MORBIDITY FOLLOWING TERMINATION OF PREGNANCY

by

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Since legalisation of abortion, this operative procedure is being performed throughout India on a vast scale. The very fact that there are so many different methods of termination and a new one is being thought of every day, suggests that none is still considered absolutely safe.

The purpose of this paper is to study the morbidity and occasional mortality associated with the known methods used today. No doubt a well motivated and well performed operation is associated with minimum complications both physical and psychological, we have however still not reached our goal of complete safety.

Material and Methods

(1) Seven hundred and twenty-nine cases of termination of pregnancy done in K. E. M. Hospital from 1st April 1972 to 31st March 1973 were carefully analysed.

(2) Age, parity, marital status were sudied.

(3) The methods adopted for termination were D & C, suction evacuation, intra-amniotic injection of hypertonic solution either by the abdominal or the vaginal route, prostaglandin injections (either by intra-amniotic or extra ovular method) and abdominal hysterotomy.

(4) These operations were carried out by doctors of all grades and of varying experience.

(5) All these cases were followed up for a period of atleast 6 weeks.

(6) Overall morbidity rate and the relative frequency of complications were studied.

TABLE I

Age Distribution in Our Series

Age group	15-20	21-25	26-30	31 and above	Total
Cases	101 (13.9%)	182 (25%)	259 (35.5%)	187 (25.6%)	729

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Results

Tables I and II show the distribution of age and parity in our series.

It is clear from the Tables that more than 60% of the patients were above 25

TABLE II
Parity Distribution in Our Series

Parity	I	II	III	IV & above	Total
Cases	115 (15.8%)	75 (10.3%)	184 (25.2%)	355 (48.7%)	729

years of age and in as many as 48.7% of cases parity was 4 or more.

Table III shows the distribution of marital status in our series compared with Sood's series.

TABLE III
Marital Status

	Married	Single	Widow	Divorced & separated
Present series 729 cases	83.7%	13.7%	1.8%	0.8%
Sood's series 1317	49.1%	41.4%	0.6%	8.9%

In Sood's series (1971), the proportion of unmarried girls was three times more than in our series (Table III).

In our series, 429 patients were in the first trimester and 300 patients were in the second trimester.

Forty patients not included in the series were referred to Medico-Social Worker as these cases of pregnancy had advanced to more than 20 weeks.

TABLE IV
Method of Termination Used

Method	D & C + suction	I.A. Inj. Hyp. Soln.	I.A. Prostaglandin	Extra ovular prostaglandin	Hysterotomy
Cases	429	252	16	16	16

Termination with D & C or suction evacuation was performed upto 12 weeks of gestation. For cases more than 12 weeks size, intra-amniotic injection of hypertonic solution by the vaginal or the abdominal route was used as a routine.

A few cases were taken up for prostaglandin trial. Only in the cases where other methods failed was abdominal hysterotomy used as a method of termination (Table IV).

Abdominal hysterotomy was always associated with sterilisation.

Further contraception was discussed with all women who had their pregnancy terminated.

Table V compares the contraception after termination in our series and in Diggory's series.

Out of 310 women sterilized, 189 had 3 or more living children, while the remaining 21 women had 2 children.

TABLE V
Further Contraception

Method	Steril-isation	Vasec-tomy	I.U.D.	Oral pill	Condom	Diaph-ragm	F.P.C.	Nil	Total
Present series	310	13	75	62	169	–	–	100	729
Diggory's 1000	122	11	17	294	4	16	436	90	1000

Mortality

In the present series there was no mortality. Mortality varies from centre to centre. In United Kingdom, during 1969, the mortality was somewhere between 0.3-0.4/ 1000 frp, 54000 induced abortions. This was certainly higher than the maternal mortality rate in United Kingdom at that time (0.24/1000).

Morbidity

The published estimates of morbidity of abortions vary from 0.9 to 55.6%. In the present series, the overall morbidity was 16.5%. Kuck (1970) concluded from a study of the situation in Czechoslavakia that complications of one sort or another occurred in approximately 15% of all pregnancies terminated. Diggory (1969), on the other hand, reporting on a personal series of 1000 consecutive cases found few complications and none serious.

TABLE VI
Main Complications

Complications		Incomplete abortion	Pyrexia	Bleeding	Pelvic infection	Perfo-ration
D & C and suction evacuation—	429	31	2	1	4	5
I.A. Inj. of hypertonic solutions—	252	40	15	9	1	–
I.A. Prostaglandin—	16	4	3	5	–	–
E.O. Prostaglandin—	16	4	1	3	–	–
Hysterotomw—	16	–	2	–	–	–

Details About Complications

(1) Incomplete abortion following Intra-amniotic and extra-ovular injections (including prostaglandin cases) Out of 284 cases, in 48 cases the abortion was incomplete (16.9%). In 36 cases blunt curettage was done under general anaesthesia. In 11 cases, placenta delivered after starting pitocin drip.

(2) Pyrexia. Slight rise of temperature after intra-amniotic injections was quite common. But cases requiring treatment with antibiotics were few. There were 23 cases of pyrexia requiring antibiotics, 3.2%. In Diggory's series also this was 3.2%. However, in Sood's series of 1317 cases. this occurred in 27% of cases.

(3) Post-abortal bleeding requiring I.V. fluids. There were 18 such cases (2.5%) In Lindahl's series of 1000 cases this figure was 3.2%. In Sood's series it was 2.5%. There were 5 cases in our series requiring blood transfusion (0.6%). In Diggory's series, 0.5% of his patients required blood transfusion due to severe bleeding.

(4) Repeat D & C for retained products following D & C and suction evacuation were surprisingly only 12. Probably some patients must have gone elsewhere with this complication.

(5) Pain in abdomen. Fourteen pa-

tients complained of pain in the abdomen which was more than usual.

(6) Perforations. There were 5 cases in our series of 729 (0.7%). Four of these patients were treated conservatively. In one case, where posterior wall of the uterus was perforated during suction evacuation, posterior colpotomy was done and perforation was sutured through the pouch of Douglas. The patient did well postoperatively. In his personal series of 1000 cases, Diggory encountered one suspected and 3 definite cases of perforation of uterus. Perforation rate in Sood's series was 2.7%. In Selig and Harold's series of 500 patients aborted by uterine aspiration, there was one case of perforation of uterus, the patient required hysterectomy because of laceration of uterine artery and broad ligament haematoma.

(7) Cases requiring readmission with pelvic infection. There were 5 such cases. Of these, 3 had bilateral T.O. masses after D & C with vaginal sterilisation. One patient of intra-amniotic saline injection and vaginal sterilisation was re-admitted one week after discharge from the hospital. She had bilateral T.O. masses. She was treated with antibiotics, Indocid, prednisolone. She had to be in ward for nearly one month. After discharge, she was referred for short wave diathermy. She came for follow up after two months The masses had resolved completely. Diggory in his series of 1000 cases had 5 cases with pelvic infection requiring readmission.

Other Complications

(1) Hypernatremia: — Following intra-amniotic injection of 160 ml of 25% saline, one patient complained of tingling and numbness. There was hyperpnoea and hyperreflexia. Patient looked pale. B.P. rose from preoperative B.P. of 110/70 to 160/100. The patient was given 40 mg. lasix intravenously, complete bed rest and 100 mg. of pethidine intramuscularly. The patient recovered within a short time.

(2) Burst abdomen:—In one case, of 16 weeks' size uterus abdomen was opened, tubes ligated and 200 ml of mannitol in glycerine was injected into the amniotic cavity and abdomen closed in layers. Patient did not get any pains until 5th day. On 6th day, patient got fever and aborted. On 6th day, sutures were removed. At that time, apparently there was only slight gaping of the wound. Next day patient coughed and omentum came out. Suturing of burst abdomen was done. Postoperatively, patient did well. Sutures were removed on 10th day. Wound healing was good.

(3) Paralytic ileus—in one case after hysterotomy there was paralytic ileus which was treated with Nil by mouth, intravenous fluids and flatus tube, etc.

(4) Injury to rectum—in one case while doing vaginal sterilisation muscular layer of the anterior rectal wall was injured. It was sutured. Patient did well postoperatively.

Follow-up—careful follow up was done for a period of atleast 6 weeks. It was during this follow up that some patients were readmitted for pelvic infection, retained products with bleeding, etc.

Discussion

Morbidity is inevitable even with a simple operation. And most methods used in termination of pregnancy are far from simple. The published estimates of complications vary from 0.9 to 55.6%. The possible reasons for this discrepancy are:

(1) Experience of the surgeon and his team.

(2) Different criteria used in the assessment of morbidity.

(3) Lack of detailed note keeping.

(4) The patient may not have returned to the same hospital if a complication develops.

To be able to understand the late complications of induced abortions, a prolonged follow up is necessary. The following possible adverse effects may follow termination.

(1) Infertility due to too vigorous curettage or due to blocked tubes as a result of postabortal infection. Five out of 1132 women in Lindahl's study got infertility.

(2) Induced abortion involving cervical dilatation may raise the possibility of premature labour or abortion in a subsequent pregnancy.

(3) Sawasaki—Tanaka study indicates that incidence of ectopic increases after abortion.

(4) Transplacental haemorrhage in Rh —ve women is supposed to be more after induced abortion than after spontaneous abortion.

Simple legalisation of abortion will not solve the problem of unwanted pregnancy. An abortion service is therefore, not complete without the relentless pursued programme to provide contraceptive instructions.

No doubt safer methods will be discovered in future, but the best method to tackle the population problem is prevention.

Summary

Seven hundred and twenty-nine cases of termination of pregnancy are studied. The various methods used for termination with the morbidity associated with them are studed in detail.

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