



Self Administration of MTP Pills and Risk of Ectopic Pregnancy

Authors

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Abstract

Objective: *The objective was to study the risk of the ectopic pregnancy in patients with self administration of the MTP Pills reporting to a tertiary care centre with different complaint*

Methodology: *This study was conducted in the department of Obstetrics and Gynecology, Kamla Nehru State hospital, Indira Gandhi medical college Shimla w.e.f. 1st July 2018 to 30th June 2019. It was a prospective observational study. A total of 25 women reported to our hospital after self administration of abortion pills were diagnosed of having ectopic pregnancy.*

Observations and Results: *In this study a total of 25 cases presented to the hospital with different complaints who were diagnosed to have ectopic pregnancy. maximum patients (72%) were in age group of 21-30 years. 77% were married. 52% belonged to rural area. 60% patients had ruptured ectopic and 32% had unruptured ectopic.*

Conclusion: *This study shows that there is a high risk of ectopic pregnancy associated with self administered MTP Pills and due to the easy availability of abortion drugs there is an urgent requirement of legislation and restriction of drugs used for medical termination of pregnancy. In patients with self administered MTP pills ectopic pregnancy may remain under-diagnosed which may lead to potentially serious consequences.*

Introduction

Various methods were implicated for abortion since ancient times. Laws, cultural and religious views for abortion vary all around the world. Abortion is defined as willful termination of pregnancy after the period of viability. World health organization defined medical abortion as "Usage of pharmacological drugs to terminate pregnancy" and unsafe abortion as a procedure for termination of an unwanted pregnancy either by persons lacking the skills required for procedure or in environment lacking minimal medical standards or both. Medical termination of pregnancy act was introduced in 1971 making abortion a legal

procedure in India. The goal of act was to regulate and ensure access to safe abortion and thus protect women from "Inflicted pregnancies" and "Forced motherhood".

World Health Organization and Federation of Obstetrics and Gynecological Society of India guidelines for Medical termination of pregnancy by medical method includes proper counseling of women, confirmation of pregnancy, estimation of correct gestational age and site by bimanual examination, ruling out contraindication, and follow up visit on 14th day are considered mandatory. Ultrasound examination is an optional modality. As per these guidelines a combination of

mifepristone and misoprostol is administered under supervision by an authorized medical practitioner after taking into consideration the contraindications in a hospital or centre approved for medical termination of pregnancy.

Ectopic pregnancy is one of the leading cause of maternal morbidity and mortality in the first trimester of pregnancy. Its incidence has been increased since 1970 and is about 2% of all pregnancies. Accurate diagnosis and appropriate management of ectopic pregnancy can significantly reduce the maternal morbidity and mortality. diagnostic accuracy is increased significantly when Transvaginal ultrasonography (TVS) along with quantitative serum bHCG estimation used for diagnosis. Diagnosis of ectopic pregnancy is still difficult despite the advances in the medical science. Ectopic pregnancy has a clinical triad which include amenorrhea, lower abdominal pain, and bleeding per vaginum. This triad is present only in less than 50 % cases of ectopic pregnancy. Diagnosis is also difficult because of atypical clinical presentation.

Methodology

This study was conducted in the department of Obstetrics and Gynecology, Kamla Nehru State hospital for mother and child, Indira Gandhi medical college Shimla w.e.f. 1st July 2018 to 30th June 2019 as a prospective observational study. A total of 25 women reported to our hospital after self intake of abortion pills who were diagnosed to have ectopic pregnancy were included in the study.

Patients who were included in the study were asked the detailed history including menstrual history, prior history of intake of any previous medication or self MTP pills and treatment history. General physical examination was done any signs and symptoms of shock was ruled out and if present was managed as per protocol Clinical examination including per abdomen, per speculum and per vaginum examination was done in each patient. Gestation at which pill was taken, whether

pelvic examination or ultrasound was done prior to it or not, who prescribed the drug and from where it was procured was noted.

As per patient's status and clinical findings decision for expectant, medical, or surgical management was made based on standard guidelines. Medical management in these patients was carried out with methotrexate (1 mg per kg body weight). Patients who underwent the laparotomy the details of operative findings were recorded. At the end of the study period data was tabulated and percentages were determined accordingly.

Results

During the time period between 1st July 2018 to 30th June 2019 a total of 25 cases presented to the hospital who were diagnosed to have ectopic pregnancy after self administration of MTP pill. Maximum 18(72%) cases were in age group of 21-30 years, 4 (16%) were below or equal to 20 years and 2 (8%) were in 31-35 years and only 1(4%) was above 35 years. 21(77%) were married and 4(16%) were unmarried. 12(48%) belonged to rural area while 13(52%) belonged to urban area. 23(92%) were multigravida with parity ≥ 2 , only 2(8%) cases were primigravida.

Table 1: age distribution

Age	Number (n=25)	Percentage
≤ 20	4	16%
21-30	18	72%
31-35	2	8%
> 35	1	4%

Table 2: Parity

Parity	Number	Percentage
Primigravida	2	7%
Gravida 2	10	43.4%
Gravida 3	6	24%
Gravida 4	4	16%
Gravida 5	3	12%

Ruptured ectopic was diagnosed on ultrasound in 15 cases, unruptured ectopic in 8 cases, abdominal pregnancy in 1 case and hemorrhagic cyst in case. 15(60%) cases of ruptured ectopic pregnancy underwent exploratory laparotomy, 1 (4%) case of ruptured hemorrhagic cyst and underwent

cystectomy , while 1(4%) case of secondary abdominal pregnancy located in the omentum and underwent exploratory laparotomy proceed excision of secondary abdominal pregnancy. Unruptured ectopic was seen in 8(32%) cases out of which 6(24%) cases were given Methotrexate while other 2(8%) cases were kept on expectant management.

Table 3: ultrasound finding

Ultrasound finding	Number	Percentage
Ruptured ectopic	15	60%
Unruptured ectopic	8	32%
Abdominal pregnancy	1	4%
Hemorrhagic cyst	1	4%

Table 4: Management

Management	Number	Percentage
Exploratory laparotomy proceed salpingectomy	15	60%
Exploratory laparotomy proceed excision of secondary abdominal pregnancy	1	4% %
Exploratory laparotomy proceed cystectomy	1	4% %
Methotrexate	6	24%
Expectant management	2	8%

Discussion

Ectopic pregnancy is defined as implantation of a fertilized at site other than the uterine cavity, 97% occur in fallopian tube which is the commonest (97 %) site. Rare sites of ectopic pregnancy include cornual (2 %), abdominal (1.4 %), and ovarian/cervical (0.2 %) pregnancy. Incidence of ectopic pregnancy has been increased recently because of improvements in the diagnostic techniques and timely management. Despite the medical advancement and timely diagnosis of ectopic pregnancy it is still the leading cause of pregnancy related deaths during the first trimester of pregnancy. Deaths are mainly due to Ruptured ectopic pregnancy.

There is not a fixed set of symptoms and physical signs that can make a diagnosis of ectopic pregnancy or exclude its diagnosis for sure because there is overlap of symptoms with other conditions. Hence the accurate diagnosis of ectopic pregnancy is not always easily done.

Ultrasonography is highly accurate and easily available diagnostic modality available these days. Alone when positive urine pregnancy test does not indicate accurately an intrauterine gestation.

Maximum patient who take MTP pills after only positive urine pregnancy test are a risk of having an ectopic pregnancy which was usually diagnosed later and mainly with adverse consequences. Such patients usually present with continued bleeding per vaginum and pain lower abdomen which is also a part of the abortion process therefore, these patients do not report when these symptoms appear and they tend to report late to a health facility. These patients usually hide the history of unsupervised drug intake. Sometimes diagnosis of ectopic pregnancy in such cases via ultrasound is difficult without accurate history.

The management of ectopic pregnancy successfully done by high index of clinical suspicion, appropriate risk stratification, early diagnosis, and timely management.

The US Food and Drug Administration (FDA) has approved the use of mifepristone/ misoprostol combination (mifepristone 600 mg orally followed 2 days later by 400 lg of misoprostol sublingual) for pregnancy up to 49 days of gestation in the year 2000. Medical termination of pregnancy act was introduced in 1971 making abortion a legal procedure in India. The goal of act was to regulate and ensure access to safe abortion and thus protect women from “Inflicted pregnancies” and “Forced motherhood”.

Mifepristone act at receptor level and blocks action of progesterone at the receptors, alters the endometrial lining, and induces endometrial shedding. On the other hand Misoprostol is an analog of prostaglandin E1 which interacts with prostaglandin receptors and causes softening of cervix and induces uterine contractions leading to expulsion of the uterine contents.

The general thinking that uneducated people consuming pill due to lack of information may be wrong, and educated people looking for easy solutions need to be targeted. In our study the most

common complaint on presentation was bleeding per vaginum, second most common complaint was pain abdomen. The similarity of symptom of bleeding per vaginum and pain after consumption of pills and ectopic pregnancy leads to seeking of health care facilities late and sometimes very late in which nothing can be done. The commonest comorbidity seen was anemia with mild, moderate and severe anemia seen in 4(15%), 14(52%), 3(11%) cases respectively. The common perceptions that bleeding occurs after intake of pills makes women ignorant for this complaint.

All women included in this study has easily taken the drug over the counter without prior checkup and prescription at local pharmaceutical shops without prior checkup at a healthcare facility. In these patients drug intake was not supervised by a healthcare personnel, and in most of the cases there was no adherence to the recommended schedule. Few women when asked they even denied the purchase of the drug without prescription initially. As per the ruling guidelines, termination of pregnancy by medical method should be offered to all women wanting termination of pregnancy up to 7 weeks. These women should be in their right frame of mind and must be prepared for at least 3 follow-up visits to nearby health care facility.

Conclusion

The choice to embrace motherhood or not has been solely provided by government of India to the mother to be. The freedom of choosing termination till required period of gestation and without consent of any other person involved is one of the most liberating reproductive rights which has been provided to all women by the society. It helps to save them from mental, social and economic trauma. There has been increased dilemma in diagnosis of ectopic pregnancy due to over-the-counter availability of drugs, failure to strictly follow the guidelines, unsupervised intake of MTP Pills and atypical clinical history and ultrasound findings which leads to potentially serious consequences in such patients.

ultrasonography confirmation of intrauterine pregnancy, as a must protocol, before giving MTP Pill would certainly preventing/minimizing the incidence of missed/delayed diagnosis of ectopic pregnancy in such patients along with high index of suspicion and awareness about the sonographic features in such cases which may lead to decrease in catastrophe events.

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