

INCOMPLETE ABORTION AT JAHANSHAH SALEH HOSPITAL*
A COMPARISON OF INPATIENT AND OUTPATIENT CASES

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ABSTRACT

299 cases of incomplete abortions were admitted to Jahanshah Saleh Hospital, Razi Medical School University of Tehran during the period of October 10, 1973 to November 24, 1974. All were treated with single dilatation and curettage. The patient group were roughly half outpatient and half inpatient.

The information was recorded on standard forms and computed by the International Fertility Research Program.

It has been shown by this analysis the high safety and efficiency of outpatient procedures as well as the immediate and late complications of dilatation and curettage performed for incomplete abortions.

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INTRODUCTION

Clinical experience shows that most complications of spontaneous or induced abortion occur at the time of operation. An inpatient stay of at least one night following the operation adds little or nothing to the safety of the procedure.⁽¹⁾

In this study, the safety of treating incomplete abortion on an inpatient and on an outpatient basis is evaluated.

MATERIALS AND METHODS

Data reported in this study were gathered from 299 women treated with single dilatation and curettage for incomplete abortion at the Jahanshah Saleh Hospital at the University of Teheran during the period of 10 October 1973 to 24 November 1974. Information was recorded on standard forms and sent to the International Fertility Research Program (IFRP) for scanning, coding and computer analysis.

Table 1 gives the distribution of the various pre-existing medical conditions for these women at the time of admission to the hospital. Of the 299 patients, 265 (88.6%) were admitted with incomplete or inevitable abortions: 10 (3.3%) were admitted with a combined systemic and abortion condition; seven women (2.3%) were admitted with septic abortions, and five (1.7%) with threatened abortions. An additional nine patients (3.0%) were admitted with systemic conditions and three patients (1.0%) with no pre-existing medical conditions were also treated.

In order to effect the clearest analysis of the inpatient/outpatient dichotomy in the data, certain patient groups were excluded from this report. Two hundred and fifty six women treated for incomplete, inevitable or threatened abortion are considered in the analysis, which focuses on differences between the inpatients and outpatients in their first trimester of pregnancy.

RESULTS

A. Anesthesia

Data on anesthesia for both first and second trimester inpatients and outpatients are included in Table 2. In general, outpatients were more frequently administered simple analgesics than were inpatients — the difference being particularly marked among the first trimester patients (85.7 per cent vs. 65.3 per cent). While every patient received some form of anesthetic, or analgesic, it was for the most

part a relatively mild form, such as local or regional anesthesia.

B. Complications

The most important implication of inpatient/outpatient status is to be found in observed differences in complication rates. If outpatient procedures cannot be made as safe and reliable as inpatient procedures, there is no medical justification for using the one over the other. Tables 4 and 5 give the distribution of immediate and follow-up complications. While the numbers for the second trimester patients are too small to permit reliable comparison, they do perhaps indicate what differences might appear with large samples.

Table 4 shows large differences in complication rates between the first trimester inpatients and outpatients; 41.2% of the inpatients had one or more complications compared to 9.5% of the outpatients. Generally, more serious complications were reported for inpatients. For the inpatient group there were four cases (4.1%) of suspected perforation, one case (1.0%) of confirmed uterine perforation, one case of blood loss greater than 100 ml requiring no transfusion (1.0%), and nine cases (9.3%) of blood loss requiring a transfusion. In addition, six women (6.2%) were hospitalized with fever requiring antibiotics and two women (2.1%) were reported with fever not requiring antibiotics. Anesthesia complications, while included in the overall complication rates, also show the same difference between the two groups (1.6% for outpatients and 13.3% for inpatients). Vomiting was the major anesthesia complication noted.

There were no immediate complications among the 12 second trimester outpatients however, immediate complications were reported for 70 per cent of the second trimester inpatients — clearly an extremely high complication rate (Table 4). As noted above, the sample size is too small to permit the drawing of firm conclusions.

Data for follow-up complications (Table 4) reverse the pattern observed for immediate complications. Among the first trimester outpatients the follow-up complication rate (women with one or more complications) was 50.9 per cent as compared to 41.6 per cent among the inpatients. Bleeding requiring curettage and fever requiring antibiotics were frequently reported for both groups, although the percentages of outpatients reported with these difficulties were roughly twice those of inpatients: 11.8 per cent vs. 4.5 per cent for bleeding requiring curettage and 30.9 per cent vs. 18.0 per cent for fever requiring antibiotics. The rate for pelvic infection, however, was greater for inpatients than for outpatients: 6.7 per cent compared to 2.7 per cent. Cervicitis was also more frequent among the inpatients (11.2 per cent) than among the outpatients (6.4 per cent).

The follow-up complication data for second trimester patients repeat the pattern noted for immediate complications in this group. Rates for women with one or more complications (outpatients,

72.7%; inpatients, 83.3%) were lower among the outpatients.

Outpatients were discernibly slower than inpatients in reporting for their follow-up visits, and it is possible that the inpatient follow-up complication rate might have been higher if they had taken as long as the outpatients to return for a follow-up visit. For example, at the end of four weeks, 50.6% (N=45) of the inpatients had reported for a follow-up visit contrasted with 32.8% (N=36) of the outpatients.

C. Death

One first-trimester patient, admitted with a pre-existing medical condition other than inevitable or incomplete abortion, died. The cause of death appears to have been a combination of pre-existing medical conditions and the termination procedure. Admitted with a cardiac condition, she died of cardiac arrest following surgery for perforation of the uterus and small bowel incurred during the abortion.

D. Hospitalization

The hospitalization data show the expected difference between those first trimester inpatients with and without immediate complications. The mean stay for those with no complications was one day (N=53) and the mean stay for those with complications was one and a half days (N=37). Data on readmission show a higher rate for outpatients (7.1%, N=9) than for inpatients (1.0%, N=1). For the second trimester patients, the same pattern was generally present. Inpatients with complications required more hospitalization (mean stay = 1.5 days, N=13) than did those with no complications (mean stay = 1.0 days, N=4),

CONCLUSIONS

The analyses conducted on these various patient groups suggest that incomplete abortion was treated quite successfully in all cases. Except for cases of uterine perforation, the complications recorded for these women were not unusual, although the rates for all groups were quite high. Of greatest significance is the fact that incomplete abortion was treated equally well by outpatient or inpatient means. In fact, it could be argued on the basis of fewer immediate complications that outpatient procedures were safer and more efficient regardless of trimester. However, while the follow-up complication rate was higher among outpatients, it should be borne in mind that the difference was a small one and may have been biased against the outpatients by virtue of earlier follow-up visits among the inpatients.

REFERENCE

- 1 Kleinman, R.L. A report of meeting of the IPPF Panel of Experts on abortion, held in Novi Sad, Yugoslavia, 24-29 June, 1971, and approved by the IPPF Central Medical Committee, page 24: 1972.

Table 1
Pre-Existing Medical Conditions for 299 Women treated at
Jahanshah Saleh Hospital, Tehran, Iran, 1973-1974

Pre-Existing Medical Condition	Concurrent Surgery			Gestational Age in Weeks						Total	
	None		Tubectomy		4-12		13-24		No.	%	
	No.	%	No.	%	No.	%	No.	%			
None	3	1.0	0	0.0	3	1.0	0	0.0	3	1.0	
Septic Abortion	7	2.3	0	0.0	6	2.0	1	0.3	7	2.3	
Incomplete/ Inevitable Abortion	265	88.6	0	0.0	239	79.9	31	10.4	265	88.6	
Threatened Abortion	4	1.3	1	0.3	4	1.3	1	0.3	5	1.7	
Systemic Systemic and Abortion	9	3.0	0	0.0	8	2.7	1	0.3	9	3.0	
	9	3.0	1	0.3	7	2.3	3	1.0	10	3.3	
Total	297	99.2	2	0.7	257	86.3	37	12.4	299	100.0	

Table 2
Anesthesia by Patient Group for 255¹ Women treated for Incomplete, Inevitable or Threatened Abortion at Jahanshah Saleh Hospital, Teheran, Iran, 1973-1974

Type of Anesthesia	First Trimester				Second Trimester				Total	
	Inpatients		Outpatients		Inpatients		Outpatients		No.	%
	No.	%	No.	%	No.	%	No.	%		
	(N=97)		(N=126)		(N=20)		(N=12)		(N=255)	
Analgesia	64	65.3	108	85.7	16	80.0	11	91.7	199	77.7
Local	16	16.3	4	3.2	0	0.0	0	0.0	20	7.8
Analgesia and Local	14	14.4	5	4.0	2	10.0	1	8.3	22	9.0
General	1	1.0	1	0.8	1	5.0	0	0.0	3	1.2
Local and General	0	0.0	1	0.8	1	5.0	0	0.0	2	0.8
Regional	2	2.0	7	5.6	0	0.0	0	0.0	9	3.5
Total	97	100.0	126	100.0	20	100.0	12	100.0	255	100.0

¹ One patient was excluded for missing data.

Table 3
 Immediate Complications by Patient Group for 255¹ Women treated for Incomplete, Inevitable or Threatened Abortion at Jahanshah Saleh Hospital, Teheran, Iran, 1973-1974

Type of Complication	First Trimester				Second Trimester				Total	
	Inpatients		Outpatients		Inpatients		Outpatients		No.	%
	No.	%	No.	%	No.	%	No.	%		
	(N=97)		(N=126)		(N=20)		(N=12)			
Retained products of conception ²	1	1.0	0	0.0	0	0.0	0	0.0	1	0.4
Suspected uterine perforation	4	4.1	0	0.0	2	10.0	0	0.0	6	2.4
Confirmed uterine perforation	1	1.0	0	0.0	0	0.0	0	0.0	1	0.4
Blood loss > 100 ml without transfusion	1	1.0	0	0.0	1	5.0	0	0.0	2	0.8
Blood loss > 100 ml with transfusion	9	9.3	0	0.0	1	5.0	0	0.0	10	3.9
Transfusion given blood loss < 100 ml	1	1.0	0	0.0	1	5.0	0	0.0	2	0.8
Fever not requiring antibiotics	2	2.1	0	0.0	3	15.0	0	0.0	5	2.0
Fever requiring antibiotics and hospitalization	6	6.2	0	0.0	4	20.0	0	0.0	10	3.9
Pelvic inflammatory disease	1	1.0	0	0.0	3	15.0	0	0.0	4	1.6
Other	17	17.4	10	8.0	6	30.0	0	0.0	33	13.1
Anesthesia complications:										
Vomiting	11	11.3	2	1.6	2	10.0	0	0.0	15	5.9
Apnea	1	1.0	0	0.0	0	0.0	0	0.0	1	0.4
Shock	1	1.0	0	0.0	1	5.0	0	0.0	2	0.8
Women with one or more immediate complications	40	41.2	12	9.5	14	70.0	0	0.0	66	25.9

¹ One woman excluded for missing data

² Not included in overall complication rate

Table 4
 Follow-Up Complications for 228¹ Women treated for Incomplete, Inevitable or
 Threatened Abortion at Jahanshah Saheh Hospital, Teheran, Iran, 1973-1974

Type of Complication	First Trimester				Second Trimester				Total	
	Inpatients		Outpatients		Inpatients		Outpatients		No.	%
	No.	%	No.	%	No.	%	No.	%		
Bleeding requiring curettage	4	4.5	13	11.8	4	22.2	3	27.3	24	10.5
Fever (over 38°C) requiring antibiotics (suspected infection)	16	18.0	34	30.9	6	33.3	5	45.5	61	26.8
Cervicitis	10	11.2	7	6.4	4	22.2	0	0.0	21	9.2
Pelvic inflammatory disease	6	6.7	2	1.8	3	16.6	0	0.0	11	4.7
Other	9	10.0	11	10.0	5	27.7	2	18.2	27	11.7
Women with one or more follow-up complications	37	41.6	56	50.9	15	83.3	8	72.7	108	47.4
Women with one or more immediate and/or follow-up complications	63	64.9	60	47.6	17	85.0	8	66.7		

¹ One woman excluded for missing data and twenty-seven women lost to follow-up.