

EVALUATION OF M.T.P. DEATHS

by

SYAMALI BASAK,* M.B.,B.S., D.G.O., M.D. (Cal.)

and

M. KONAR,** M.B., D.G.O., F.R.C.O.G. (Lond.)

The liberalisation of Abortion Law has imposed a great responsibility on the present day obstetricians. One should be very cautious in his judgement in the selection of cases, and one should be careful to avoid any increase in the maternal mortality rates from M.T.P., while trying to minimise the death rates from hands of quacks. Since this law has been liberalised and practiced in India for the last 5 years a thorough analysis and assessment is necessary to justify the mass medical termination of pregnancy

Eden hospital, Calcutta, since the introduction of medical termination of pregnancy in the year 1972, till date (August, 1977).

Observation and Discussion

So far in Eden hospital, 14,166 medical terminations have been performed by different methods out of which there were altogether 8 maternal deaths (an incidence of 0.5 per 1,000 of all medical termination and further analysis are given below.

TABLE I
M.T.P. in Relation to Confinements

Year	Total confinements	Total M.T.P.	Confinement M.T.P. Ratio
1972	10,141	295	34.37 : 1
1973	9,827	945	10.39 : 1
1974	8,906	1,677	5.31 : 1
1975	8,927	3,507	2.54 : 1
1976	8,037	5,225	1.53 : 1
1977 (till August)	5,167	2,517	2.0 : 1

and its safety.

Preliminary reports have been published from many centres regarding the maternal morbidity and mortality. In this paper an attempt has been made to analyse all the abortion (M.T.P.) mortalities in

It is seen from the above Table that during the last 6 years the total confinements decreased and number of M.T.P. increased. For the last 3 years the confinement: M.T.P. ratio has remained in the range of 1.5 : 1 to 2.5 : 1. At least in our hospital the impact of M.T.P. on total births has been definitely shown by a downward trend of births in comparison to the pre-abortion days. There were 53,817 confinements during previous

*Senior Research Officer I.C.M.R.

**Professor and Head, Department of Obstetrics & Gynaecology.

Eden Hospital, Medical College, Calcutta.

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5 years period (1968 to 1972) whereas after promulgation of M.T.P. act, in the next 4½ years there were approximately

40,864 deliveries. The total incidence of pregnancy remaining almost same. (40,864 (births) + 14,166 (M.T.P.) = 55,030).

TABLE II
M.T.P. in Deaths in Relation to Total Confinements and Total M.T.P.

Year	M.T.P. Death	Total confinement Death ratio per 1,000	Total M.T.P. Death ratio per 1,000
1972	nil	—	—
1973	1	0.1	1
1974	2	0.2	1
1975	1	0.1	0.3
1976	2	0.2	0.4
1977	2	0.38	0.7

(till Aug.)

Introduction of M.T.P. has only added 0.1 to 0.4 per thousand maternal deaths. When deaths only out of M.T.P. cases are considered it varied between 0.3 to 1 per 1,000.

The above Table presents the incidence of deaths in M.T.P. and septic abortions. As the deaths resulted from septic abortions failed to show any downward trend after introduction of M.T.P., it only implies that for social reason many people are still going to quacks to procure abortions.

In the above table, 14,166 abortions by different methods have been analysed.

TABLE III
Comparison of M.T.P. Deaths in Relation to Septic Abortions (Deaths per 1,000 births)

Year	M.T.P. Death	Incidence	Septic Abortion Death	Incidence
1973	1	1	17	1.7
1974	2	1	16	1.7
1975	1	0.3	14	1.5
1976	2	0.4	13	1.6
1977	2	0.7	3	1.54

(till August)

TABLE IV
Different Methods of Abortion With Incidences of Deaths (All years Combined)

	Total	No. of deaths	Incidence 1,000
O.P.D. Suction evacuation	7,950	0	0
Indoor S/E or D/E with or without ligation	1,339	2	1.5
Anterior hysterotomy with Ligation	2,215	3	1.35
I.A.H.S.	2,052	3	1.4
I.A.N.S.	472	0	0
Prostaglandins	113	0	0
Unacredil	25	0	0
	14,166	8	0.5/1,000

It was highly interesting to note that in the out-patient suction series, in intra-amniotic normal saline induction group as well as in Prostaglandins and unacredil groups out of 8,560 cases there were no maternal deaths. In the other three groups (I.A.H.S. hysterotomy and indoor suction evacuation) there were 8 deaths out of 5,606 abortions.

thorough medical check up. Another patient was lost after 28 days of hysterotomy from severe secondary post abortal haemorrhage and shock. In the intra-amniotic hypertonic saline group 2 more patients were lost one each from renal failure and coagulation failure, which are known dangers of hypertonic saline induction.

TABLE V
Analysis of Causes of Death

	Indoor S/E or D/E with & without ligation	I.A.H.S.	Hystero- tomy
Paralytic ileus	1	1	1
Acute renal failure	-	1	-
Tetanus	1	-	-
Anaesthetic	-	-	1
Secondary Hg. (Post abortion)	-	-	1
Coagulation failure	-	1	-

In the above Table causes of deaths have been tabulated, as met with in each group. One case of paralytic ileus was found in each group. The patient of S/E, who died of paralytic ileus, concomitant abdominal ligation was performed. Cause of peritonitis could be attributed to laparotomy. One patient had suffered from tetanus. This patient was an unwed mother with a pregnancy duration of about 14 weeks. Intra-amniotic hypertonic saline instillation failed to induce abortion. Indoor evacuation was carried out after preliminary dilatation with laminaria tents. But this patient later developed tetanus and expired. Since then the use of laminaria tents is abolished in this centre and vaginal evacuation is no more tried with a uterus which is more than 12 weeks in size.

One patient died of anaesthetic complication after hysterotomy and ligation who was a known case of heart disease and was put for operation after a

Comments

Deaths from medical termination of pregnancy have been reported from home and abroad. The death incidences as well as the causes are inconsistent and vary from centre to centre. But most of the deaths were reported as well as found by the present authors in cases of mid-trimester abortions, performed by hysterotomy or hypertonic saline instillation (Table VI).

So far no death has been reported from any centre, as well as in the present series, (7,950 O.P.D. S/E, vide Table-4) where Outdoor suction evacuations were carried out within 10 weeks of gestation.

The single patient that was lost in first trimester abortion after suction evacuation was in her twelfth week of gestation and a concomitant laparotomy for abdominal sterilisation was done; death was due to peritonitis.

Though use of laminaria tents was advocated by Wazira *et al* (1977), Golditch

TABLE VI
Incidence of Maternal Deaths in M.T.P. in Relation of Weeks of Gestation

	1st Trimester		2nd Trimester	
	<10 weeks	10 to 12 wks.	12-14 wks.	14-20 wks.
No. of cases	8,250	1,039	3,015	3,462
No. of deaths	nil	1	1	6
Incidence of death per 1,000 M.T.P.		0.1		1.08

and Glassen (1974), Newton (1972) and Rovinsky (1971) with a caution of high incidences of infection but with no maternal mortality, its use has been totally stopped in this hospital after 1 death from tetanus.

The usual methods that are usually adopted for procuring midtrimester abortion are intra-amniotic instillation of hypertonic saline and hysterotomy. Prostaglandins, Unacredils etc. are still in the stages of research and trial and not widely adopted. Intra-amniotic hypertonic saline instillation is the most popularly accepted and widely practiced method of inducing mid-trimester abortion, because of its efficacy, availability, low cost and comparatively easier method of application. But one must remain aware of the dangers of coagulation failure, hypernatraemia and renal failure, which are so commonly associated with hypertonic saline instillation (Jhaveri *et al*, 1977; Kannan and Philips, 1977; Morton, 1973; Wagatsuma *et al*, 1965).

The dangers are felt all the more because coagulation failure and/or hypernatraemia can never be predicted earlier. In fact, all the patients go in a potentially hypercoagulable state within hours of saline instillation from where consumptive coagulopathy and coagulation failure can be triggered off at any moment (Das, *et al*, 1977). Same is true in hypernatraemia also.

In the present study, 1 case of coagulation failure and another case of hypernatraemia were met with where not much help could really be offered clinically and the patients were lost.

Deaths after hysterotomy were reported to occur from anaesthetic hazards, peritonitis and post abortal haemorrhage (Nottage 1975; Berger *et al*, 1974). The death incidences in the present study tallied with that of other authors.

Deaths after hysterotomy, though revealed a similar incidence as with saline deaths in the present study, the authors feel that hysterotomy deaths can still be avoided unlike hypertonic saline instillation, if little more meticulous care is taken.

The over all maternal mortality from medical termination of pregnancy was 0.5 per 1,000 births in the present series. If one questioned about the justification of adding these maternal deaths over the already existing high maternal death rate, justifications are that had pregnancy been not terminated at least 14,000 women would have had from different pregnancy and child birth complications.

It is alarming to note that incidences of septic abortion deaths could not be reduced; it only indicates that under coverage of liberalised laws of abortion more and more untrained persons are carrying out abortions in unauthorised centres which should be restrained.

It is encouraging to note the convincingly reduced rate of birth after promulgation of M.T.P. act.

More rewarding results could be expected if more number of patients could be brought within weeks of first missed period, where Outdoor Suction Evacuation can be undertaken safely without subjecting the patient to hazards of anaesthesia.

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