated by chart abstraction.RESULTSDuring the study period, 639 patients requested a postpartum intrauterine device or implant and 350 patients enrolled in prospective follow-up prior to discharge from the hospital. Among enrollees, 325 (93%) received their preferred contraceptive device prior to hospital discharge: 88 (27%) copper intrauterine device users, 123 (38%) levonorgestrel intrauterine device users, and 114 (35%) implant users. Participants predominantly were Hispanic (90%), were multiparous (87%), reported a household income 8 of 10 women initiating an intrauterine device or implant continue use at 6 months postpartum.

Database: Medline

8. Non-visualisation of strings after postplacental insertion of Copper-T 380A intrauterine device

Author(s): Dewan R.; Bharti R.; Kaim M.; Dewan A.; Singal S.

Source: Journal of Family Planning and Reproductive Health Care; Jul 2017; vol. 43 (no. 3); p. 186-194

Publication Date: Jul 2017

Publication Type(s): Article

Abstract: Aim: To assess the incidence of visible strings of intrauterine contraceptive devices (IUDs) after postplacental insertion following vaginal or caesarean delivery and to establish a management protocol of follow-up visits when strings are not visualised. Methods: This was a prospective study of a cohort of 348 women who underwent postplacental insertion of Copper-T 380A IUDs following vaginal or caesarean delivery, conducted at a hospital in New Delhi, India. Women were followed up at 6 weeks, 3, 6 and 12 months after IUD insertion and were questioned about IUD expulsion or removal at each visit. The cervix was inspected to visualise the IUD strings. All women whose IUD strings could not be visualised at the cervical os at any given follow-up were identified. We analysed the cumulative incidence of visible strings and of procedures performed to locate the IUD when strings were not visible. Results: At 1 year follow-up, the IUD was in situ in 313/348 (89.9%) women. There were eight (2.3%) expulsions and 15 (4.3%) IUD removals. Among women with IUDs in situ, the strings were not visible in 73 (21%) cases. Pelvic ultrasound confirmed intrauterine position of the IUDs in these cases. At 1 year, string visibility was significantly lower after intra-caesarean insertions as compared to vaginal insertions (72.4% vs 98.1%; p

Database: EMBASE

9. Intra-cesarean insertion and fixation of frameless intrauterine devices.

Author(s): Karateke, Ateş; Turgut, Abdulkadir; Özdamar, Özkan; Wildemeersch, Dirk

Source: Turkish journal of obstetrics and gynecology; Mar 2017; vol. 14 (no. 1); p. 64-66

Publication Date: Mar 2017

Publication Type(s): Journal Article Review

PubMedID: 28913137

Abstract: Various contraceptive methods are available to postpartum women including hormonal and nonhormonal barriers, as well as injectable forms. Of all the available birth control methods, intrauterine devices (IUD) are felt by many to be the near-ideal form of contraception, and are recommended by advocacy groups, physicians, and gynecological organizations worldwide. Immediate postpartum IUD insertion deserves greater attention because it can provide immediate contraception, prevents repeat unintended pregnancies, and may serve to reduce the incidence or need for secondary cesarean delivery; however, insertion of conventional T-shape IUDs immediately post placenta delivery is limited by their high expulsion and displacement rates. Anchoring of frameless-design IUDs that lack conventional cross-arms to the uterine fundal surfaces has been medically and commercially available throughout Europe for many years. The placement technique is simple, has minimal patient discomfort, and high long-term patient acceptance due to its high degree of uterine compatibility as a consequence of its small size and segmented design. Frameless-design IUD implantation appears to represent a major advance, suitable for general use, due to its lack of timing restraints and its simplicity of attachment, which only requires limited training.

Database: Medline

10. A comparative study of manual vs instrumental intracesarean postpartum intrauterine contraceptive device

Author(s): Chakheni N.; Kaur P.; Kaur K.; Singh B.; Mohi M.K.

Source: Journal of SAFOG; Mar 2017; vol. 9 (no. 1); p. 25-28

Publication Date: Mar 2017

Publication Type(s): Article

Abstract: Aims and objectives: The main objective of the study was to compare the two different methods of intracesarean insertion of postpartum intrauterine contraceptive device (PPIUCD), i.e., manual vs instrumental, and to study the effectiveness, safety, and continuation rate of intracesarean PPIUCD as a contraceptive method. Materials and methods: A total of 100 subjects undergoing lower (uterine) segment cesarean section (LSCS) were enrolled for the study. In group I (n = 50), Cu-T 380A was inserted manually and in group II (n=50), Cu-T 380A was inserted with a PPIUCD forceps. After checking for the inclusion and exclusion criteria and proper counseling, written consent was obtained and subjects were enrolled for the study. All the subjects were followed up for 3 months either clinically or telephonically. All the complaints, side effects, complications, and findings of both the groups were compared and analyzed. Results: The continuation rate after the period of follow-up was 94% in group I and 92% in group II. There was only one case (2%) of expulsion in group II. A total of 3 (6%) subjects in group I and 3 (6%) of the subjects in group II got PPIUCD removed for various reasons. There was no case of infection, perforation, or contraceptive failure. Conclusion: Intracesarean PPIUCD is an effective method of postpartum contraception and both the methods (manual and instrumental) are equally effective with minimum side effects and complications and good acceptability by the clients.

Database: EMBASE

11. Current status of frameless anchored IUD for immediate intracesarean insertion.

Author(s): Wildemeersch, Dirk; Goldstuck, Norman D; Hasskamp, Thomas

Source: Developmental period medicine; 2016; vol. 20 (no. 1); p. 7-15

Publication Date: 2016

Publication Type(s): Journal Article

PubMedID: 27416620

Abstract: Immediate postpartum intrauterine device (IUD) insertion deserves great attention as it can provide immediate, timely and convenient contraception plus the added benefit of preventing repeat unintended pregnancies. Although women post vaginal delivery can benefit from immediate post-placenta contraception, women undergoing Cesarean section clearly need contraception, as an inter-delivery interval shorter than 18 months places them at a high risk for uterine rupture. The main drawback of currently available framed IUD devices for immediate postpartum insertion of an IUD is their high expulsion and displacement rates when inserted immediately postpartum after both vaginal and Cesarean delivery. Current research suggests that a brief window of opportunity exists of 10 minutes for insertion of conventional IUDs after which time expulsion rates both immediately and over time are greatly enhanced. This paper summarizes the current research conducted to overcome the expulsion problems associated with conventional T-shaped devices as well as through the use of an anchored frameless device. In the 1970s and 1980s, attempts were made to solve the expulsion problem by modifying existing devices, such as adding absorbable sutures (Delta-T) or additional appendages. These attempts proved to be clinically unsuccessful as the catgut suture added to the transverse arms did not provide sufficient resistance to prevent downward displacement and expulsion. An anchoring technique to suspend a copper IUD to the

fundus of the uterus was developed in Belgium in the 1980s and has been the subject of extensive ongoing clinical research since 1985. Recently the frameless copper releasing anchor IUD, GyneFix, has been tested for postplacental insertion. Initially, the anchor was modified by the inclusion of a biodegradable cone which was added below the anchoring knot. Clinical studies confirmed the adequacy of this approach suggesting that it was technically possible to anchor an IUD immediately following Cesarean section as well as after vaginal delivery with minimal incidence of expulsion. However, it was found that removal of the IUD was difficult in a number of women who requested early removal, due to the slow disintegration time of the cone. Based on these prior experiences, a new approach for anchoring of a frameless IUD immediately after delivery of the placenta was invented and developed specifically for use immediately post-Cesarean delivery. Beyond providing convenient and timely contraception the intended use allows a woman adequate time to recover from both the surgery and the burden of childbirth, while ensuring adequate future contraception. It is anticipated that it will also have an added benefit of allowing a greater number of women to have follow-on vaginal deliveries. The anchoring procedure is conducted under direct vision. It can be performed immediately after placental removal without the burden of timing restraints. It consists of the precise placement of the anchor of the frameless IUD immediately below the serosa of the uterus, followed by fixing the anchoring knot in place with a very thin absorbable suture. Early stage studies have confirmed the suitability and ease of use of this approach with additional clinical trials currently being conducted. The anchoring technique is easy, quick, safe and effective with no expulsions at 12 months. The method is considered a major advance, suitable for general use due to its simplicity requiring limited training.

Database: Medline

12. Evaluation of post placental trans caesarean/vaginal delivery intrauterine device (PPIUCD) in terms of awareness, acceptance and expulsion in services hospital, Lahore

Author(s): Shahbaz F.; Tariq R.; Tahira T.; Javaid M.; Noreen Z.

Source: Pakistan Journal of Medical and Health Sciences; 2016; vol. 10 (no. 2); p. 338-340

Publication Date: 2016

Publication Type(s): Article

Abstract: Aim: To assess the awareness, acceptance rate at the time of delivery either by vagina route or trans caesarean section. Expulsion rate of PPIUCD at 6 weeks follow up in vaginal deliveries and trans caesarean section is also assessed. Method: Prospective longitudinal study. Setting: Department of Obstetrics & Gynaecology, SIMS/ Services Hospital, Lahore. Duration of Study: Six months from 1st January 2015 to 30th June 2015. Result: - Awareness about PPIUCD was 74%. Acceptance rate of PPIUCD was 30%. Expulsion at 6 weeks follow up was 5.4%. Conclusion: PPIUCD is a safe, highly effective, long acting and cost effective method of contraception. Awareness about PPIUCD has been gradually increasing in both health professionals and patients.

Database: EMBASE

13. Twelve-month contraceptive continuation and repeat pregnancy among young mothers choosing postdelivery contraceptive implants or postplacental intrauterine devices

Author(s): Cohen R.; Sheeder J.; Arango N.; Teal S.B.; Tocce K.

Source: Contraception; Feb 2016; vol. 93 (no. 2); p. 178-183

Publication Date: Feb 2016

Publication Type(s): Article

Abstract: Objective To compare discontinuation rates and incidence of repeat pregnancy within 1 year among young mothers choosing postplacental intrauterine devices (IUDs) versus postpartum contraceptive implants. Study Design We enrolled a prospective cohort of postpartum adolescents and young women who chose either postplacental IUDs or postpartum contraceptive implants prior to hospital discharge. We used chart review and phone interviews to assess device discontinuation (by request or expulsion) and pregnancy within 12 months. Results Of the 244 13-22 year-old participants, 82 chose IUDs (74 levonorgestrel IUDs and 8 copper IUDs), and 162 chose implants. Both groups had participant-requested discontinuation rates of 14% (9/67 IUD; 19/135 implant) within 1 year. Participants choosing IUDs had a 25% (17/67) expulsion rate. Median time to expulsion was 4.1 weeks (range: 0.4-29.3 weeks, 16/17 within 12 weeks), and participants recognized 15/17 expulsions. IUD initiators had significantly higher pregnancy rates by 12 months (7.6% vs. 1.5%, p=0.04). Most pregnancies occurred when women discontinued their initial device and did not start alternative contraception. Discussion Participant-requested discontinuation was similar in both groups. Differences in overall device discontinuation rates were due to IUD expulsions. Pregnancy rates by 12 months postpartum were lower than previously reported in this age group in both implant initiators and IUD initiators. Implications Young mothers who choose postplacental IUDs or postpartum contraceptive implants are unlikely to request removal within the first year. Clinicians should counsel postplacental IUD users that early expulsion is common (25%) and may be unrecognized (11% of expulsions). Patients should have a plan for contraceptive management should expulsion occur.

Database: EMBASE

14. A Prospective Study to Evaluate Vaginal Insertion and Intra-Cesarean Insertion of Post-Partum Intrauterine Contraceptive Device

Author(s): Halder A.; Sowmya M.S.; Gayen A.; Bhattacharya P.; Mukherjee S.; Datta S.

Source: Journal of Obstetrics and Gynecology of India; Feb 2016; vol. 66 (no. 1); p. 35-41

Publication Date: Feb 2016

Publication Type(s): Article

Available at Journal of Obstetrics and Gynecology of India - from SpringerLink

Available at Journal of Obstetrics and Gynecology of India - from Europe PubMed Central - Open Access

Abstract: Objectives: Evaluation and comparison of safety and efficacy of vaginal and intra-cesarean insertion of Post-Partum Intrauterine Contraceptive device (PPIUCD). Methods: An interventional prospective study conducted in the Department of Obstetrics and Gynaecology at NRS Medical College, Kolkata. PPIUCD were inserted in 263 mothers in 1-year study period. Among them, first 100 mothers who delivered vaginally and the first 100 who underwent cesarean section were regarded as study groups and were followed up for 1 year. Results: Both modes of PPIUCD insertion were found to have very low rates of expulsion, vaginal bleeding, infection, missing strings, and also effective as contraceptive. Expulsion rate was 4 % in the vaginal group and 2 % in intra-cesarean group. Strings of PPIUCD were less visible after cesarean insertion than vaginal insertion (p = 0.028).

Conclusion: PPIUCD is an appealing approach and may become the best choice as post-partum contraception after vaginal as well as cesarean delivery.

Database: EMBASE

15. Expulsion of Nova-T380, Multiload 375, and Copper-T380A contraceptive devices inserted during cesarean delivery

Author(s): Ragab A.; Hamed H.O.; Alsammani M.A.; Shalaby H.; Nabeil H.; Barakat R.; Fetih A.N.

Source: International Journal of Gynecology and Obstetrics; 2015; vol. 130 (no. 2); p. 174-178

Publication Date: 2015

Publication Type(s): Article

PubMedID: 25975871

Abstract: Objective: To compare the expulsion rate of Nova-T380, Multiload 375, and Copper-T380A intrauterine contraceptive devices (IUCDs) inserted during cesarean delivery. Methods: A comparative randomized study was conducted between January 1, 2013, and June 30, 2014, in three maternity centers in Egypt and Saudi Arabia. All women scheduled for an elective cesarean and accepting intraoperative insertion of an IUCD were randomly allocated to receive the Nova-T380 (group 1), Multiload 375 (group 2), or Cu-T380A (group 3) using a computergenerated table. Researchers and participants were not masked to the type of IUCD. Follow-up was for 1 year. The primary outcome was IUCD expulsion (complete or partial [i.e. displacement]). Results: Each group contained 40 participants. At 1 year, expulsion had been reported for 5 (13%) women in group 1, 2 (5%) in group 2, and 6 (15%) in group 3 ($P > 0.05$ for all). The frequency of displacement was significantly lower in group 2 (5 [13%] participants) than in group 1 (15 [38%]; $P = 0.001$) and group 3 (14 [35%]; $P = 0.008$). Conclusion: Despite a comparable risk of expulsion following IUCD insertion during cesarean delivery, the Multiload 375 device showed the lowest risk of displacement.

Database: EMBASE

16. Immediate postpartum provision of long-acting reversible contraception.

Author(s): Goldthwaite, Lisa M; Shaw, Kate A

Source: Current opinion in obstetrics & gynecology; Dec 2015; vol. 27 (no. 6); p. 460-464

Publication Date: Dec 2015

Publication Type(s): Comparative Study Journal Article Review

PubMedID: 26536209

Available at Current opinion in obstetrics & gynecology - from Ovid (LWW Total Access Collection 2015 - Q1 with Neurology)

Abstract:PURPOSE OF REVIEWThe objective of this review is to describe current literature regarding the role and characteristics of long-acting reversible contraception (LARC) used immediately postpartum.RECENT FINDINGSCopper and levonorgestrel intrauterine devices (IUDs) inserted immediately postpartum at the time of both vaginal and cesarean deliveries are associated with higher rates of continuation at 6-12 months when compared with IUDs placed at the postpartum visit (4-8 weeks after delivery), despite higher rates of expulsion. IUDs and contraceptive implants are cost-effective when used immediately postpartum, and they are associated with longer interpregnancy intervals. There is limited evidence regarding the effects of immediate postpartum LARC on breastfeeding.SUMMARYUse of LARC methods in the immediate postpartum period is both effective and safe, and could reduce unmet need for contraception during this time. More research is needed to explore various immediate postpartum IUD insertion methods and the effects of immediate postpartum progestin-containing LARC on breastfeeding.

Database: Medline

17. Immediate postplacental insertion of a copper intrauterine device: a pilot study to evaluate expulsion rate by mode of delivery.

Author(s): Sucak, Ayhan; Ozcan, Sarp; Çelen, Şevki; Çağlar, Turhan; Göksu, Gonca; Danışman, Nuri

Source: BMC pregnancy and childbirth; Sep 2015; vol. 15 ; p. 202

Publication Date: Sep 2015

Publication Type(s): Comparative Study Journal Article Evaluation Studies

PubMedID: 26330364

Available at BMC pregnancy and childbirth - from BioMed Central

Available at BMC pregnancy and childbirth - from Europe PubMed Central - Open Access

Abstract:BACKGROUNDThe present study aimed to investigate risk factors for expulsion in immediate postplacental IUD insertion. We specifically sought to determine whether cesarean delivery before or during labor have an impact on IUD expulsion.METHODSThe study included 160 pregnant women for immediate IUD insertion following vaginal or cesarean delivery. Three groups of patients were recruited: Patients who underwent pre-planned cesarean delivery (group 1, n: 51), patients who underwent cesarean delivery during active labor (group 2, n: 47), patients who delivered vaginally (group 3, n: 62).RESULTSThe cumulative expulsion rates were similar with a frequency of 8.7, 8.9 and 11.3% respectively in groups 1 to 3 ($p > 0.05$ in all pairwise comparisons). The rate of patients who had the IUD removed at 12th month was 4,3, 6.7 and 11.3% for groups 1, 2 and 3 respectively ($p > 0.05$ in all pairwise comparisons). Multiparity increased the risk of cumulative expulsion within 12 months by 2.1 fold (95% 1,03-4,37) in the logistic regression model. Previous vaginal deliveries or IUD use did not have an impact on the expulsion of the IUD. The risk of spontaneous expulsion was similar in patients whose IUD was placed after cesarean in the active and latent phase or after spontaneous vaginal delivery.CONCLUSIONSThe rates of IUD expulsion are

similar in patients who underwent cesarean section before and during labor and who delivered vaginally. Parity was the only factor independently associated with IUD expulsion.

Database: Medline

18. Five-year follow-up of two types of contraceptive device fitted during elective cesarean delivery.

Author(s): Elsedeek, Mervat S E

Source: International journal of gynaecology and obstetrics: the official organ of the International Federation of Gynaecology and Obstetrics; Aug 2015; vol. 130 (no. 2); p. 179-182

Publication Date: Aug 2015

Publication Type(s): Comparative Study Journal Article

PubMedID: 25957802

Abstract:OBJECTIVETo present follow-up data for patients fitted with a copper intrauterine contraceptive device (IUCD) or the levonorgestrel intrauterine system (IUS) during cesarean delivery.METHODSBetween March 2006 and December 2011, a prospective study was undertaken of women who were scheduled to have a repeat cesarean for a singleton pregnancy and had chosen to undergo intraoperative fitting of an IUCD or the IUS. Participants were followed up for up to 5 years using transvaginal ultrasonography, clinical evaluation, and a questionnaire.RESULTSAmong 143 participants, 63 requested the IUCD and 80 the IUS. Misalignment was more common at 6 weeks with the IUS (37 [46.3%] patients) than with the IUCD (22 [34.9%]; P=0.06). Spontaneous expulsion occurred in the IUCD group only (4 [6.3%] patients). No pregnancies were reported in the IUS group, whereas 4 (6.3%) women with the IUCD became pregnant.CONCLUSIONAlthough misalignment of an IUCD or the IUS is fairly common after intraoperative insertion, the contraceptive performance and menstrual pattern are not affected. Therefore, there is no need to remove or replace a misaligned IUCD or IUS.

Database: Medline

19. Intrauterine Device Placement During Cesarean Delivery and Continued Use 6 Months Postpartum: A Randomized Controlled Trial.

Author(s): Levi, Erika E; Stuart, Gretchen S; Zerden, Matthew L; Garrett, Joanne M; Bryant, Amy G

Source: Obstetrics and gynecology; Jul 2015; vol. 126 (no. 1); p. 5-11

Publication Date: Jul 2015

Publication Type(s): Research Support, Non-u.s. Gov't Research Support, N.i.h., Extramural Comparative Study Randomized Controlled Trial Journal Article

PubMedID: 26241250

Available at Obstetrics and gynecology - from Ovid (LWW Total Access Collection 2015 - Q1 with Neurology)

Abstract:OBJECTIVETo compare intrauterine device (IUD) use at 6 months postpartum among women who underwent intracesarean delivery (during cesarean delivery) IUD placement compared with women who planned for interval IUD placement 6 or more weeks postpartum.METHODSIn this nonblinded randomized trial, women who were undergoing a cesarean delivery and desired an IUD were randomized to intracesarean delivery or interval IUD placement. The primary outcome was IUD use at 6 months postpartum. A sample size of 112 (56 in each group) was planned to detect a 15% difference in IUD use at 6 months postpartum between groups.RESULTSFrom March 2012 to June 2014, 172 women were screened and 112 women were randomized into the trial. Baseline characteristics were similar between groups. Data regarding IUD use at 6 months postpartum were available for 98 women, 48 and 50 women in the intracesarean delivery and interval groups, respectively. A larger proportion of the women in the intracesarean delivery group were using an IUD at 6 months postpartum (40/48 [83%]) compared with those in the interval group (32/50 [64%], relative risk 1.3, 95% confidence interval 1.02-1.66). Among the 56 women randomized to interval IUD insertion, 22 (39%) of them never received an IUD; 14 (25%) never returned for IUD placement, five (9%) women declined an IUD, and three (5%) had a failed IUD placement.CONCLUSION Intrauterine device placement at the time of cesarean delivery leads to a higher proportion of IUD use at 6 months postpartum when compared with interval IUD placement.LEVEL OF EVIDENCEI.

Database: Medline

20. A randomised clinical trial to assess satisfaction with the levonorgestrel- releasing intrauterine system inserted at caesarean section compared to postpartum placement.

Author(s): Braniff, Kathleen; Gomez, Edmund; Muller, Reinhold

Source: The Australian & New Zealand journal of obstetrics & gynaecology; Jun 2015; vol. 55 (no. 3); p. 279-283

Publication Date: Jun 2015

Publication Type(s): Research Support, Non-u.s. Gov't Comparative Study Randomized Controlled Trial Journal Article

PubMedID: 26053465

Abstract:BACKGROUNDInsertion of levonorgestrel-releasing intrauterine system (LNG-IUS) at caesarean section (CS) provides contraception prior to resumption of ovulation or sexual activity. Patient satisfaction with insertion at CS has not previously been studied.AIMSThe aim of this study was to compare patient satisfaction with LNG-IUS inserted at the time of lower uterine segment CS to six weeks postpartum.MATERIALS AND METHODSOpen-label randomised controlled trial. Women booked for elective CS were randomised to LNG-IUS insertion either at the time of CS (study group) or at six weeks postpartum (control group). The primary outcome measure was patient satisfaction. Outcomes were measured at six weeks, three months and six months postpartum.RESULTSForty-eight women were randomised into two treatment groups. Twenty-five women were randomised to have LNG-IUS inserted at the time of CS, 23 of whom had the planned intervention and two had the LNG-IUS inserted postpartum. Twenty-three women were randomised to the control group, four of whom withdrew prior to treatment. The 44 remaining women contributed to data analysis. Patient satisfaction was high and similar in both groups. At six months postpartum, 90.5% of the study group were very satisfied or somewhat satisfied compared with 88.2% of the control group.CONCLUSIONSPatient satisfaction is high with LNG-IUS insertion at CS and not different to that with delayed insertion. LNG-IUS insertion may be an option for women who find postpartum contraception difficult to access.

Database: Medline

21. Immediate postpartum insertion of intrauterine device for contraception.

Author(s): Lopez, Laureen M; Bernholc, Alissa; Hubacher, David; Stuart, Gretchen; Van Vliet, Huib A A M

Source: The Cochrane database of systematic reviews; Jun 2015 (no. 6); p. CD003036

Publication Date: Jun 2015

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

PubMedID: 26115018

Available at The Cochrane database of systematic reviews - from Cochrane Collaboration (Wiley)

Abstract:BACKGROUND Women who want to start intrauterine contraception (IUC) during the postpartum period might benefit from IUC insertion immediately after delivery. Postplacental insertion greatly reduces the risk of subsequent pregnancy and eliminates the need for a return visit to start contraception. Without the option of immediate insertion, many women may never return for services or may adopt less effective contraception.OBJECTIVESOur aim was to examine the outcomes of IUC insertion immediately after placenta delivery (within 10 minutes), especially when compared with insertion at other postpartum times. We focused on successful IUC placement (insertion), subsequent expulsion, and method use.SEARCH METHODSWe searched for trials until 1 April 2015. Sources included PubMed (MEDLINE), the Cochrane Central Register of Controlled Trials (CENTRAL), POPLINE, Web of Science, EMBASE, LILACS, ClinicalTrials.gov, and ICTRP. For the original review, the authors contacted investigators to identify other trials.SELECTION CRITERIAWe sought randomized controlled trials (RCTs) with at least one treatment arm that involved immediate IUC placement (i.e., within 10 minutes of placenta delivery). Comparison arms could have included early postpartum insertion (from 10 minutes postplacental to hospital discharge) or standard insertion (during a postpartum visit). Trials could also have compared different IUC methods or insertion techniques. Delivery may have been vaginal or cesarean. Primary outcomes were placement (insertion), subsequent expulsion, and method use at study assessment.DATA COLLECTION AND ANALYSISFor dichotomous outcomes, we used the Mantel-Haenszel odds ratio (OR) with 95% confidence interval (CI). Earlier studies primarily reported results as life-table rates. We aggregated trials in a meta-analysis if they had similar interventions and outcome measures. A sensitivity analysis included studies with moderate or high quality evidence and sufficient outcome data.MAIN RESULTSWe included 15 trials. Seven studies reported from 2010 to 2014 were added to eight from the original 2001 review. Newer trials compared immediate postplacental insertion versus early (10 minutes to 48 hours) or standard insertion (during the postpartum visit). Of four with full reports, three were small trials. The other three studies had conference abstracts. The eight early trials examined immediate insertion of different devices or insertion techniques. Most studies were published in the 1980s, some with limited reporting.Our sensitivity analysis included trials with sufficient outcome data and moderate or high quality evidence. Four newer trials comparing insertion times met the inclusion criteria. Two studies used the levonorgestrel-releasing intrauterine system (LNG-IUS) after vaginal delivery. The other two trials placed IUC after cesarean section; one used the CuT 380A intrauterine device (IUD) and the other used the LNG-IUS.A pilot trial compared immediate insertion versus early or standard insertion. In groups comparing immediate versus early insertion (N = 30), all women had the LNG-IUS inserted. By six months, the groups had the same expulsion rate and did not differ significantly in IUC use.For immediate versus standard insertion, we conducted meta-analyses of four trials. Insertion rates did not differ significantly between study arms. However, the trial from Uganda showed insertion was more likely for the immediate group, although the estimate was imprecise. In the meta-analysis, expulsion by six months was more likely for the immediate group, but the confidence interval was wide (OR 4.89, 95% CI 1.47 to 16.32; participants = 210; studies = 4). IUC use at six months was more likely with immediate insertion than with standard insertion (OR 2.04, 95% CI 1.01 to 4.09; participants = 243; studies = 4). Study arms did

not differ in use at 3 or 12 months in individual small trials.AUTHORS' CONCLUSIONSRecent trials compared different insertion times after vaginal or cesarean delivery. Evidence was limited because studies with full reports generally had small sample sizes. Overall, the quality of evidence was moderate; abstracts and older studies had limited reporting. Ongoing trials will add to the evidence, although some are small. Trials of adequate power are needed to estimate expulsion rates and side effects.The benefit of effective contraception immediately after delivery may outweigh the disadvantage of increased risk for expulsion. Frequent prenatal visits during the third trimester provide the opportunity to discuss effective contraceptive methods and desired timing for initiation. Clinical follow-up can help detect early expulsion, as can educating women about expulsion signs and symptoms.

Database: Medline

22. Intracesarean insertion of the Copper T380A versus 6 weeks postcesarean: a randomized clinical trial.

Author(s): Lester, Felicia; Kakaire, Othman; Byamugisha, Josaphat; Averbach, Sarah; Fortin, Jennifer; Maurer, Rie; Goldberg, Alisa

Source: Contraception; Mar 2015; vol. 91 (no. 3); p. 198-203

Publication Date: Mar 2015

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

PubMedID: 25499587

Abstract:OBJECTIVESTo compare rates of Copper T380A intrauterine device (IUD) utilization and satisfaction with immediate versus delayed IUD insertion after cesarean delivery in Kampala, Uganda.METHODSThis study was a randomized clinical trial of women undergoing cesarean section who desired an IUD in Kampala, Uganda. Participants were randomly assigned to IUD insertion at the time of cesarean delivery or 6weeks afterward. The primary outcome was IUD utilization at 6months after delivery.RESULTSAmong 68 women who underwent randomization, an IUD was inserted in 100% (34/34) of the women in the immediate insertion group and in 53% (18/34) in the delayed group. IUD use at 6 months was higher in the immediate insertion group (93% vs. 50% after delayed insertion; p<.0001). Infection and expulsion were rare and did not differ between groups. When we pooled both groups and looked at IUD users compared to nonusers, 91% (39/43) of IUD users were satisfied or very satisfied with their contraceptive method compared to 44% (11/25) of nonusers (p<.0001). Women who chose not to be in the study or had the IUD removed often did so because of perceived husband or community disapproval.CONCLUSIONThe 6-month utilization of an IUD after immediate insertion was significantly higher than after delayed insertion without increased complications. Contraceptive satisfaction was significantly higher among IUD users than nonusers. Community and husband attitudes influence IUD utilization and continuation in Kampala, Uganda.IMPLICATIONSThis work is important because it shows the safety and efficacy of providing IUDs during cesarean section in a setting where access to any healthcare, including contraception, can be extremely limited outside of childbearing and the consequences of an unintended, closely spaced pregnancy after a cesarean section can be life threatening.

Database: Medline

23. Intrauterine device insertion in the postpartum period: a systematic review.

Author(s): Sonalkar, Sarita; Kapp, Nathalie

Source: The European journal of contraception & reproductive health care : the official journal of the European Society of Contraception; Feb 2015; vol. 20 (no. 1); p. 4-18

Publication Date: Feb 2015

Publication Type(s): Journal Article Review

PubMedID: 25397890

Abstract:OBJECTIVESGiven new research on postpartum placement of levonorgestrel and copper intrauterine devices (IUDs), our objective was to update a prior systematic review of the safety and expulsion rates of postpartum IUDs.METHODSWe searched MEDLINE, CENTRAL, LILACS, POPLINE, Web of Science, and ClinicalTrials.gov databases for articles between the database inception until July 2013. We included studies that compared IUD insertion time intervals and routes during the postpartum period. We used standard abstract forms and the United States Preventive Services Task Force grading system to summarise and assess the quality of the evidence.RESULTSWe included 18 articles. New evidence suggests that a levonorgestrel releasing-intrauterine system (LNG-IUS) insertion within 48 hours of delivery is safe. Postplacental insertion and insertion between 10 minutes and 48 hours after delivery result in higher expulsion rates than insertion 4 to 6 weeks postpartum, or non-postpartum insertion. Insertion at the time of caesarean section is associated with lower expulsion rates than postplacental insertion at the time of vaginal delivery.CONCLUSIONSThis review supports the evidence that insertion of an intrauterine contraceptive within the first 48 hours of vaginal or caesarean delivery is safe. Expulsion rates should be further studied in larger randomised controlled trials.

Database: Medline

24. The Clinical Outcome of Post Placental Copper-T-380A Insertion with Long Placental Forceps (Kelly's Forceps) After Normal Vaginal Delivery and Cesarean Section

Author(s): Gupta G.; Goyal R.; Kadam V.K.; Sharma P.

Source: Journal of Obstetrics and Gynecology of India; Nov 2014

Publication Date: Nov 2014

Publication Type(s): Article In Press

Available at Journal of Obstetrics and Gynecology of India - from SpringerLink

Available at Journal of Obstetrics and Gynecology of India - from Europe PubMed Central - Open Access

Abstract: Objectives: To study the efficacy safety effect on menstrual cycles, expulsion, continuation, and failure rate of post placental Copper-T-380A after vaginal and cesarean birth in a tertiary center, over the period of 1 year.Methods: A total of 150 women who opted for insertion of Copper-T-380A within 10 min of expulsion of placenta whether delivered vaginally or by cesarean section were enrolled into study. Women having past history of ectopic pregnancy or any genital tract infection or hemorrhagic disorders, uterine anomaly, chorioamnionitis, LPV > 18 h, unresolved PPH, Hb < 8 g% were excluded from the study.Results: No incidence of perforation, PID, and failure of contraception was detected. Percentage satisfaction among users after 6 weeks-91.7 %, 3 months-92.9 %, and 6 months-95.6 %.Conclusion: Although there was high incidence of missing IUCD threads (probably owing to coiling of long threads), the actual expulsion rate was far lesser. Removal rate due to menorrhagia, pain in abdomen, and vaginal discharge was low, and 6 months continuation rate was considerably good.Copyright © 2014 Federation of Obstetric & Gynecological Societies of India

Database: EMBASE

25. Evaluation of Safety, Efficacy, and Expulsion of Post-Placental and Intra-Cesarean Insertion of Intrauterine Contraceptive Devices (PPIUCD)

Author(s): Mishra S.

Source: Journal of Obstetrics and Gynecology of India; Oct 2014; vol. 64 (no. 5); p. 337-343

Publication Date: Oct 2014

Publication Type(s): Article

Available at Journal of Obstetrics and Gynecology of India - from SpringerLink

Available at Journal of Obstetrics and Gynecology of India - from Europe PubMed Central - Open Access

Abstract: Background: This study examines to describe the factors associated with acceptability of immediate PPIUCD insertion in women according to their socio-demographic and obstetrics characteristics, and future pregnancy desires and to determine the rates of uterine perforation, expulsion, pelvic infection, lost strings and displacement following PPIUCD insertion among the acceptors by 6 to 18 months.Aim: An intrauterine device (IUD) is an effective form of Long Acting Reversible Contraception. Present study is aimed at determining the safety, efficacy, and expulsion of Post-placental and intra-cesarean insertion of Intrauterine contraceptive device (PPIUCD).Materials & Methods: The study was conducted at District Head Quarters Hospital, Bolangir, Odisha, India. From 1st. January 2012 to 31st. December 2012. Women admitted and delivered at D.H.H. Bolangir, were counseled. CuT 380A was inserted within 10 minutes of delivery of placenta in accepters who fulfilled the Medical Eligibility Criteria and had no contraindications for PPIUCD. They were followed up till 30th June 2013.Results: Total women counseled 3209, Accepted 564, Declined 2645, lost to follow up 130, Followed up 434, Complications: 190 (Expulsion 39, Bleeding 102, String problem 49), Removal 43, Continuation 352.Conclusions: The PPIUCD (Inserting CuT 380 A by 10 minutes after placental delivery) was demonstrably safe, effective, has high retention rate. The expulsion rate was not very high and it can be reduced with practice. With the high level of acceptance despite low levels of awareness, the government needs to develop strategies to increase public awareness of the PPIUCD through different media sources. It is also important to arrange training on PPIUCD in order to increase knowledge and skills among healthcare providers. This will also further promote PPIUCD use and aid in reduction of the expulsion rates. Cash incentives to the accepter, motivator and of course provider would bring about a substantial progress in the PPIUCD use in developing countries like India.

Database: EMBASE

26. Clinical outcome of postplacental copper T 380A insertion in women delivering by caesarean section

Author(s): Singal S.; Bharti R.; Dewan R.; Divya; Dabral A.; Batra A.; Sharma M.; Mittal P.

Source: Journal of Clinical and Diagnostic Research; Sep 2014; vol. 8 (no. 9)

Publication Date: Sep 2014

Publication Type(s): Article

Available at Journal of Clinical and Diagnostic Research - from Europe PubMed Central - Open Access

Available at Journal of Clinical and Diagnostic Research - from Free Medical Journals . com

Abstract: Introduction: Short interconception period after caesarean section and its associated risk of increased morbidity, mortality and surgical interventions could be avoided by postplacental IUCD insertion during the procedure. Despite the safety reports on intracaesarean IUCD insertion, obstetricians are still hesitant to extend the benefit of this long acting reversible contraception to women undergoing operative delivery.Objective: To study the clinical outcome (safety, efficacy, expulsion and continuation rates) of postplacental Copper T 380A insertion in primiparous women undergoing caesarean section.Materials and Methods: This study was a prospective observational study, carried out in the Department of Obstetrics and Gynaecology, Safdarjung hospital, which is a tertiary care hospital of Northern India. Primiparous women who delivered by caesarean section over a period of six months (July 2012 to December 2012), willing for postplacental intracaesarean IUCD insertion, and willing to comply with the study protocol, were recruited for the study. All these subjects fulfilled the WHO Standard Medical Criteria for PPIUCD insertion; follow up visits were scheduled at 1, 3, 6 and 12 months.Results: A total of 300 primiparous women underwent postpartum intracaesarean insertion of Copper T 380A. The mean age of women included in the study was 23.12 +/- 2.42 years. Most common postinsertion complication observed in the immediate postoperative period was febrile morbidity (2%). Majority of women (94.33%) had hospital stay of less than 4 days. The common adverse events observed during follow-up of 12 months were menstrual complaints, excessive vaginal discharge and persistent pelvic pain. At the end of one year, there were 16 expulsions, 21 removals, and 2 pregnancies with gross cumulative expulsion, removal, failure and continuation rates of 5.33%, 7%, 0.67% and 91%, respectively.Conclusion: Postplacental intracaesarean Copper T 380A insertion in primiparous women is a safe and effective method of reversible contraception, with low expulsion and high continuation rates.

Database: EMBASE

27. Postplacental insertion of the levonorgestrel intrauterine device after cesarean delivery vs. delayed insertion: a randomized controlled trial.

Author(s): Whitaker, Amy K; Endres, Loraine K; Mistretta, Stephanie Q; Gilliam, Melissa L

Source: Contraception; Jun 2014; vol. 89 (no. 6); p. 534-539

Publication Date: Jun 2014

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

PubMedID: 24457061

Abstract:OBJECTIVEThis trial was designed to compare levonorgestrel intrauterine device (LNG-IUD) use at 1 year after delivery between women randomized to postplacental insertion at the time of cesarean delivery and delayed insertion 4-8 weeks after delivery.STUDY DESIGNThis randomized controlled trial was conducted at two urban medical centers. Eligible pregnant women with planned cesarean deliveries were randomized to immediate postplacental insertion during cesarean or delayed insertion after 4-8 weeks. We used intention-to-treat analysis for the primary outcome of LNG-IUD use 12 months after delivery.RESULTSForty-two women were randomized, 20 into the postplacental group and 22 in the delayed group. Although confirmed use of the LNG-IUD 12 months after delivery was higher in the postplacental group (60.0% vs. 40.9%, p=.35), this difference was not statistically significance. Expulsion was significantly more common in the postplacental group (20.0% vs. 0%, p=.04). There were significant differences between the two sites in baseline population characteristics, follow-up and expulsion. The trial did not answer the intended question as it was halted early due to slow enrollment.CONCLUSIONSOur results show higher expulsion after postplacental insertion compared to delayed insertion but suggest similar IUD use at 12 months. Moreover, it provides valuable lessons regarding a randomized controlled trial of postplacental LNG-IUD placement due to the challenges of estimating effect size and the nature of the population who might benefit from immediate insertion.IMPLICATIONSPostplacental insertion of an IUD may improve use of highly effective contraception during the postpartum period. While our results suggest higher expulsion after postplacental insertion compared to delayed insertion and similar IUD use at 12 months, our trial was insufficient to definitively test our hypothesis.

Database: Medline

28. Intrauterine contraception after cesarean section and during lactation: a systematic review.

Author(s): Goldstuck, Norman D; Steyn, Petrus S

Source: International journal of women's health; Dec 2013; vol. 5 ; p. 811-818

Publication Date: Dec 2013

Publication Type(s): Journal Article Review

PubMedID: 24348074

Abstract:BACKGROUNDAll postpartum women, including those who are breastfeeding or have had a cesarean section, appear potentially suited to intrauterine contraception, a long acting reversible contraceptive (LARC). Like any other method used after delivery, it should not interfere with lactation or be affected by cesarean section.STUDY DESIGNWe searched the MEDLINE, PubMed, Popline, Google Scholar, and Clinicaltrials.gov databases from January 1968 through to December 2012. Studies were included if they reported event rates in women who had a cesarean section and event rates and clinical outcomes in lactating women or their infants in the breastfeeding group. Summary odds ratios were not calculated because of the diverse methods of reporting event rates in the cesarean section group and the heterogeneity of the results in the breastfeeding group.RESULTSWe found 26 articles on event rates in interval and post-placental intrauterine device (IUD) use, and 18 on event rates and clinical outcomes in breastfeeding IUD users. Four prospective studies and one retrospective study showed an increased expulsion rate in interval insertion. There were 19 studies, of which five were controlled in post-placental IUD insertion after cesarean section. Four studies had expulsion rates of 10 or more per 100 woman-years of use and 15 expulsion rates below 10 per 100 woman-years of use. Three studies showed that event rates for lactating IUD users are the same as those for non-lactating users. Fifteen controlled studies showed that the IUD had no effect on milk production and seven of these showed no effect on infant growth. Pharmacovigilance databases report an increased rate of IUD perforations in lactating women, while the event rate studies report that insertion is generally easier and less painful than expected. These were uncontrolled reports.CONCLUSIONThe IUD is a long-acting reversible method of contraception with expulsion rates of 5-15 per 100 woman-years of use when used as a post-placental method immediately after cesarean section. As an interval procedure (6 or more weeks after cesarean section) it appears to have a high expulsion rate (5% or higher) notably in older devices. The IUD does not affect breastfeeding and is easy to insert in these women, but appears to be associated with a higher perforation rate (>1 per 100). Providers should not be deterred from using this contraception method, especially in developing countries, but should be attentive to preventing these potential problems.

Database: Medline

29. Immediate post-partum initiation of intrauterine contraception and implants: a review of the safety and guidelines for use.

Author(s): Mwalwanda, Carolyn S; Black, Kirsten I

Source: The Australian & New Zealand journal of obstetrics & gynaecology; Aug 2013; vol. 53 (no. 4); p. 331-337

Publication Date: Aug 2013

Publication Type(s): Journal Article Review

PubMedID: 23635040

Abstract: Women are particularly susceptible to unintended pregnancies in the first year after birth, with 10-44% of pregnancies being unintended. In many settings, post-partum birth control is initiated at the six-week post-partum visit but most women are sexually active by this time, and ovulation can occur as early as day 28. There are many potential advantages of initiating intrauterine contraception (IUC) and implants use in the immediate post-partum period, including their high efficacy and reversibility which rivals sterilisation as well as ease of access to providers trained in their insertion. This review aims to describe the benefits and risks of use of IUC and implants in the immediate post-partum period. It discusses the maternal and infant health safety issues of early initiation of the progestogen containing methods and provides a critical review of existing international guidelines. Overall low rates of adverse effects such as pain, bleeding, infection and perforation, are documented to occur in all studies regardless of the timing or route of IUC insertion. Expulsion rates are significantly higher immediately after vaginal delivery compared to interval insertions, but are no higher after insertion at caesarean section. Post-partum implants appear to have the same side effects as interval insertions, and to date, no adverse impact on breast milk or infant growth has been demonstrated. Most international evidence-based guidelines support the initiation of IUC and progestogen containing contraceptive methods in the immediate post-partum period as they regard the advantages of provision at this time to outweigh the risks.

Database: Medline

30. Post-placental intrauterine device insertion--a five year experience at a tertiary care centre in north India.

Author(s): Shukla, Manju; Qureshi, Sabuhi; Chandrawati

Source: The Indian journal of medical research; Sep 2012; vol. 136 (no. 3); p. 432-435

Publication Date: Sep 2012

Publication Type(s): Journal Article

PubMedID: 23041736

Abstract:BACKGROUND & OBJECTIVESIn view of high rate of unintended pregnancy in our country, particularly in post-partum women, there is a need for reliable, effective, long-term contraception such as intrauterine device (IUD) in post-partum women. The present study was planned to evaluate the safety and efficacy of immediate post-partum IUD insertion in women delivering vaginally or by caesarian section in a tertiary care centre facility in north India during a period of five years.METHODSThe women recruited had CuT 200B insertion immediately after delivery of placenta in vaginal or caesarean delivery. Women having post-partum haemorrhage (PPH), anaemia, pre-labour rupture of membranes >18 h, obstructed labour and distorted uterine cavity by fibroid or by congenital malformation were excluded from the study. The women were followed up at 6 wk and 6 months after delivery.RESULTSA total of 1317 women were included in the study. Of these, 1037

(78.7%) came for first follow up. The cumulative expulsion rate at the end of 6 months was 10.68 per cent. There was no case of misplaced IUD.INTERPRETATION & CONCLUSIONSAlthough the expulsion rate for immediate post-partum insertion was higher than for interval insertion, the benefits of providing highly effective contraception immediately after delivery outweigh this disadvantage, particularly in country where women have limited access to medical care.

Database: Medline

31. Immediate postplacental IUD insertion at cesarean delivery: a prospective cohort study.

Author(s): Levi, Erika; Cantillo, Evelyn; Ades, Veronica; Banks, Erika; Murthy, Amitasrigowri

Source: Contraception; Aug 2012; vol. 86 (no. 2); p. 102-105

Publication Date: Aug 2012

Publication Type(s): Multicenter Study Journal Article

PubMedID: 22264666

Abstract:BACKGROUNDImmediate postplacental insertion of intrauterine devices (IUDs) during cesarean delivery could reduce a substantial barrier to access to long-term effective contraception. Initiating IUD use prior to discharge from the hospital postpartum eliminates a 6-week postpartum waiting period and an additional office visit.STUDY DESIGNThis was a prospective cohort study of 90 patients undergoing cesarean delivery. After delivery of the placenta, a copper T380A IUD was inserted into the endometrial cavity through the incision. The study participants were followed up at 6 weeks and 6 months postpartum. This study was conducted at the Weiler Division of the Montefiore Medical Center and at the Jacobi Medical Center in the Bronx, NY.RESULTSForty-three (48%) women returned for their 6-week follow-up visits, and among those, no expulsions were recorded. Forty-two (47%) women were reached for phone follow-up at 6 months postpartum, and 80% reported being "happy" or "very happy" with their IUD.CONCLUSIONSImmediate postplacental IUD insertion at the time of cesarean delivery is safe and acceptable.

Database: Medline

32. Puerperal and menstrual bleeding patterns with different types of contraceptive device fitted during elective cesarean delivery.

Author(s): Elsedeek, Mervat S E

Source: International journal of gynaecology and obstetrics: the official organ of the International Federation of Gynaecology and Obstetrics; Jan 2012; vol. 116 (no. 1); p. 31-34

Publication Date: Jan 2012

Publication Type(s): Randomized Controlled Trial Journal Article

PubMedID: 22036512

Abstract:OBJECTIVETo evaluate the impact of a copper-containing intrauterine contraceptive device (IUCD) and the levonorgestrel-releasing intrauterine system (IUS) on puerperal and menstrual bleeding when fitted intraoperatively during scheduled elective cesarean.METHODSParticipants were allocated to 3 groups: cesarean with no device inserted; IUCD inserted during cesarean; and IUS inserted during cesarean.RESULTSThere was significantly shorter and lighter puerperium in the IUS group (20.2 ± 7.7 days and 3.1 ± 1.6 pads/day) than in the IUCD (33.4 ± 9.5 days and 4.9 ± 2.4 pads/day) and the control (27.0 ± 11.4 days and 4.9 ± 2.3 pads/day) groups (P0.07). In the IUS group, menstrual periods were significantly shorter and lighter than in the other groups (P<0.0001).CONCLUSIONIntrauterine system fitting at the time of elective cesarean is associated with significant reductions in the duration and amount of puerperal blood loss, as well as a high incidence of amenorrhea and lighter periods thereafter.

Database: Medline

33. Immediate postplacental insertion of an intrauterine contraceptive device during cesarean section.

Author(s): Çelen, Şevki; Sucak, Ayhan; Yıldız, Yasemin; Danışman, Nuri

Source: Contraception; Sep 2011; vol. 84 (no. 3); p. 240-243

Publication Date: Sep 2011

Publication Type(s): Journal Article

PubMedID: 21843687

Abstract:BACKGROUNDAn intrauterine device (IUD) is an effective reversible form of contraception. We determined the efficacy and safety of immediate postplacental IUD insertion during cesarean section.STUDY DESIGNTwo hundred forty-five women with term pregnancies delivering by cesarean section between September 2006 and December 2007 were included in the study. A copper IUD (TCu 380A) was inserted using a ring forceps within 10 min of removing the placenta. The participants were examined before hospital discharge and at 6 weeks, 6 months and 12 months postpartum.RESULTSNone of the patients were lost to follow-up. There was one case of an unplanned pregnancy (0.4%). There were no serious complications associated with immediate IUD insertion during cesarean section. The cumulative rates of expulsion, removal for bleeding/pain and other medical reasons were 17.6, 8.2 and 2.4 per 100 women per year, respectively. The continuation rates were 81.6% and 62% at 6 and 12 months, respectively.CONCLUSIONImmediate postplacental IUD insertion during cesarean section provides adequate protection against pregnancy. However, greater than one fourth of the participants discontinued IUD use due to spontaneous expulsion or other medical reasons.

Database: Medline

34. Insertion of intrauterine contraceptive device at caesarean section.

Author(s): Bhutta, Shereen Zulfiqar; Butt, Iffat Javed; Bano, Khadeja

Source: Journal of the College of Physicians and Surgeons--Pakistan : JCPSP; Sep 2011; vol. 21 (no. 9); p. 527-530

Publication Date: Sep 2011

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

PubMedID: 21914407

Abstract:OBJECTIVETo determine the safety (infection, conception rate and perforation) of intrauterine contraceptive device (IUCD, Multiload Cu 375) insertion at caesarean section and compare their postoperative period (in term of pain, amount of bleeding and expulsion rate) of women who had caesarean section without IUCD insertion and to women who had IUCD inserted as an interval procedure.STUDY DESIGNA case control study.PLACE AND DURATION OF STUDYJinnah Postgraduate Medical Centre, Karachi, from November 2006 to October 2007.METHODOLOGYGroup 1 (cases) were 50 women who had IUCD inserted at caesarean section. Groups 2 and 3 were controls, group 2 consisted of 50 matched women who had a caesarean section without IUCD insertion and group 3 consisting of 50 women who had IUCD inserted as an interval procedure. Degree of pain was assessed by doses of analgesics needed and amount of bleeding by the soaked pads, which were observed by doctor. Infection and expulsion was observed in immediate postoperative period during admission and at follow-up visits at 6 weeks and 6 months and conception was also checked. Analysis of variance was undertaken to compare characteristics at baseline on SPSS version 13. Data were analyzed using univariate methods, two-tailed t-test for continuous variables and chi-square test or Fisher's exact test as appropriate for dichotomous variables.RESULTSHospital stay of group 1 was 3.48 days as compared to 3.46 in group 2 (p=0.93). Wound was infected in 10% women in group 1 and 2% in group 2 (F-test = 0.10); lochia was heavy in 4% in group 1 and 0% in group 2 (F-test = 0.25). Thread was visible in 92% in group 1 and 96% in group 3 (p=0.50). Eighty two percent women were willing to continue with IUCD in group 1 and 86% in group 3 after 6 months.CONCLUSIONWomen undergoing caesarean section, who are desirous of, and suitable for using this method, should be given the option of IUCD insertion at the same time.

Database: Medline

35. Insertion of intrauterine contraceptive device (IUCD) at caesarean section after the delivery of placenta: An experience with 60 cases

Author(s): Ghaffar N.; Rahim M.; Chishti A.T.; Baloch S.N.

Source: Medical Forum Monthly; Jun 2011; vol. 22 (no. 6); p. 24-26

Publication Date: Jun 2011

Publication Type(s): Article

Abstract: Objectives: To access the safety of Intrauterine Contraceptive Device (IUCD) insertion at Caesarean section after placental delivery. Study design: Observational analytical study of cohort type. Place and duration of study: Department of Obstetrics and Gynecology, Bolan Medical Complex Hospital, Quetta, from September 2009 to August 2010. Patients and Methods: This prospective study was conducted in the department of Obstetrics and Gynecology Quetta from September 2009 to August 2010. Sixty patients who had IUCD inserted at cesarean section were studied and followed for six months. The age ranges from 20-45years. Detailed history of each patient was recorded and thorough physical examination was performed. Patients with findings of any medical disorder were excluded. All analysis and computation including data base were done by SPSS 10. Results: During the study period, a total of sixty women who had IUCD inserted at cesarean section were observed. All the cases were within age group ranging from 20-45 years of age. Out of them 53.3% were between 20-30 years, 28% between 31-40 years, 18.3% belongs to 41-45 years of age. The events that were analyzed during the Puerperium were pain, bleeding, infection and expulsion. Considering the postoperative complications, pain was the main complication during the puerperium and it occured in 54% of patients. Endometritis were occurring in 25% of cases and heavy lochia in 21% of cases. The expulsion rate was 8.3%. Conclusion: Women undergoing Cesarean section, who are suitable for using this method, should be given the option of IUCD insertion at the same time.

Database: EMBASE

36. Postplacental or delayed insertion of the levonorgestrel intrauterine device after vaginal delivery: a randomized controlled trial.

Author(s): Chen, Beatrice A; Reeves, Matthew F; Hayes, Jennifer L; Hohmann, Heather L; Perriera, Lisa K; Creinin, Mitchell D

Source: Obstetrics and gynecology; Nov 2010; vol. 116 (no. 5); p. 1079-1087

Publication Date: Nov 2010

Publication Type(s): Research Support, N.i.h., Extramural Comparative Study Randomized Controlled Trial Journal Article

PubMedID: 20966692

Available at Obstetrics and gynecology - from Ovid (LWW Total Access Collection 2015 - Q1 with Neurology)

Abstract:OBJECTIVETo estimate whether 6-month use of the levonorgestrel-releasing intrauterine device (IUD) would be higher when insertion occurred within 10 minutes of placental delivery compared with 6-8 weeks postpartum.METHODSWe enrolled pregnant women planning vaginal deliveries and desiring a postpartum levonorgestrel-releasing IUD. Patients were randomly assigned when admitted in labor to postplacental or delayed IUD insertion. The women followed up in person at 6-8 weeks and 6 months and were contacted by telephone at 3 months. Women were ineligible for a study IUD postenrollment for intrapartum events including infection, hemorrhage, and cesarean delivery; these women were contacted by phone at 3 and 6 months. Expelled IUDs were replaced per patient preference.RESULTSSuccessful IUD placement occurred in 50 of 51 participants

(98.0%) and 46 of 51 participants (90.2%) in the postplacental and delayed groups, respectively (P=.2). Expulsion within 6 months occurred in 12 of 50 (24.0%; 95% confidence interval [CI], 13.1-38.2) and two of 46 (4.4%; 95% CI 0.5-14.8) participants, respectively (P=.008). Intrauterine device use at 6 months was 43 of 51 (84.3%; 95% CI 71.4-93.0) and 39 of 51 (76.5%; 95% CI 62.5-87.2), respectively (P=.32). For ineligible patients, only 11 of 41 (26.8%) women were using IUDs at 6 months and two (4.9%) had become pregnant.CONCLUSIONIntrauterine device use 6 months after delivery is similar in women who have postpartum or scheduled delayed IUD placement through a study after replacement of expelled IUDs. Expulsions are significantly higher with postplacental compared with delayed IUD placement. Women asked to follow up with their own health care providers for delayed insertion are significantly less likely to receive an IUD.CLINICAL TRIAL REGISTRATIONClinicalTrials.gov, www.clinicaltrials.gov, NCT00476021.LEVEL OF EVIDENCEI.

Database: Medline

37. Intrauterine device insertion during the postpartum period: a systematic review.

Author(s): Kapp, Nathalie; Curtis, Kathryn M

Source: Contraception; Oct 2009; vol. 80 (no. 4); p. 327-336

Publication Date: Oct 2009

Publication Type(s): Research Support, Non-u.s. Gov't Research Support, N.i.h., Extramural Research Support, U.s. Gov't, Non-p.h.s. Journal Article Review Research Support, U.s. Gov't, P.h.s.

PubMedID: 19751855

Abstract:BACKGROUNDInsertion of an intrauterine device (IUD) at different times or by different routes during the postpartum period may increase the risk of complications.METHODSWe searched Medline, Lilacs and Cochrane Collaboration databases for articles in any language, between database inception until December 2008, which compared outcomes of postpartum IUD insertion time intervals. Search terms included postpartum, puerperium, postcesarean delivery, cesarean section, IUD(s), IUCD(s), intrauterine device(s) and insertion.RESULTSFrom 297 articles, we identified 15 for inclusion in this review: all studies examined the outcomes from copper IUD insertions within the postpartum time period compared to other time intervals or compared routes (vaginal or via hysterotomy) of postpartum insertion. No studies of levonorgestrel IUDs were identified. Immediate IUD insertion (within 10 min of placental delivery) was safe when compared with later postpartum time periods and interval insertion. Immediate postpartum IUD insertion demonstrated lower expulsion rates when compared with delayed postpartum insertion but with higher rates than interval insertion. Immediate insertion following cesarean delivery demonstrated lower expulsion rates than immediate insertion following vaginal delivery.CONCLUSIONPoor to fair quality evidence from 15 articles demonstrated no increase in risk of complications among women who had an IUD inserted during the postpartum period; however, some increase in expulsion rates occurred with delayed postpartum insertion when compared to immediate insertion and with immediate insertion when compared to interval insertion. Postplacental placements during cesarean delivery are associated with lower expulsion rates than postplacental vaginal insertions, without increasing rates of postoperative complications.

Database: Medline

38. Intraoperative placement of the Copper T-380 intrauterine devices in women undergoing elective cesarean delivery: a pilot study.

Author(s): Nelson, Anita L; Chen, Stephanie; Eden, Robert

Source: Contraception; Jul 2009; vol. 80 (no. 1); p. 81-83

Publication Date: Jul 2009

Publication Type(s): Journal Article

PubMedID: 19501220

Abstract:BACKGROUNDThe purpose of this pilot project was to test the feasibility of a technique designed to place a copper intrauterine device (IUD) through the hysterotomy incision of an elective cesarean delivery to minimize possible contamination and to guarantee that tailstrings were visible in the vagina for easy removal should complications occur.STUDY DESIGNWomen were monitored in the hospital for signs of infection or excessive blood loss. At the time of hospital discharge and at 2 and 6 weeks postpartum, they were examined to determine the status of the tailstrings. The position of the IUD was assessed by ultrasound at week 6.RESULTSAll seven of the subjects had successful placement. The sutures tied to the IUD strings were visible on vaginal examination in each case. The original tailstrings were visible in the vagina at 6 weeks and each IUD was fundally positioned.CONCLUSIONSuccessful intraoperative placement of Copper T-380A IUDs through incision at the time of cesarean birth is possible.

Database: Medline

39. Mirena at caesarean section.

Author(s): Puzey, M

Source: The European journal of contraception & reproductive health care : the official journal of the European Society of Contraception; Sep 2005; vol. 10 (no. 3); p. 164-167

Publication Date: Sep 2005

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

PubMedID: 16318963

Abstract: The aim of the study was to audit the clinical experience of insertion of the Mirena intrauterine system at the time of a caesarean section. The Mirena apparatus was inserted into the fundus of the uterus after delivery of the foetus and placenta. Thirty-three patients were analysed in private practice over 32 woman-years. The audit revealed the device was extremely well tolerated. There were no contraceptive failures, no complications and no expulsions of the intrauterine device. Patient satisfaction was extremely high. At the conclusion of the audit, only one device had been removed; this descriptive study showed that the Mirena intrauterine device can be inserted into the uterus at caesarean section to provide an immediate, reliable and reversible contraceptive.

Database: Medline

40. Clinical outcomes of early postplacental insertion of intrauterine contraceptive devices.

Author(s): Celen, Sevki; Möröy, Perran; Sucak, Ayhan; Aktulay, Ayla; Danişman, Nuri

Source: Contraception; Apr 2004; vol. 69 (no. 4); p. 279-282

Publication Date: Apr 2004

Publication Type(s): Journal Article Evaluation Studies

PubMedID: 15033401

Abstract:OBJECTIVESTo assess the efficacy, safety and, thus, advantages and disadvantages, of early postplacental intrauterine device (IUD) insertion.METHODSIUDs were inserted within 10 min after postplacental expulsion in term pregnancy both in vaginal and cesarean deliveries via a ring forceps. Of the 276 patients enrolled, 235 were included in the study. Recipients were scheduled for examination before hospital discharge and at 6 weeks, 6 months and 12 months after postplacental insertion.RESULTSThe percentages of women returning for a follow-up visit were 221 (94%), 210 (89%) and 183 (78%) at 6 weeks, 6 months and 12 months, respectively. Among IUD acceptors, 74% of the cases had vaginal deliveries and 26% had cesarean deliveries. Continuation rates were relatively high, 87.6% and 76.3%, at 6 and 12 months, respectively, after postplacental insertion of IUD. In this study, the 1-year cumulative expulsion rate with TCu 380A device was 12.3%, which may be regarded as a standard expulsion rate for immediate postplacental insertion of similar models of IUDs.CONCLUSIONThe evidence from this study suggests that immediate postplacental insertion of CuT 380 models is an effective, useful, safe, convenient and low-cost procedure for early postpartum contraception.

Database: Medline

Strategy 341963

#	Database	Search term	Results
1	Medline	exp "INTRAUTERINE DEVICES"/	10832
2	Medline	("contraceptive intrauterine device*").ti,ab	26
3	Medline	("contraceptive intrauterine device").ti,ab	19
5	Medline	("contraceptive intra uterine device*").ti,ab	5
6	Medline	(IUD).ti,ab	4370
7	Medline	(coil*1).ti,ab	13919
8	Medline	(1 OR 2 OR 3 OR 5 OR 6 OR 7)	25728
9	Medline	(cesarean*).ti,ab	34155
10	Medline	(caesarean*).ti,ab	18351
11	Medline	exp "CESAREAN SECTION"/	40337
12	Medline	("c section*").ti,ab	1032
13	Medline	(9 OR 10 OR 11 OR 12)	64482
14	Medline	(8 AND 13)	153
15	Medline	("Postplacental intrauterine device*").ti,ab	7
16	Medline	(13 AND 15)	2
17	EMBASE	exp "INTRAUTERINE DEVICES"/	18505
18	EMBASE	("contraceptive intrauterine device*").ti,ab	35

19	EMBASE	("contraceptive intrauterine device").ti,ab	25
20	EMBASE	("contraceptive intra uterine device*").ti,ab	6
21	EMBASE	(IUD).ti,ab	6753
22	EMBASE	(coil*1).ti,ab	57453
23	EMBASE	(17 OR 18 OR 19 OR 20 OR 21 OR 22)	76628
24	EMBASE	(cesarean*).ti,ab	45615
25	EMBASE	(caesarean*).ti,ab	28963
26	EMBASE	exp "CESAREAN SECTION"/	84525
27	EMBASE	("c section*").ti,ab	2626
28	EMBASE	(24 OR 25 OR 26 OR 27)	100468
29	EMBASE	(23 AND 28)	570
30	EMBASE	29 [English language]	526
31	EMBASE	("Postplacental intrauterine device*").ti,ab	15
32	EMBASE	(28 AND 31)	6
33	EMBASE	exp "INTRAUTERINE DEVICE EXPULSION"/	331
34	EMBASE	(28 AND 33)	63