ABORTIONS

(A Clinical Review of 1217 Cases)

by

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Modern medicine has been able to do little to cut down the appalling waste of human life occurring in the first weeks of conception. In fact even today, abortion stands to be so frequent, as to have an incidence of 1 in 10 pregnancies in the published figures but in the vast majority no definite cause can be ascertained.

Material of Study

This series of 1217 cases of abortions were collected during the two years (1956 and 1957) from consecutive cases admitted in the Eden Hospital where the obstetric admissions during the same period were 30,362 in total, thus giving an incidence of about 4%, but for obvious reasons the hospital figures cannot be relied on as the true index of the condition.

Age Incidence and Seasonal Variation

The peak periods of abortion were noted during the months of April, May and June. The average age incidence was 25.8 years compared to 29 years of Albert Davis's series (1950). 53.0% of the cases were noticed in the age group 20-29 years, the extremes of ages being 14 and 47 respectively (Table I). The difference in age incidence from that of Western countries may be attributed to early marriages and poor socio-economic conditions prevalent in the locality.

Period of Gestation

The incidence of abortion was more common at the 8th, 12th, 16th and 20th week of pregnancy suggesting that abortions are more likely to occur near about the expected date of normal menstruation (Table II).

TABLE I

Age	below 15	15-19	20-24	25-29	30-34	35-39	40 and above	Records incom- plete	Total
No. of ab	or-	167	348	297	235	103	49	17	1217
%	0.09	13.72	28.6	24.4	19.3	8.47	4.02	1.40	100

Paper read at the 10th All-India Obstetric and Gynaecological Congress at Hyderabad in January 1959.

TABLE II
Period of Gestation at Abortion

Weeks	0-7	8	9-11	12	13-15	16	17-19	20	21-23	24	25-27	28	No. record	
No.	33	202	177	280	112	188	23	72	12	29	2	1	86	1217
%	19.	37	37.		24.6		7.80		3.37	7	0.25	5	7.07	100

Previous Pregnancies

Abortions were more or less evenly distributed in the different parity groups but notably it had been found to occur in the first pregnancy or within the third (Table III).

Previous Abortions

65.08% of the cases had no previous abortions compared to 74% in the series of Albert Davis's. 23.33% of the cases had history of previous abortions in contrast to 9.5% quoted by the same author. About 11.9% cases had one abortion previously and in over 10% more than one (Table

IV). This naturally brings in the problem of habitual abortion and in the absence of systemic diseases, organic defects or hormonal disorders, tightening of lax or dilated internal os by modified Shirodkar's technique yielded good results in our hands.

Type of Abortions

The figures quoted by different authors widely vary since much depends upon the stage when the patient is first seen, the history she narrates and the policy of the institution she attends. The types of the cases in the series were distributed as shown in Table V.

TABLE III
Parity in Abortions

					Paris	ty in	Abo	ortion	ıs						
Para	. 0	1	2	3	4 5	6	7	8		9 1	.0	10 +	No re- cords	Tota	al
No. of cases	182	143	188	156	116	85	64	38	47	21	15	21	141	1217	
%	14.95	11.75	15.45	12.82	9.53	6.98	5.26	3.13	3.86	1.73	1.23	1.73	11.58	100	
4A F					Prev		LE IV	7 rtion	s				.= .=		
No. of al	or-	0	1		2	3		4	5	6		7	No re cords		Tota
No. of ca	ases	792	14	6	78	31	1	.8	9	1		1	141		1217
%		65.08	11.9	99	6.41	2.55	1.	48	0.74	0.0	08	0.08	11.59		100

TABLE V
Types of Abortions

Nature	Septic	Threat- ened		Incom- plete	Com- plete	Miss- ed	Thera- peutic	No re- cords	Total
No. of									
cases	72	191	241	654	36	11	5	7	1217
%	5.9	15.7	19.0	53.7	2.9	0.9	0.4	0.6	100

Symptoms of threatened abortion were present in 15.7% cases. Inevitable and incomplete abortions together comprised the vast majority of cases (73.6%). The products of conception were expelled in a complete sac in most cases within 8 to 12 weeks but after the 4th month often the foetus came out first and the placenta with the membranes was retained. Small vesicles were noticed in some portions of the sac or placenta in 14 cases. The admission of complete abortion was infrequent, being present in only about 2.9%. Therapeutic abortions were minimum, being performed only in 5 cases, and were due to advanced pulmonary tuberculosis in 3, rheumatic heart disease in one and hypertensive heart disease in one with history of failure in both. Septic abortion, on the criterion of temperature of more than 100.4°F, on admission, was recorded in 5.9%. Criminal interferences were assumed only in the presence of confirmatory history, cervical laceration, septicaemia or

evidence of perforation with peritonitis.

Treatment

Conservative treatment with absolute bed rest, sedatives, vitamin E with/-out hormones, e.g. progesterone 50 mgm. or stilboesterol 1 mg. or a combination of stilboesterol and progesterone daily, stopped bleeding in 67.6% of the cases (Table VI). No estimation of pregnandiol excretion was made in any of the cases. Indication for termination of conservative procedures included irregular bleeding for 5 days after hospitalisation, increase of or a change in character of the bleeding to bright red colour and persistent suprapubic pain or pain in back. One case turned into missed abortion during treatment and was subsequently evacuated after introduction of tents.

In inevitable and incomplete abortions, proper resuscitation and early interference in the form of evacuation with/-out curettage is the prac-

TABLE VI Results of Threatened Abortions

Conser- vative	Sponta- neous ex- pulsion	D & C with/-out C	Pito- cin	Tent & evacuation (including one missed)		Incom- plete records	Total
129 (67.6%)	. 8	45	1	3	1	4	191

tice followed in this institution. None of the incomplete abortions are left to nature for spontaneous completion. Curetting is performed where digital evacuation fails to bring out all the products of conception. Injection of ergometrine or pitocin is only administered for the process of expulsion in debilitated patients or where there is presence of established sepsis. Plugging is never done in any case.

Spontaneous expulsion of the products of conception occurred in 48 cases soon after admission. In 4.36% of cases, where the cervix was tight and did not admit even a finger, the preliminary introduction of laminaria tents facilitated complete evacuation. Pitocin or ergometrine along with resuscitative measures was used only in 8 cases in expulsion of the products of conception. Anterior hysterotomy was needed in only one case, where the uterus was of the size of 24 weeks, bleeding profuse and cervix tubular, not admitting even a finger.

Active operative intervention was needed in about 78.80% cases, a figure that closely approximates that of Webster, Albert Davis and Berger and differs greatly from Collins who records an interference rate of 5.4% cases. Shock requiring blood transfusion was necessary in 50 cases of the whole series.

Digital exploration was followed in every case admitted, in complete abortion or where products were lying in the vagina or outside soon after admission. Curetting was performed, particularly the uterine cornua, in about 80% either immediate in clean cases or after an interval of 3 to 4 weeks, where there was any suspicion of sepsis to avoid the for-

mation of placental polyp, resulting in irregular bleeding later.

Septic abortions stand as a group by themselves because of the inherent dangers of increased mortality and morbidity and the problem of management in presence of established sepsis. Here opinions vary diametrically from active interference as advocated by gynaecologists like Stallworthy to conservatism as recommended by others like Ramsay (1948). There is no divergence of opinion that chunks of necrotic placental tissue lying within the cervical canal should be gently removed with the sponge-holding forceps, or intervention followed in the event of bleeding. But Stallworthy proceeds for surgical evacuation of uterus under cover of antibiotics and chemotherapy if sepsis is not controlled within 36 hours, on the ground that retained products of conception would form a nidus for continued infection. In Eden Hospital the teaching is for adoption of a more conservative line with control of sepsis or to make it more localised believing that intrauterine manipulation in active septic condition would further facilitate the spread of infection. For the purpose of a comparative study, the cases in the present series were divided into two groups, in one with administration of antibiotics immediate evacuation of uterus was undertaken and in the other infection was reasonably controlled or localised by antibiotics as revealed by proper blood examinations and absence of any rise of temperature for at least 3 days and then uterus emptied. The results of both the procedures as summarised in Table VII will amply

TABLE VII
Results of Treatment in Septic Abortions

	No. of eases	Morta- lity	Septi- caemia	Peri- toni- tis	Anu- ria	Ute- rine infec- tion	Sal- pin gitis	Para metri- tis	Placen- tal polyp
Active interference	 30	4	2	2	1	1	5	1	4
Initial conservatism	 42	2		1	-	_	2	1	4

justify our attitude towards the management of such conditions.

Antibiotics were used routinely in both groups of cases. Penicillin as routine and streptomycin where resistant strains of B. Coli were met with. A.T.S. and A.G.S. had been used where evidences of interference outside were present or clinical signs and symptoms or bacteriological study suggested possibility of such infection. This was present in 2 cases of the series. No case of tetanus infection had been revealed.

Stilboesterol, quinine and pitocin succeeded in the expulsion of a fleshy mole only in 4% of cases of missed abortion where the uterus was below 18 weeks' size. Most of them had to undergo slow evacuation after the introduction of tents when conditions

were considered optimum for intervention. But their success was more pronounced where uterus was more than 20 weeks.

Mortality and Morbidity. Six cases died in the whole series giving a mortality rate of 0.49%. Considering that our hospital is catering for such a large population of the city with its suburbs and not refusing any emergency admission, the figure does not compare unfavourably to that of Collins (1952) and Albert Davis (1950) who report a mortality rate of 0.46% and 0.26% respectively. Most of the deaths occurred in cases of septic abortion (Table VIII). Maternal morbidity was recorded in 4.8% cases and the conditions are tabulated in Table VIII. Twenty-seven cases returned with formation of placental

TABLE VIII

Maternal Mortality and Morbidity in Abortion

Mortality —	0.49%		Morbidity — 4.8%						
Gas-gangrene infection		 1	Septicaemia				1		
Generalised peritonitis		 2	Uterine infection				1		
Septicaemia		 2	Salpingitis						
Anuria		 1	Pelvic abscess						
			Pyrexia				1		
			Cervical tear						
			Parametritis						
	2"		Placental polyp				2		
			Pelvic peritonitis						
		-							
	Total	 6			Total		6		

ABORTION

polyp and none showed any malignant transformation.

In conclusion, it can be recalled that the incidence of abortion can hardly be lessened till the etiology can be ascertained. But there is yet some scope for improving maternal mortality and morbidity by education of public regarding early hospitalisation, replacement of blood loss, avoidance of dangerous practices and measures for induction of criminal abortion, and in septic condition routine introduction of bacterial culture and antibiotic sensitivity tests. Further improvement in results can better be met less by improving methods

of treatment as by probing into the etiology of the condition.

I take this opportunity to thank Dr. Miss Lakshmi Bose, Senior House Staff, and Dr. Bhabes Lahiri, the Registrar, Eden Hospital, for the help I received during the work.

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