

SEPTIC INDUCED ABORTION — A REPORT OF 100 CASES IN SARAWAK

MICHAEL TEO YU KENG
 TIONG TUNG HUI
 BIBIANA TEO

SUMMARY

Over a 28 month period in the Sarawak General Hospital, Kuching, there were 100 'confirmed' septic induced abortions and 75 'suspect' cases. Socio-demographic characteristics are studied. Seventy-five percent of induced abortions used some kind of foreign body per vaginam. Forty-one percent are in the age group of 20 - 25 years and the housewife together with the unemployed form 57 percent of the whole group. There were 2 maternal mortalities.

INTRODUCTION

Induced abortion is a significant cause of maternal mortality and morbidity in Sarawak. This report attempts to highlight some of the epidemiological factors associated with induced abortions in Sarawak. The histories of the cases with complications are analysed with a view to see what factors might have been altered to produce a more favourable outcome.

MATERIALS AND METHODS

Between 1st August, 1978 to 1st December, 1980, a period of 28 months, 100 cases of confirmed

Michael Teo Yu Keng, M.B.B.S., M.M.E.D., M.R.C.O.G.,
 Tiong Tung Hui, M.B.B.S.,
 Bibiana Teo, M.B.B.S.,
 Miri General Hospital,
 Sarawak.

induced abortions were studied in the Sarawak General Hospital, Kuching. By confirmed we mean the patient admitted that an interference by an untrained unqualified person had occurred. During this period, 75 cases of suspect cases are also seen. A 'suspect' patient is one who refused to say whether abortion had been induced, and one where there is pyrexia and foulsmelling discharge per vaginam but without foreign bodies found in the vagina. (The 'suspect' cases are not included in this study.)

All cases of spontaneous abortions or those done by trained personnel are not included.

RESULTS

Table I shows that the highest percentage of 41 percent occurred in the age group between 20 - 25 years; and that 29 percent occurred in the 15 - 20 years age group. Thus the age group 15 - 25 years accounts for 70 percent of all induced abortions studied.

TABLE I
 NUMBER OF CASES BY AGE

Age (years)	15 - 20	20 - 25	25 - 30	30 - 35	35 - 40	40 - 45	45 - 50	Total
No. of cases	29	41	11	14	2	2	1	100

SOCIO-DEMOGRAPHIC DATA

Marital Status

Out of the 100 cases, 58 percent are unmarried,

TABLE II
NUMBER OF CASES BY ETHNIC GROUP

Ethnic Group	(%) of cases
Bidayuh	49
Chinese	20
Iban	9
Malay	21
Kayan	1
Total	100

33 percent are married and 9 percent are divorced.

Occupation

The housewife tops the list at 31 percent and 26 percent are unemployed, together they account for the majority of 57 percent.

Incidence

The incidence of confirmed criminal abortion works out to be 1 in 680 deliveries conducted at the Sarawak General Hospital.

Method Used

As seen from Table IV, 75 percent of the cases involves insertion of some foreign body per vaginam. Twenty percent did not know what was done to them. Oral medicine accounted for only 5 percent. There is not a single case involving syringing with soaps or other antiseptic solutions.

Period of Amenorrhoea

A frightening 29 percent is 16 weeks and above. Twenty-five percent are between 12 - 16 weeks.

One mortality occurred between 12 - 16 weeks and the other beyond 16 weeks of amenorrhoea.

Eighty cases of induced abortion stayed 7 days or less in hospital. Only 6 percent stayed beyond 14 days and 14 stayed between 7 and 14 days.

In the majority of cases (69 percent) no organisms

TABLE IV
METHOD USED FOR INDUCING ABORTION IN 100 PATIENTS

Method Used	% of cases
Grass Stalk	42
Bamboo	12
Insertion of unknown foreign body	17
Oral medicine	5
Ginger inserted pv.	1
'Medicine' inserted pv.	1
Betel nut pv.	1
Straw pv.	1
Unknown	20
Total	100

TABLE V
PERIOD OF AMENORRHOEA BY PERCENTAGE

Period of amenorrhoea	Percentage
0 - 9 weeks	17
- 12 weeks	29
- 16 weeks	25
> 16 weeks	29
Total	100

were cultured. The cause is unknown as most of these cases are referred to hospital by general practitioners. Many could have been given antibiotics. Delay in sending of swabs could also be a factor. We hope that using 2 swab sticks instead of one and earlier blood cultures would increase the chances of a positive identification.

COMPLICATIONS

As various authors define 'complication' differently, no attempt is made here to compute the complication rate. Instead the 2 case histories of the mortalities are highlighted, these constituting 2 percent of all confirmed cases of induced abortion.

TABLE III
PERCENTAGE OF CASES BY OCCUPATION

Occupation	House-wife	Unem-ployed	Bargirl & waitress	Un-known	Student	Factory worker	Servant	Teacher	Clerk	Cook	Typist	Farmer	Total
% of cases	31	26	14	8	6	4	4	2	2	1	1	1	100

TABLE VI
DURATION OF HOSPITAL STAY

Duration in days	2	3	4	5	6	7	8	9	10	12	13	14	15	19	28	30	39
Number of patients	2	15	22	27	10	4	7	2	2	1	1	1	2	1	1	1	1

MORTALITY I

19 year old Bidayuh, unmarried. Amenorrhoea 3½ months. Induced abortion by insertion of foreign body by untrained unqualified personnel 6 days before admission. Came in with stiffness of body and locked jaw of 1 day and fever of 2 days. Aborted products of conception few hours after admission.

She had multiple fits on the second day of admission and was put on artificial ventilation. (Uterine cavity curretted but no products of conception or pus was seen.) She developed massive consolidation of the left lung on the third day.

Organism cultured from uterus - *Clostridium tetani*. She died on 8th day of admission in spite of massive doses of antibiotics, anti-Tetanus serum and general supportive treatment.

MORTALITY II

20 year old Malay, unmarried student. Amenorrhoea 4½ months. Interference by untrained unqualified woman 2 days before admission. Complained of fever, chills, rigors and foulsmelling per vaginam discharge for 2 days. Admitted in very advanced state of septic shock. Aborted a dead fetus with perforated abdomen 8

hours after admission. Died after evacuation under anaesthesia 20 hours after admission.

Other complications included one patient who had persistent fever for 1 month; she later developed deep vein thrombosis on the left calf.

Another patient who had a pelvic mass and persistent fever for 20 days required a laparotomy and drainage of a pelvic abscess. *Proteus aeruginosa* was cultured at laparotomy and patient responded to carbenicillin. Another patient who developed pelvis abscess required a colpotomy. One litre of pus was drained.

Six patients developed alarming hypotension of 70/50 or less together with anuria but responded to treatment.

DISCUSSION

History taking in criminally induced patients are notoriously difficult as some patients attempt to conceal the fact that criminal interference had occurred. Part of this is probably due to the unfounded fear that the hospital staff would report her to the police. Reassurance and patience often bring forth the truth in many cases, allowing the doctors to come to an earlier diagnosis and treatment.

Insertion of some kind of foreign body is the most popular method used to induce abortion. Presumably none of the abortionists knew about aseptic techniques as almost all cases have evidence of pyrexia and tachycardia.

As induced abortion is extremely dangerous, early antibiotics are given routinely in all 'suspect' cases without waiting for the definite sensitivity report. We use intramusalen Ampicillin and gentamycin in almost all cases for a start. Majority of the cases responded to this combination. Ampicillin has been found to be potently bactericidal to many gram negative as well as to gram positive bacteria. ¹ In all cases evacuation of the uterus is done between 12 and 24 hours after administration of antibiotics.

TABLE VII
TYPES OF ORGANISMS CULTURED

Organisms	Percentage of cases
No organisms grown	69
Coliform bacilli	6
E. Coli	6
Pseudomonas aeruginosa	5
Kliesiella	5
Staphylococcus pyogenes	2
Streptococcus Viridens	2
Streptococcus fecalis	2
Clostridium Tetani	1
Araerobic Streptococcus	1
Proteus aeruginosa	1
Total	100

The mortality rate is 2 percent in all confirmed cases.

This is higher than those reported by Burnett,² 0.75 percent; Ramsay *et al*,³ 0.40 percent; and Bateman *et al*,⁴ 0.5 percent.

Both mortalities are classified as unavoidable in view of the late admission and severity of the condition on admission. In Wulf's⁵ study of 28 mortality cases from septic abortion, 18 cases died within 24 hours of admission and 7 had *Clostridium welchi* cultured.

An interesting observation is that intrauterine tetanus is not associated with much pus formation.

In the patient who died from tetanus, there was no pus seen in the vagina or uterus. The same happened in another tetanus patient (not included in the study) who subsequently died.

ACKNOWLEDGEMENTS

We would like to thank the staff of Gynae Ward, Sarawak General Hospital, Kuching for compiling the records and Miss Elizabeth Leong Soon Siek of Miri General Hospital for typing this manuscript. We wish to thank the Director of Medical Services, Sarawak for permission to publish this report.

REFERENCES

- ¹ Sutherland R and Robinson G N (1964) *J. Clin. Path.* 17, 461.
- ² Burnett C W F (1952) *Brit. Med. J.* 1, 886.
- ³ Ramsay A M, Brown E H and Manners S M (1955) *Brit. Med. J.* 2, 1239.
- ⁴ Bateman *et al.* *J. Obstet Gynae Brit. Cwth November*, 968 Vol. 75 pp 1169-1172.
- ⁵ Wulf H Utian (1968) *J. Obstet. Gynae. Brit. Cwth July 1968* Vol 75 pp 705-712.