

Prescribing Medical Method of Abortion - Current Need and Prerequisites for Efficacy

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Research Article

Abstract: About 75 % of all pregnancies are unplanned and 50 % definitely unwanted. Medical termination of pregnancy is legal in India since 1971. Medical method of abortion is available in India. Many women ask for it in outpatient department. Correct estimation of gestational age is cornerstone for safe and effective use of this method. This study tries to know current demand for medical method of abortion and for it to be successful, tries to know how to acquire minimum skill by mastering bimanual examination.

Key words: Medical method of abortion (MMA), Medical termination of pregnancy (MTP).

Introduction

Illegal abortions far outnumber legal procedures and account for approximately eight percent of all reported maternal deaths in the country. (Registrar general of India, 2006). Reasons include dearth of trained abortion providers, limited availability of safe and legal services, inadequate and underutilized training facilities and legal restrictions. The situation is compounded by social and cultural stigma as well as the fact that millions of Indian women remain unaware of their right to legal abortion and the availability of safe, legal services. Government of India is committed to increasing access to safe abortion care as an important strategy for reducing maternal morbidity and mortality. India's National population policy 2000 delineates specific actions such as educating communities on abortion issues, decentralizing abortion services, adopting new technologies including manual vacuum aspiration (MVA) and medical methods of abortion (MMA). Traditionally, clinicians believing history narrated by women and carrying out bimanual per vaginum examination, estimated gestational age. Of late, ultrasound is popular for this indication. In some clinics, ultrasound is performed routinely prior to medical abortion to determine gestational age. In other settings, such as a family practice office, low-resource settings or facilities that provide a very low volume of abortions, an ultrasound machine is just too expensive to justify its use for women having medical abortions. In addition, machines break, need repair and replacement, and sometimes, despite best efforts, mistakes are made in the

performance and interpretation of ultrasound results. In the present study, we tried to find out how a bimanual examination should be mastered before prescribing medical method of abortion (MMA).

Materials and methods

Continuing medical education workshops are best places for meeting colleagues for interactions. Such meetings are frequently organized now days. We thought of this and in one such meetings, this study was conducted. The participants were all doctors possessing graduate M.B.B.S. degree and variable experience in different subspecialties. We circulated a questionnaire amongst all participants. Only two questions were asked on a paper. First question was regarding the number of abortion seekers asking for medical method of abortion. This, we asked them to be quoted in percentage. Second question was regarding the number of per vaginum examinations needed by M.B.B.S. graduate to confidently and correctly estimate gestational age in first trimester. Responses were sought in numerical values. The respondents were not asked to reveal personal information viz, write their names and designations. The participation was voluntary. Many respondents were happy to interact.

Observations

Total ninety five doctors participated in the study. Few doctors did not respond in numerical values and said they do not have experience in obstetrics and gynecology and were practicing different specialty. Few said the value should not be in numbers but years of practice. Ten such entries were removed from analysis. Total 85 responses were analyzed. Mean was calculated for both responses and mode value and median value was calculated for the first response i.e. number of women seeking tablets for abortion. Respondents did not know the purpose of this study and name, aim and whereabouts of the investigators. Thus this study was free from fear or favour and hence without bias.

Results

Eighty five responses were analyzed. For the number of abortion seekers asking for tablets for MMA in outpatient department, following findings were noted – responses ranged from one to hundred. A mean value of 40.77 and median 65.38. The mode value was 90. All above are in percentages. For a number of per vaginum examinations, to master technique of bimanual examination to correctly and consistently estimate gestational age in the first trimester, the responses were from one to five hundred. A mean value of 28.74 was calculated with computerized sheets.

Discussion

Freedom from unplanned and unwanted pregnancies is now considered to be a human right for women. Correct estimation of gestational age is the single most important determinant for safe and successful MMA. It can be frequently done by various methods eg. By history alone, along with clinical examination and with ultrasonographic evaluation. MMA is permitted for use up to 9 (Nine) weeks in India. A large study of 10 clinics in the United States examined the feasibility and efficacy of determining gestational age using information about last menstrual period and a bimanual pelvic examination compared with ultrasound. Nearly 4,500 women were eligible to participate in the study. Most of the clinics were in states where clinicians other than physicians can provide medical abortions; 95 percent of the providers in the study were nurse practitioners, nurse-midwives or physician assistants. Results showed that women themselves were very accurate in their assessment of pregnancy duration. Of women who were certain of their LMP, only 2.6 percent were over the 63-day eligibility criteria; only 0.4 percent had pregnancies of 11 weeks or more. The clinician estimates of gestational age were even more accurate. Only 1.6 percent of women judged by the clinician to be within the eligibility window of nine weeks were more than 63 days pregnant and only one woman (0.02 percent) had a pregnancy of 11 weeks or more. These results are helpful to providers and health system managers because they demonstrate that there are safe and effective alternatives to using ultrasound to determine gestational age before medical abortion. The small number of women who are assessed by LMP and clinical exam to be nine weeks pregnant or less, but who in fact are slightly more than nine weeks are unlikely to have complications; in fact, there is a good chance that they will have successful abortions. Although efficacy of the standard regimen used up to nine weeks declines slightly as gestational age advances, it is still highly effective. A recent literature review of medical abortion without routine use of ultrasound supports the findings of the study discussed above. Studies of medical abortion with mifepristone and misoprostol in Vietnam and India

where ultrasound was not used still had a very high success rate. In Nepal, in a documented 2,563 medical abortions provided shortly after introduction of mifepristone in the country, none had ultrasound. Yet the success rate of medical abortion was 98.2 percent. 422 women seeking first-trimester abortions in two clinics (Pune, India, and Atlanta, USA) used a simple worksheet and calendar to calculate the duration of gestation from the date of last menstrual period (LMP) and/or of unprotected intercourse. Clinicians then used standard clinic practices to estimate pregnancy duration. Investigators compared the two sets of estimates, focusing on women who fell into the “caution zone” (i.e., had pregnancy durations >8 weeks according to providers, but ≥ 8 weeks by their own estimates). The participants were generally representative of the women seeking abortion at the two clinics. 217 (97.7%) of 222 women in Atlanta and 173 (86.5%) of 200 in Pune could produce an estimate of pregnancy duration. Most (85.4% in Atlanta; 93.6% in Pune) of these estimates were within 2 weeks of those made by providers. For estimates based on LMP, only 10.0% (exact 95% CI 6.2–15.0) of women in Atlanta and 9.8% (5.8–15.3) in Pune fell into the caution zone. For estimates based on a date of intercourse, just 7.7% (4.0–13.1) of women in Atlanta and 3.4% (0–17.8) in Pune fell into the caution zone, although fewer women could use this method. The vast majority of women seeking first-trimester abortion in this study could accurately calculate pregnancy duration within a margin of error clinically inconsequential for safe use of unsupervised medical abortion. In yet another study, women scheduled to undergo abortion received transvaginal ultrasound assessment of gestational age. A resident and faculty physician, blinded to the ultrasound results, each performed a pelvic examination immediately prior to the procedure. The pelvic examination assessments were compared to the ultrasound calculations of gestational age. The absolute value of the difference between the bimanual examination and ultrasound dating were compared. The results were -the pelvic examination agreed with the ultrasound (± 2 weeks) in 92% of cases for faculty and 75% for residents. Accuracy of the resident examinations did not change over their two-month rotation. There is increasing number of women asking for MMA in outpatient departments. As compared to previous years when no such method was available, many women now know it is available; it is safe and effective way of pregnancy termination. In this study, we found mean value of 40.77. Most important knew the mode value was 90%. With a mean value of 28.74, the number of per vaginum examinations to correctly and consistently gestational age seems modest. A range from 1 to 500 was suggested by respondents. Approximately,

ten examinations to know normal size of uterus seems adequate. A uterine size palpable abdominally corresponds to 12 weeks of pregnancy, a finding that cannot be missed. Remaining 17 pelvic examinations for noting various uterine sizes would be practical, effective and logical exercise. This study may be of some help to various training centres engaged in MVA and MMA training to medical professionals. Someday, as we envision, literate and responsible women may get MMA over the counter and feel empowered. Advances in medical abortion might allow women seeking early abortions to terminate their pregnancies safely and effectively without medical supervision.

Conclusion

Many women are asking for MMA in outpatient department. In the present study, about 41 % of abortion seekers demanded it. For correct and consistent estimation of gestational age, about 27 pelvic examinations seem useful for practice. This study may be of some help to various training centres engaged in MVA and MMA training to medical professionals. Someday, as

we envision, literate and responsible women may get MMA over the counter and feel empowered.

References

1. Bracken, H., W. Clark, E. S. Lichtenberg, S. Sweikert, J. Tanenhaus, A Barajas, L Alpert, B. Winikoff. 2010. Alternatives to routine ultrasound for eligibility assessment prior to early termination of pregnancy with mifepristone-misoprostol. *BJOG*, 118 (1): 17-23.
2. Kaneshiro, Bliss, Alison Edelman, Robyn Sneeringer, Rodolfo Gomez Ponce de Leon. 2011. Expanding medical abortion: Can medical abortion be effectively provided without the routine use of ultrasound? *Contraception*: 83, 194-201.
3. Is clinician evaluation by history and physical exam adequate to determine gestational age compared with ultrasound? *Medical abortion matters*. 2011
4. Accuracy of assessment of pregnancy duration by women seeking early abortions. *The Lancet*. Vol 355. Issue 9207. Pages 877-881.
5. Comparing bimanual pelvic examination to ultrasound measurement for assessment of gestational age in the first trimester of pregnancy. *J Rerod Med* 2002; Oct 47 (10);825-8.