SOME EXPERIENCE IN LEGAL ABORTIONS

by

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Abortion has been mankind's most commonly used method of birth control. Today, both the social attitudes and medical practices are changing fast. New medical and surgical techniques are being developed for an easy and safe method to meet the increasing social demand for such a procedure. The Medical Termination of Pregnancy Act, 1971 came to force in India from 1st April 1972. From April, 1972 to December, 1973, 1205 terminations were carried out in the Nehru Hospital, Chandigarh. Analysis of the data is given so as to give an impression about the experience in the procedure, its morbidity and mortality, the type of population demanding such services and comparison of the data with other workers.

Material and Methods

All women attending the hospital for termination of unwanted pregnancy were referred to the abortion clinic. After complete history, physical examination and confirmation of pregnancy by use of withdrawal bleeding and/or immunological test of pregnancy wherever necessary, the various risks and probable complications were explained and the ultimate decision for termination was taken by the senior consultant on duty. Cases upto ten weeks period of gestation were terminated under intravenous pethidine and phenergan alongwith paracervical block, and were discharged six hours after the abortion. Cases with more than 10 weeks of pregnancy were admitted and method of termination was decided according to period of gestation (a) 12-14 weeks of pregnancy by extra-amniotic PGF_2 alpha (b) 14-20 weeks of pregnancy by hysterotomy and tubal ligation or intra-amniotic saline/ PGF_2 alpha. The details are given in Table IV. Selection of cases was strictly according to the clauses of the Act.

Results

One thousand seven hundred and ninety-six cases were accepted for termination of pregnancy. However, 39.4% did not keep their appointment. Total terminations done in this period were 1205 against 3404 deliveries. The age and parity is shown in Tables I, and II. 89.1% belonged to age group of 21-40 years. 84.4% had 2 or more live issues. 4.87% were unmarried girls.

Eighty-nine per cent cases were less than 12 weeks period of gestation, rest being from 12 to 20 weeks. Period of gestation and methods of termination are shown in Tables III and IV.

80.5% cases had either dilatation and curettage or suction evacuation. Rest of the cases were terminated by a variety of other techniques as listed in Table IV.

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TABLE I
Age Distribution of Cases

No. of cases	< 15 yrs.	16-20	21-30	31-40	More than 40	Not known	Total
1205	0.5%	3.7%	69.1%	20%	1%	5.7%	100%

TABLE II
Number of Living Issues in Cases undergoing Termination of Pregnancy

Unmarried	1	2	3	4 or more	Unknown	Total
4.87%	11.7%	37.7%	24.6%	17.1%	4.03%	100%

TABLE III
Period of Gestation of Cases Undergoing Termination of Pregnancy

6-8 weeks	9-10 weeks	11-12 weeks	13 or more weeks	Total
75.6%	9.53%	4.2%	10.0%	100%

TABLE IV
Methods of Induction of Abortion

METHOD	1972 Year	1973 Year	Total	Percentage
D & C	266	320	586	48.63
Suction evacuation	65	319	384	31.86
Intra-amniotic saline	7	48	55	4.64
Intra-amniotic PGF_2 alpha	16	52	68	5.64
Extra-amniotic PGF_2 alpha	6	51	57	4.73
Intravenous PGF_2 alpha	0	7	7	0.57
Hysterotomy	45	3	48	3.93
Total	405	800	1205	100

There were five perforations of uterus during evacuation giving an incidence of 0.41%. Three cases had immediate laparotomy for completion of abortion and closure of the rent in the uterus. None of these cases required hysterectomy. Recovery was uneventful in these 3 cases. Two cases were managed conservatively. There was cervical laceration due to vulcellum/tenaculum in 13 (1.07%) which was treated by vaginal packing for 6-8 hours and/or suturing. Two cases had excessive blood loss at the time of evacuation. Both were less than 12 weeks period of gestation and were given general anaesthesia with an intention to do vaginal tubal ligation at the same time. One needed blood transfusion. Vaginal tubal ligation was postponed in both these cases.

There were 16 cases in prostaglandin series where blood loss was more than

100 cc associated with incomplete expulsion of products of conception. One of these cases received blood transfusion. 1.9% cases returned to the hospital with incomplete evacuation and needed repeat curettage. There were some immediate complications peculiar to the technique used, such as gastrointestinal disturbances and bronchospasm with prostaglandins Table V. All of these were short lasting and were managed symptomatically.

TABLE V

Immediate Complications after Legal Termination of Pregnancy

Complications	Methods other than PGF_2 alpha 1073 Cases	With PGF_2 alpha (All Routes) 132 Cases	Total
Perforation of uterus	5	–	0.41%
Cervical laceration	13	0	1.07%
Excessive bleeding	2	16	1.49%
Incomplete abortion	14	10	1.90%
Sepsis (M.T.P. alone)	3/140	–	2.1%
Sepsis (M.T.P. with Tubal ligation)	3/60	–	5.0%
G.I.T. disturbances	–	49/132	37.1%
Bronchospasm	–	1/132	0.75%

As most of the cases were discharged within few hours of admission, it is difficult to asses the infection rate. However, one case returned with bilateral tubovarian masses following hysterotomy and tubal ligation. Culture from the aspiration fluid grew E-coli and patient responded to kanamycin. Home visit of a consecutive series in 140 cases revealed 2.1% incidence of infection in the form of tenderness in the fornices. These cases needed systemic antibiotic therapy. None had major infection in the form of parametritis, or pelvic abscess.

Three hundred and sixty-two cases had vaginal tubal ligation as a concurrent procedure with abortion. Follow up of 60 cases (Home visit) revealed 5% incidence of mild pelvic inflammation and 13.3% with excessive vaginal discharge. In the prostaglandin series (all second trimester abortions) 44.4% had incomplete abortion, 37.1% had mild gastrointestinal upset, pyrexia, bronchospasm, etc. and 8.2% had re-admission to the hospital for incomplete abortion. The acceptance rate of contraception following abortion in the form of intrauterine device, permanent sterilisation or hormonal therapy was 60% as shown in Table VI.

TABLE VI

Contraceptive Acceptance Rate in Cases Undergoing Legal Abortion

Method	Total No. of cases	Percentage
Tubal Ligation	362	30.0%
I.U.D.	346	28.6%
Oral pills	8	1.4%
Vasectomy	6	
Monthly inj.	2	
Implant	1	
Total	725	60%

Discussion

Although few series are available in the literature reporting negligible morbidity and no mortality (Bluett 1973) still a large number of series show serious complication like perforation of uterus, severe haemorrhage, incomplete evacuation and genital sepsis (Sood 1971; Loung

et al, 1971). Methods like intra-amniotic saline have been reported to cause serious complications such as coagulation failure (Spivak *et al*, 1972; Halbert *et al*, 1972; Stander *et al*, 1971; Beller *et al*, 1972), and brain necrosis (Cameron *et al*, 1966) leading to maternal death. Intra-amniotic and extra-amniotic prostaglandins are not associated with serious life threatening complications, but immediate morbidity is still very high (27.3% Embrey *et al*, 1972). Moreover, these drugs are not available freely in India and hence such methods are not available to a general physician. Hysterotomy and intrauterine pastes for midtrimester abortions carry high morbidity (Sood *et al*, 1971). In conclusion, none of the methods available uptill now are satisfactory.

In view of reports suggesting 30-40% tubal blockage after spontaneous and induced abortion (Kotasek 1971) and a very high incidence of recurrent abortion with or without incompetent os (Wright *et al*, 1972) and 2-3 times greater risk of prematurity following abortion (Papaevanaelou *et al*, 1973), it is important to make a very careful selection of these cases. Each patient should be explained these risks clearly before she undergoes any surgical or medical induction and preferably they should have minimum of two living children as in this series. Exceptions are cases of rape or contraceptives failure. In the present series, only 16.5% were with one or none living issue, Table II).

The overall morbidity in any series (short term and long term) is difficult to evaluate. Mostly women want to keep the procedure a secret and do not wish to talk of it or report to the hospital unless some complication occurs and hence follow up is poor. A positive effort has to be made to evaluate the morbidity and psychological impact of such procedures. Technically, intra-amniotic method (both saline and prostaglandins) was found to be better for second trimester abortions. Although these cases needed a very close observation for nearly 48 hours and immediate morbidity was quite high.

Considering the high acceptance rate of contraceptive methods (60%) in this series, it is felt that abortion may be useful if incorporated as an important measure for spacing or limitation in family planning when combined with other methods.

Summary

Analysis of data about 1205 medical terminations of pregnancy is given. 84.4% had two or more live issues. 89.5% were first trimester abortions. There was no mortality in this series. The overall morbidity was 6.97%. In view of possible sequelae like tubal blockage or recurrent abortions it is suggested that women with one living child should be accepted for termination only under special circumstances. The acceptance rate of contraception following abortion was 60%.

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