First Trimester Miscarriages: Medical or Surgical Outpatient Management

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The World Health Organization reported 93,000 maternal deaths due to miscarriages and abortions yearly in developing countries. This represents more than 13% of all pregnancy-related deaths, and is especially prevalent in settings where access to safe health-care services is difficult. Miscarriages and abortions contribute excessively to maternal morbidity and mortality in under-developed and developing countries.

Complications from unsafe, induced and spontaneous abortions/miscarriages are recognized worldwide as a main public health fear and are one of the foremost reason women seek critical care. A lot of women survive with pelvic inflammatory disease, chronic pain, risk of ectopic pregnancies and infertility. Most mortalities and morbidities are actually preventable through in-time access to safe health-care and contraception services. Post-abortion care, refers to specific services for those females who are experiencing problems from all types of spontaneous miscarriages or induced abortions. This term is commonly used by the 'international community for reproductive health'. Availability of services for post-abortion care must be improved to reduce maternal mortality and morbidity. Midwives, nurses and junior/senior doctors can safely provide post-abortion care even in outpatient settings; only if they receive appropriate support and training. Access to health-care services and contraception facilities decreases the need for it and averts complications. It is much less expensive to prevent unsafe abortion/miscarriage rather to treat resulting complications.

Missed miscarriage is in-utero death of the embryo/foetus before the 20th week of pregnancy. It is not very uncommon, occurring in up to 10-20% of recognized pregnancies. Incomplete miscarriages are incomplete expulsion of products of conception before 20th week of pregnancy. These miscarriages can be managed expectantly, medically and surgically.

Medical treatment of miscarriage is the one that is carried out by taking medications. It is gaining ground as a feasible and low-cost method of uterine evacuation. Multiple drugs are used for this purpose e.g. mifepristone, misoprostol and methotrexate. Vaginal and oral misoprostol are safe, effective and acceptable methods of treating miscarriage with a reported effectiveness of 85–95%. Increasing evidence is coming that tablet misoprostol is a safe, effective, and acceptable method to achieve uterine evacuation for women needing care after miscarriages.

Misoprostol must be readily available especially for women who do not otherwise have access to proper healthcare facilities. According to multiple studies in the recent past, medical management of miscarriages by oral misoprostol was lesser effective than MVA (Manual Vacuum Aspiration), but it was more acceptable to the patients. Medical termination is well-suited for usage in low-resource situations and it must be encouraged to be used as an option for the management of incomplete/missed/spontaneous miscarriages. Latest researches have questioned the necessity for routine surgical evacuation of uterus, suggesting expectant /medical management to be more appropriate.

Surgical management of miscarriages has been the standard treatment across the globe for many years. Its effectiveness and safety are very well proven. Surgical treatment of spontaneous, incomplete, missed miscarriage, or of induced abortions, includes evacuation of the uterus with sharp curettage or MVA. Manual vacuum aspiration is increasingly being used to treat first trimester miscarriages. It is believed to be safe and cost
effective in experienced hands. MVA is quite a new (2013) addition to the management of incomplete abortion in our hospital. Multiple studies reveal that MVA is more efficient than medical termination of pregnancy in the treatment of first trimester miscarriages. If uterine size is lesser than or equivalent to gestational age 13 weeks, either misoprostol or treatment with vacuum aspirator is recommended. MVA is reported to be very useful and effective procedure in low-resource settings for patients with 'incomplete/missed/spontaneous miscarriages' with a uterine size of less than 12-13 weeks.

Complications which are reported only in the misoprostol group and not in the MVA group are: abdominal cramping (usually starting within the first few hours but it may begin as early as 10 minutes after misoprostol administration), fever, vomiting and chills. These are common side effects but are transient. Fever does not necessarily indicate infection. Antipyretic can be used for its relief. Nausea and vomiting usually resolve within 2 to 6 hours. Anti-emetic can be used if required. MVA is generally considered safe, but complications such as infection, bleeding, uterine perforation and decreased fertility can occur in up to 10% of women. Relatively more complications are reported for the treatment with misoprostol than with MVA. Hospital stay was shorter in the MVA group than the misoprostol group in almost all the studies of the last five years.

After this brief review, we can conclude: in low resource settings, misoprostol can be used where MVA is not available or when complete uterine clearance cannot be achieved even after misoprostol (in recommended doses). Health care providers must be optimally educated/trained/drilled (in medial termination as well as in MVA) beforehand, about complete protocols, procedures, complications and timely referrals. In those areas where MVA or operation theatre facilities are not available, health care providers can prescribe misoprostol and they should inform females about the side effects e.g. chills, fever nausea, cramping etc. and guide them about the simple management of these minor complications. Women should also learn to get help when they notice/feel the bleeding as 'too much'. Timely medical/surgical/both management of first trimester miscarriages/abortions will profoundly help not only to decrease the maternal morbidity and mortality but it will also minimize the social and economic burden on the society and country.

REFERENCES: