Situation Analysis of Patients Attending TU Teaching Hospital after Medical Abortion with Problems and Complications

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ABSTRACT

Introduction: In Nepal medical abortion has been approved for use since 2009. There were many cases coming to Tribhuvan University Teaching Hospital coming with problems and complications following medical abortion. Thus the objective of this study was to analyze the cases that came to TUTH following medical abortion with problems and complications.

Methods: This is a prospective study conducted in the Department of Obstetrics and Gynecology of TUTH. Study was carried from 1st August 2011 to 30th November 2012. Women who came to TUTH with any complaints following medical abortion were interviewed, examined and treatment provided. Relevant clinical finding were noted.

Results: There were a total of 57 cases during the study. Most (66.6%) of the women were in age group 20-29 years age. There were 45 (79%) women who had abortion up to 9 weeks. Medical shop was the main place where most of the women (45.6%) directly come to know about medical abortion. More than 34 (77.2%) received the service from medical shops without any supervision. Most 31 (54.4%) presented with incomplete abortion. There were three cases of continuing pregnancy and four presented with ectopic pregnancy. Eighteen (31.6%) cases needed admission. Fifty six percent of the cases were treated with manual vacuum aspiration, six cases underwent laparotomy and there was one maternal mortality.

Conclusions: There is a need for proper dissemination and implementation of guideline for management of these women and adequate supervision to reduce the problems and complications.

Keywords: *complications; incomplete abortion; medical abortion; problems.*

INTRODUCTION

The legalization of abortion law in Nepal through amendment of 11th Muluki Ain on September 2002 has been a big step forward to decrease the unsafe abortion. The initiation of Comprehensive Abortion Care (CAC) has provided affordable and accessible abortion services and addresses to women's reproductive health and provides post abortion contraception as well. The development of methods of inducing abortion medically (non-surgically) has created alternative options to make abortion available to women in health care settings.

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In 2003 WHO stated medical methods of abortion to be safe and effective.[1] Medical abortion using Mifepristone combined with synthetic prostaglandin Misoprostol has been approved for this purpose in Nepal since 2009. The recommendation on medical abortion has been restricted to early first trimester (up to 63 days or 9 weeks since last menstrual period). This regimen has been shown to achieve complete abortion in about 98 percent of cases and less than 1 percent of women using this regimen experience ongoing, viable pregnancies.[2, 3]

Patient education and counseling for medical abortion requires to discuss key points like pregnancy termination options, risk and benefits of medical abortion, known side effects, potential birth defects of the drugs, medical abortion process, need for multiple visits, contraceptive needs and contact in case of emergency.[4] Providing Women Centered Medical Abortion Care requires adequate facilities, supplies, personnel, referral system, and recording keeping.[5] This study aims to analyze the cases that come to TU Teaching Hospital following medical abortion with problems and complications.

METHODS

This was a prospective study conducted in the Department of Obstetrics and Gynecology of TUTH. Study was carried for sixteen months from 1st August 2011 to 30th November 2012. Consent for the study was taken from the department of the obstetric and gynecology of the hospital. Women who came to TU Teaching Hospital emergency or outpatient department with any complaints following medical abortion were taken as cases. Immediate resuscitation, if needed was carried out. A detailed history regarding complaints and reasons for coming to the hospital was noted. Details regarding the medical abortion- drugs, dosage, routes, price etc of medicine was taken. Examination was performed, investigations sent and appropriate treatment was provided. All the relevant information was noted in the preformed questionnaire, after explaining the nature of the study and taking verbal consent. Admitted patients were followed up till discharge. The computer program SPSS version 11.5 was used for data analysis.

RESULTS

There were a total of 57 women who came to hospital with complaints following medical abortion done outside. Of these 24 (42%) were first seen in outpatient department and 33 (58%) in emergency room. Fifty one (89.5%) were married and six were unmarried. Most (66.6%) of the women were in age group 20-29 years age. There were three patients above 40 years age group. Looking at the parity, almost two third of the women were either nullipara or paraone (Table 1).

Table 1. Demographic profile of the women.

Characteristics		N = 57 (%)
Age group (years)	≤ 19	3 (5.3)
	20-29	38 (66.6)
	30-39	13 (22.8)
	≥ 40	3 (5.3)
Marital status	Married	51 (89.5)
	Unmarried	6 (10.5)
Parity	Nullipara	19 (33.3)
	Primipara	17 (29.8)
	Multipara	21 (36,8)

Most of the women 19 (33%) opted for abortion due to family being complete, 12 (21%) for reason as due to career or study, while in 8 (14%) the pregnancy was illegitimate. Medical abortion is recommended for pregnancy up to nine weeks. There were 45 (79%) women who had abortion up to 9 weeks (Figure 1).

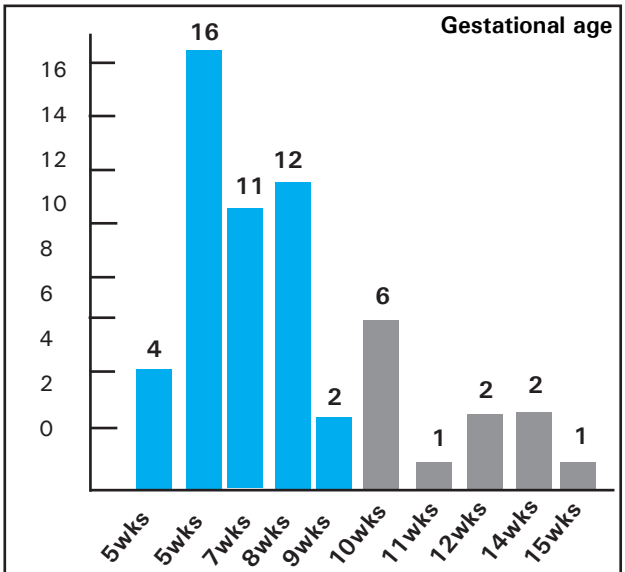

Figure 1. Duration of pregnancy during medical abortion.

Medical shop was the main place where most of the women 26 (45.6%) directly come to know about medical abortion. About 44 (77.2%) received the service from medical shops without any supervision. Only 10 (17.5%) received the service at private clinic or abortion centers (Table 2).

Table 2. Knowledge about medical abortion and place of receiving the service.

Features		N = 57 (%)
Knowledge about medical abortion	Medical shop	26 (45.6)
	Friends/relatives	22 (38.6)
	Medical person	8 (14.0)
	Media	1 (1.8)
Place of service	Medical shop	44 (77.2)
	Abortion centre/ private clinic	10 (17.5)
	Friends /relatives	3 (5.3)

Looking at the amount of money spent for medical abortion, the pricing was varied. It ranged from NRS 200 to 11,000 in one case. The average money spent was NRS 1465. The government facilities are providing the service at around NRS 1000. For best result, the national protocol for administration of misoprostol is sublingual or vaginal after 24 hours of oral mifepristone. Only 14 (24.6%) have taken in this way. Most 42 (74%) used misopristol orally.

Almost two third 42 (73.7%) came with complain of bleeding per vagina and 22 (38.6%) had pain abdomen. One lady came with abdomen swelling who was 22 weeks pregnancy due to method failure (Table 3).

Table 3. Presenting complaints of the women.

Presenting complaints*	Frequency(%)
Bleeding per vagina	42 (73.7)
Pain abdomen	22 (38.6)
Dizziness	2 (3.5)
Fainting	3 (5.3)
Nausea & vomiting	2 (3.5)
Fever	1 (1.7)
Abdominal swelling (quickening)	1 (1.7)

*Based on multiple responses

More than half 31 (54.4%) of the women had incomplete abortion, though most of them had abortion at less than 9 weeks and there were 11 cases of complete abortion. Of the three cases coming with continuing pregnancy two had attempted medical abortion after 9 weeks. Interestingly there were four cases of ectopic pregnancy. Of the two cases with infection one had peritonitis. There was one case of DIC, who could not be revived. Of the total cases, almost one third 18 (31.6%) required admission. Seven women with incomplete and one with complete abortion were admitted mainly for blood transfusion.

Twenty four (42%) women had anemia (Hb <11.0gm%). Of them five had severe anemia (Hb <7gm%) (Table 4). Total 13 (23%) women required blood transfusion. Fifty six percent of the women underwent uterine evacuation. Six required laparatomy and interestingly, four were for ectopic pregnancy. One case had peritonitis with interloop collection of pus on laparatomy (Table 5).

Table 4. Diagnosis of cases in relation to admission to hospital.

Diagnosis	Admitted	Not admitted	Total (N = 57)
Incomplete abortion	7	24	31(54.4%)
Complete abortion	1	10	11(19.3%)
Persistent gest sac	2	3	5(8.8%)
Continuing pregnancy	2	1	3(5.3%)
Ectopic pregnancy	4	0	4(7.0%)
Infection(1 peritonitis)	1	1	2(3.5%)
DIC(maternal mortality	1	0	1(1.7%)
Total	18(31.6)	39(68.4)	57(100)

Table 5. Treatment provided.

Treatment provided	N = 57 (%)		causes
Uterine evacuation (MVA)	32(56)	27	Incomplete abortion
		3	Persistent gest sac
		1	Continuing pregnancy
		1	Complete abortion
Laparatomy	6(11)	4	Ectopic pregnancy
		1	Peritonitis
		1	Associated dermoid cyst
Conservative treatment	19(33)		
Blood transfusion	13(23)		

DISCUSSION

Among the 57 women who came to hospital with problems and complications following medical abortion done outside, almost two third were either nullipara or para one. This suggests the small family norm the women are opting for in the present context. It is interesting to see that the women seeking to terminate pregnancy 45.6% came to know about medical abortion from medical shops and 38.6% from friends and relatives. More than three fourth 77.2% received the service directly from the medical shops without any supervision.

At the central level there is no proper data on the number of patients seeking and undergoing abortion, let alone medical abortion. At TU Teaching Hospital of 275 women seeking safe abortion service 21% had medical abortion during one year from March 2011 to February 2012 (Unpublished). A multicentre randomized controlled trial was done in five rural districts hospitals in Nepal among women less than 9 weeks pregnant. It was conducted to assess the safety and efficacy of early first trimester medical abortion provided by midlevel providers. Among women assigned to midlevel providers complete abortions were achieved in 504 cases (97.3%) compared with 494 of those assigned to physicians (96.1%). The risk difference was 1.24%. With proper training the midlevel healthcare providers can provide safe abortion service.[6] Other studies have shown overall success rate of >95% for medical abortion at 49 to 56 days of pregnancy.[7, 8]

In this study there were three cases of continuing pregnancy, two of them had medical abortion at more than 9 weeks. The risk of continuing pregnancy are reported in <1% of women who begin treatment at ≤49 days gestation, regardless of regimen.[9] Ashok et al has even lower rate at similar gestation age of 0.2% of women continuing pregnancy.[8]

In a prospective cohort study on 2550 women undergoing early medical abortion, success rate was 96.5% with continuing pregnancy 1.45%, incomplete abortion 1.22% and one missed ectopic pregnancy.[10] It is interesting to note that there were four cases of ectopic pregnancy during the study period, which seems quite high and reflect the lack of supervision in using medical abortion.

In this study, among the 31 cases of incomplete abortion 27 women underwent suction evacuation which seems quite high. This could be due lack of training among emergency staff about medical abortion who needs to understand the difference between incomplete abortion and the normal process of abortion. However, almost two third of the women attending the hospital came with bleeding per vagina and 42% of the women were anemic of whom five had severe anemia with 13 (23%) requiring blood transfusions. Spitz et al reported that 56 (2.6%) of 2121 women who had medical abortion through 63 days gestation required suction evacuation for excessive bleeding and 4 (0.2%) received transfusion.[11] Winikoff et al reported that 3 (0.2%) of 1373 women in developing countries who received mifepristone and misoprostol required blood transfusion.[12]

In this study, there were two case of infection. One presented with peritonitis and required laparatomy while the other had endometritis. There was one maternal mortality. She was third gravida 15 weeks pregnant who after sex determination had medical abortion two days before. Just after expulsion of fetus she had severe bleeding per vagina. During admission she was in shock, jaundiced with Hb of 3.9 gm%, all coagulation were deranged and died 21 hours of admission.

Data on mifepristone abortion use from the Planned Parenthood Federation of America, from 2001 through the first quarter of 2004 were collected using a centralized reporting system. Over the study period 95,163 mifepristone abortions were provided. Overall, 2.2 per 1000 women (95% CI 1.9-2.5) experienced complication, of which heavy bleeding requiring blood transfusion was 0.5/1000 and endometritis 0.2/1000.[13] Mifepristone abortion mortality is estimated to be 1.1 per 100,000 based on one death (95% CI 0.3-5.9).[9] In a systematic review covering 46,421 women, the frequency of infection after MA was less than one percent (0.92%).[14]

As mentioned before, in Nepal there are no central records of the women undergoing medical abortion except in some hospitals and health centers, therefore it is difficult to find out the rate of problems and complication.

CONCLUSIONS

Forty five percent of the cases come to know about this service from the medical shops.

More than three fourth of the cases got the service directly from the medical shop who are not trained for providing this service. Dreaded complications like ectopic pregnancy, peritonitis and DIC were seen.

There is a need for proper implementation of guideline for providing medical abortion. There should be

provision of women centered medical abortion care with adequate facilities, personnel, referral system, and recording keeping. Over the counter sale of 'Abortion Pill' should be stopped. Women should be made aware that Medical Abortion can sometimes cause life threatening complications, thus it is important to take under supervision.

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