Research Article

The Side Effects of Intra-cesarean Intrauterine Contraception: A Descriptive Study

Efek Samping Pemasangan Alat Kontrasepsi dalam Rahim (AKDR) Intrasesarea: Suatu Studi Deskriptif

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Abstract

Objective: To investigate the side effects and acceptance of intracesarean Intrauterine Device (IUD) insertion.

Methods: This was a descriptive study. Subjects were all pregnant women who had Cu T380A IUD to be placed after cesarean delivery at Prof. Dr. dr. R. D. Kandou Hospital during the period between August 2016 and September 2016.

Results: A total of 52 subjects were recruited in this study.43 (82.69%) subjects were in the age group of 20-30 years. 51 of the subjects accepted the IUD. On the 7th day, 49 (94.23%) and 51 (98.07%) subjects complained of abdominal pain and vaginal bleeding, respectively, while on the 14th day, 48 (92.3%) and 50 (96.1%) subjects had abdominal pain and vaginal bleeding, respectively. There were significant decreases in both complaints on the 14th day, compared to the 7th day. (p<0.05 and p<0.05, respectively). 51 (98.07%) subjects accepted the IUD. There were no significant difference between acceptance on day 7 and 14th (p>0.05).

Conclusion: The acceptance of side effects by the acceptor reaches 100%, with the incidence of early postpartum expulsion is 3.8%. The side effects of IUD are minimal.

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 $\textbf{Keywords} \hbox{: intra-cesarean, intrauterine device, side effects}$

Abstrak

Tujuan: Mengetahui keluhan efek samping yang ditimbulkan serta penerimaan IUD intra-sesarea pada awal masa nifas di RSUD Prof. Dr. R.D. Kandou Manado.

Metode: Penelitian ini merupakan studi deskriptif. Sampel penelitian adalah seluruh perempuan hamil yang intrasesarea di RSU Prof. Dr. dr. R.D. Kandou selama periode Agustus 2016 - September 2016.

Hasil: Jumlah sampel sebanyak 52 orang, terbanyak pada perempuan usia 20 - 35 tahun yaitu 43 perempuan (82,69%). Penerimaan terhadap efek samping diobservasi pada hari ke 7 dan hari ke 14. Sebanyak 51 responden menerima efek samping IUD sedangkan hanya terdapat 2 responden yang tidak menerima efek samping IUD. Didapatkan perbedaan penurunan yang bermakna untuk keluhan nyeri perut pada observasi hari ke 7 dan hari ke 14, sedangkan perdarahan bercak masih didapatkan pada 50 kasus, hingga hari ke 14 pengamatan. Ekspulsi hingga hari ke 14 terjadi pada 2 kasus.

Kesimpulan: Efek samping perdarahan dan nyeri perut didapatkan minimal dengan kejadian ekspulsi awal nifas sebesar 3,8%. Di luar kasus ekspulsi, penerimaan akseptor mencapai 100%.

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Kata kunci: alat kontrasepsi dalam rahim, efek samping, intrasesarea

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INTRODUCTION

Family planning permits people to accomplish their desired number of children and determine the spacing of pregnancies. The National Family Planning Coordinating Board (BKKBN) did campaigns for long-term contraceptive methods such as of intrauterine device (IUD) as a strategy to reduce mortality rate, which was one of the targets of Millenium Development Goals (MDGs) 2015. IUD is an effective long-term contraceptive method compared to other contraceptions, particularly when inserted immediately after delivery, including after cesarean delivery. The insertion

of IUD immediately after cesarean delivery can reduce complaints during setup, however, there are several side effects after insertion.^{2,3} To our knowledge, studies regarding the side effects of IUD insertion after cesarean delivery is limited. We aimed to investigate the side effects of intracesarean IUD placement.

METHODS

This was a descriptive study. Subjects were all pregnant women who had Cu T380 IUD to beplaced after cesarean delivery at Prof. Dr. dr. R. D.

Kandou Hospital during the period of August 2016 to September 2016. After the IUDs were placed, we would monitor the side effects for two weeks. The data obtained were recorded in a special form. All statistical analysis was performed using SPSS 20 for windows. A p value of < 0.05 was considered statistically significant. McNemar test was used to compare paired dichotomous, categorical variables.

RESULTS

A total of 52 subjects were recruited in this study. 43 (82.69%) of the subjects were in the age group of 20-35 years, 36 (69.24%) subjects were multiparous, 27 (51.92%) graduated from senior high school (Table 1).

Table 1. Characteristics of Research Subjects

Variables		N	%
Age	< 20	3	5.76
	20 - 35	43	82.69
	> 35	6	11.54
Primiparous		16	30.76
Multiparous		36	69.24
Elementary School		2	3.84
Junior High school		5	9.61
Senior High School		27	51.92
Scholar		18	31.61

On the 7th day, 49 (94.23%) and 51 (98.07%) subjects complained of abdominal pain and vaginal bleeding, respectively. Whereas, on the 14^{th} day, 48 (92.3%) and 50 (96.1%) subjects had abdominal pain and vaginal bleeding, respectively. We found significant decreases in both complaints on the 14^{th} day, compared to the 7^{th} day. (p<0.05 and p<0.05, respectively).

Table 3. The Acceptance of Side Effects of the Insertion

Acceptance of	Day 7 th		Day 14 th		_ p value	
Side Effects	N	%	N	%	- p value	
Yes	51	98.07	51	98.07	0.05	
No	1	1.92	1	1.92	> 0.05	

51 (98.07%) subjects accepted the IUD. There were no signicant difference between acceptance on day 7^{th} and 14^{th} (p > 0.05).

DISCUSSION

IUD has many advantages compared to other contraceptives. IUD has long-term effectiveness, and it only requires one installation. Moreover, it is relatively affordable. The weakness of this method is the side effects during and after placement. The side effects of IUD insertion including bleeding, abdominal pain, expulsion influence the decision to keep using IUD as a contraceptive method. The acceptors are reluctant to use IUD because they are afraid of the side effects.^{4,5}

In this study, 82.69% of IUD acceptors were in the age group of 20-30. This finding is similar to previous studies. Juliaan and Maria reported that 86% postpartum contraceptive users were in the age group of 25-29 years (86%).⁶ Jurisman et al found that most of IUD users IUD were in the age group of 20-35 years.⁷

Bleeding and abdominal pain are the side effects that are caused by the reaction in the endometrium plasminogen. Nidhi et al found that on intracesarean IUD, 15 subjects had bleeding, while 88% had only mild pain.⁸

Chi et al stated that the incidence of expulsion was 4.1% in intracesarean IUD insertion.⁹ Friadi found the expulsion rate was 5%.¹⁰ Manju revealed

Table 2. Side Effects of Intracesarean IUD Insertion

Variables		Day 7 th		Day 14 th		p value
		N	%	N	%	p value
Abdominal Pain	Yes	49	94.23	48	92.3	< 0.05
Abuommai Fam	No	3	5.76	4	7.64	
Vaginal bleeding	Yes	51	98.07	50	96.1	< 0.05
	No	1	1.92	2	3.84	

that the expulsion rate of women who gave birth by vaginal delivery was 1-7%.⁴ In this study, there were 2 cases with expulsion, which occurred on day 7 (1.92%) and day 14 (1.92). Expulsion maybe caused by several factors such as the distance IUD on the endometrium, extensive uterine cavity in twin pregnancies and the process of uterine involution.

Knowledge and understanding of the advantages and disadvantages of the IUD is still low. Vaginal bleeding and abdominal pain are side effects that often cause a person to stop using IUD. Bleeding is the highest reason to discontinue the usage of IUD. An understanding of the side effects including bleeding is of course related to the initial counseling when the acceptor will decide to use the IUD. In a study conducted by Satyavathiin 1000 women using IUD, 27.27% and 9.09% of them discontinued the usage of IUD due to bleeding and abdominal pain, respectively. 11 Setijanto found the AKDR CuT380 acceptance and effectiveness for 6 months were 86.8% and 100% with expulsion rate of 12.6%. There were also other side effects such as vaginal discharge, menstrual pain and spotting.12 In this study, the acceptance of the side effects of IUDs on both the 7th and 14th day were 98.07%. Bleeding that occurs in this study is spotting and abdominal pain category degrees of mild to moderate. Based on the number of cases there were only two acceptors that were not satisfied with the use of IUD due to expulsion.

CONCLUSION

The acceptance of side effects by the acceptor reaches 100%, with the incidence of early postpartum expulsion is 3.8%. The side effects of IUD are minimal.

REFERENCES

- Situasi dan Analisis Keluarga Berencana. Diterbitkan oleh Kementrian Kesehatan RI Pusat Data dan Informasi. 2014. http://www.depkes.go.id/folder/view/01/structure-publi kasi-pusdatin-info-datin.html
- Proyeksi pertumbuhan penduduk menurut provinsi 2010-2035. Diterbitkan oleh Badan Pusat Statistik. 2009.
- Pusat Penelitian dan pengembangan KB-KS. Kajian Implementasi Kebijakan Penggunaaan kontrasepsi IUD 2011: 1-3.
- Amelia M, Wahyono K. Penggunaan Alat Kontrasepsi Pascamelahirkan. Puslitbang KB dan Kesehatan Reproduksi Badan Koordinasi Keluarga Berencana Nasional. Jakarta 2009.
- 5. Irving S, Forrest G, Frederick S, Sandra N. The Copper T 380 Intrauterin Device, the Population Council. 1992: 7-32.
- Juliaan F, Maria A. Penggunaan Kontrasepsi pada Perempuan Pascamelahirkan dan Pascakeguguran, Se DKI 2012.
 Pusat Penelitian dan Pengembangan Kependudukan, BKKBN 8 Juni 2015.
- 7. Jurisman A, Ariadi, Kurniati R. Hubungan Karakteristik Ibu dengan Pemilihan Kontrasepsi di Puskesmas Padang Pasir Padang. J Kes Andalas. 2016; 5(1): 1-5.
- 8. Nidhi M, Neelesh D, Vrunda J. Intrauterine Device Insertion during Caesarean Section A Boon for Rural Women. IOSR J Dental Med Scien, 2013; 8(3): 21-3.
- 9. Chi IC, Wen ZS, Balogh S, Ng K. Post-Cesarean Section Insertion of Intrauterine Devices AJPH, 1984; 74(11).
- 10. Ginting FS. Pemasangan AKRD CuT-380A saat seksio sesaria di RSUP Prof. Dr. R. D. Kandou. Manado: Universitas Sam Ratulangi, 2012.
- Maluchuru S, Aruna V, Prabhavathi N. Post Partum Intrauterine Device Insertion 2 yr Experience at a Tertiary Care Center in Guntur Medical College/Govt. General Hospital, Guntur. IOSR J Dental Med Scienc (IOSR-JDMS). 2015; 14: 56-61.
- Setijanto IT. AKDR CuT380A pascaplasenta: penerimaan, efektivitas dan efek samping. Universitas indonesia. Program studi obstetri dan ginekologi: Jakarta 2014.