

Induced Abortions in Adolescents

Nozer Sheriar

6 Summer Breeze, 15th Road, Bandra, Mumbai 400050.

Each year more than 75 million women world wide experience an unintended pregnancy (UNFPA 1997). An estimated 20 million of these resort to unsafe abortions, resulting in 80,000 maternal deaths and many more injuries (WHO 1998). Approximately 2 million adolescents risk unsafe abortion annually in the developing world, accounting for a third of hospitalisations for abortion related complications (UNFPA 1998).

An Issue of Global Concern

In recognition of the fact that most abortion related deaths are preventable, the International Conference on Population and Development (ICPD) made the following recommendations (UN 1995).

- Access to compassionate, quality services for the management of complications arising from abortion.
- Postabortion counselling, education and family services to reduce recourse to repeat abortion.
- Where abortion is legal, access to safe induced abortion services.

With adolescent pregnancies attracting a disproportionately higher risk of complication, these guidelines are more relevant and demand application.

Ground Realities

Unwanted pregnancy in adolescents is associated with apprehension, fear and misconception. Attempts at initial concealment or genuine ignorance often result in delayed presentation in the second trimester. This is well illustrated by an analysis of 6500 medical terminations of pregnancy undertaken at the Wadia Maternity Hospital. It was revealed that while 5% of overall procedures were performed in the second trimester, late abortions accounted for over 15% of procedures in adolescents.

Since late abortions have four fold complications when compared to early procedures no effort must be spared to educate adolescents and their families about the easy availability of safe and early legal abortion in India with a guarantee of confidentiality.

The MTP Act of 1971 (1985)

Terminations of adolescent pregnancies are adequately covered by the protective umbrella of the MTP Act, so far as the procedure is performed in good faith in accordance with its legal requirements.

Of particular importance is the recording of an informed consent of the parent or legal guardian of any patient who is technically a minor. This must be done in the Form C referred to in the MTP Rules (1978). Besides this a documentation of two qualified medical practitioners to justify the need for an induced abortion between 12 and 20 weeks of gestation. It must be stressed that on no account should an induced abortion be performed, after completion of 20 weeks of gestation.

Technical Nuances of Induced Abortions

Early Abortion

The WHO Technical Report (1997) reports a four fold rise in complication rates in late abortions when compared with first trimester abortions. It is hence vital that an awareness of the availability of safe legal abortion be generated in vulnerable adolescents to encourage earlier presentation and safer outcomes.

Suction evacuation using metal cannulae has hitherto been the procedure of choice for first trimester terminations. Supplementary issues such as the use of general anaesthesia or a local paracervical anaesthesia and the use of an electric or a mechanical pumps need to be addressed. Because of the need for anaesthesia and cervical dilatation there is a move to search for simple, alternative ambulatory or medical techniques to be used

as an interceptive to prevent pregnancy.

Manual Vacuum Aspiration (MVA)

MVA involves using a hand held syringe attached to a plastic cannula to suction the contents of the uterus. Successful evacuation is achieved in 98%, the procedure being generally performed on an outpatient basis using local anaesthesia (UNFPA 1998).

The resurgence of this avatar of menstrual regulation has been facilitated by the widespread availability of sensitive tests for confirmation of pregnancy and transvaginal ultrasound in contemporary clinical practice, which largely pre-empt the procedures previously performed when the diagnosis of pregnancy was in doubt.

A recent study assessed MVA use in conjunction with ultrasound and an inspection of the aspirated products for villi, for early abortion between 3 and 6 weeks of gestation. Complete abortion occurred in over 99% with all early ectopic gestations also being identified, testifying to the clinical effectiveness of the procedure (Edwards and Creinin 1997)

Non-surgical Methods

The use of an antiprogesterogen in tandem with a prostaglandin is proving to be a safe and effective technique for inducing early abortion. After much experimentation, oral mifipristone (RU 486) 600 mg followed 48 hours later by misoprostol (Cytotec) 400-800 mcg seems to be the most practical method. Success varies from 90-97% with higher success rates at earlier gestations. A review of nine studies using various mifipristone plus prostaglandin regimens, reported a complete abortion rate of 94% (Grimes 1997).

Medically induced abortions are best performed by 49 days but may be a valid option up to 63 days of amenorrhoea. However easy access to emergency medical services is mandatory since 5% may require uterine evacuation and 0.1% may require a blood transfusion because of significant haemorrhage. There is also a need for the patient to return to the clinic on many occasions for initial evaluation, drug and prostaglandin administration and follow up. This may

be impractical where access to services is difficult.

Besides mifipristone, oral administration of methotrexate (50 mg) or intramuscular administration of methotrexate (50 mcg/square metre of body surface), followed 3-5 days later by misoprostol (800 mcg) administered vaginally, has been used with a 90-91% success (Carbonell et al 1998). However given the 10% failure rate with methotrexate, which is a known teratogen the WHO Toxicology panel has recommended against its use due to the potential for birth defects in cases after treatment failure (Grimes 1997).

Adjunctive Techniques

Preoperative intramuscular administration of 250 mcg of 15 methyl PGF₂α is used to ease cervical dilatation and minimise blood loss.

Ultrasound guidance during induced abortion by suction evacuation is useful when difficult cervical dilatation is anticipated, to determine uterine position, in cavity distorted by fibromyomas or scarring and to confirm completeness of the procedure. Caspi et al (1992) reported early menstrual regulation (gestational sac diameter less than 30 mm) with ultrasound assistance, with success evacuation in every case.

Late Abortions

Adolescents are at high risk of presenting late for induced abortions due to ignorance of the symptoms of pregnancy or attempts at concealment due to fear.

Extra amniotic Ethacridine

Extra amniotic instillation of ethacridine lactate (150 ml) through a 14F foley catheter is followed 6 hours later by an extra amniotic of 250 mcg (1 ml) of 15 methyl PGF₂α (Diluted to 10 ml with distilled water) through the catheter, which is removed 2 hours later. The combination significantly reduces induction-abortion interval with a success of 98% (Bhathena et al 1990)

Prostaglandins.

These may be used intra amniotically, extra amniotically or intramuscularly. Intramuscular 15 methyl PGF₂α is

administered in up to 10 does of 250 mcg, each approximately 4 hours apart. Judicious titration and close monitoring reduce the risk of uterine and cervical trauma and supplementary antiemetics suppress the otherwise common gastrointestinal symptoms.

Intramuscular 15 methyl PGF₂α (250 mcg) or an oxytocin infusion are used to supplement medical methods for late abortion both to augment the procedure as also to prevent and treat postabortal haemorrhage.

Surgical Methods

These are primarily resorted to in case of the rare failure of medically induced abortion. Effective nonsurgical methods have made surgical procedures, particularly the traditional hysterotomy almost obsolete and largely discredited (WHO 1995).

However there still exists a marginal role for resorting to dilatation and evacuation by aspirotomy, particularly the earlier second trimester pregnancies (generally considered a grey zone for medical management). The procedure must be performed only by skilled clinicians with the requisite training and under continuous ultrasound guidance (Cates et al 1982). The advantages are an ambulatory procedure that can be done under a mere paracervical block, avoiding the need for extended hospital admission. These benefits must be balanced against the manifold increase in risk when compared to the relatively safe first trimester surgical methods of termination.

Prophylaxis in Induced Abortions

Perioperative antibiotic therapy using a variety of preparations ranging from ampicillin to cephalosporins and doxycycline were all determined to be effective in preventing postabortal sepsis in a review by Grimes et al (1977) so long as the principles of antibiotic prophylaxis were adhered. A preoperative oral or parenteral dose may be followed by prophylaxis for 24-48 hours.

For the Rh negative woman Anti D immunoglobulin prophylaxis (100-350 mcg) is necessary within 72 hours. Hence knowledge of the patients blood group is

mandatory before induced abortion.

Postabortion Care

The ICPD (1994) endorsed postabortal care (PAC) as an effective strategy to reduce maternal mortality. This recommended strategy encompasses the following components.

- *Emergency treatment for incomplete abortion and complications.* This is a vital component since a large proportion of adolescent abortions are unsafe, with the patient presenting for medical care with abortion related complications.
- *Postabortion family planning.* Counselling regarding life style modulation coupled with factual information and access to effective contraception is vital in preventing repeated unwanted pregnancies. Contraceptives recommended for adolescents include barrier contraception (with the add on benefit of STD and HIV prevention) and hormonal contraception (both the combined oral contraceptive as well as long acting progestogens. The intrauterine device is best avoided in adolescents, who are as such at a high risk of pelvic inflammatory disease.
- *Links to other reproductive health services.* Medical supervised induced abortion is an important entry portal for a young woman into the reproductive and child healthcare (RCH) system.

Experience from Ghana has shown that offering PAC through trained midwives, resulted in increased access and use of postabortal family planning and reproductive health services (Billings 1998)

Safe Abortions benefit women's Health

The safest induced abortions are those that are performed early, by trained medical practitioners, in hygienic settings within the appropriate legal framework. It should be our goal and constant endeavour to guarantee adolescents with unwanted pregnancies the right, the access and the opportunity to safe abortion. It is these adolescents who when they grow to healthy womanhood will ensure the

health, welfare and wellbeing of mankind.

References.

1. Bhathena, R.K., Sheriar, N. K., Walvekar, V.R. and Guillbaud, J., Br J Obst Gyn, 97:1027,1990.
2. Billings, D. L., A summary report of a study tour in Ghana, IPAS, 1998.
3. Carbonell, M. D., Dubois, C., Cronje H, and Gomet J. M., Contraception 55(2):83, 1998.
4. Caspi, B., Appelman I., Manon, Y., Baresh, A., Eliroz, A., and Insler, V: Advances in Contraception, 8(4); 349,1992.
5. Cates, W. Jr., Schultz, R. F., and Gold, G. F., JAMA, 284(5):559,1982.
6. Edwards, J and Creinin, M. D., Curr. Prob. in Obst. Gyn & infertility, 2(1):11,1997.
7. Grimes, D. A., Obstet. Gynaecol., 89(2):790, 1997.
8. Grimes, D. A., Schultz, K. F. and Cates, W. Jr. The National Abortion Foundation, New York 1997.
9. The Medical Termination of Pregnancy Act, 1971, Government of India, Simla, 1985.
10. The Medical Termination of Pregnancy Rules and Regulations, 1975 Eastern Book Company, Lucknow, 1978.
11. UN, Population and Development, Adopted at ICPD, 1995.
12. UNFPA, Outlook, 16(2):1,1998.
13. UNFPA, The State of the World Population, UNFPA, New York, 1997.
14. UNFPA, The State of the World Population, UNFPA, New York, 1998.
15. WHO, Complications of Abortion, WHO, Geneva, 1995.
16. WHO, Division of Reproductive Health, Unsafe Abortion, WHO, Geneva, 1998.
17. WHO, Technical Report, WHO, Geneva, 1997.