DEATH FOLLOWING EXTRA-AMNIOTIC INSTILLATIONS OF 20% MANNITOL FOR MIDTRIMESTER ABORTIONS

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Attempts to find out a safe and ideal method for termination of pregnancy in second trimester still continues by comparison of results and associated complications.

All except 20% saline, hypertonic urea, mannitol and prostaglandins have been rejected because of various life threatening complications and high range of failure rates.

In 1975, Deshmukh *et al* presented a paper entitled "The almost perfect method of pregnancy termination". Their series consisted of 26 cases in whom 20% mannitol was injected extra-amniotically. The success rate was 92.4% without any complication. Same author in 1976 reported 95% success rate with induction-abortion internal of 33.8% hours without any adverse effect. The success rate was more than the extra-amniotic instillation of hypertonic saline and prostaglandin (Krishan *et al*, 1978; Deshmukh *et al*, 1979). Such a high incidence of success rate without any reported complications till 1979 prompted us to study the effectiveness of this method. Twenty per cent mannitol is universally available, fairly cheap, does not undergo metabolic alteration and has been widely used as I/V infusion for its osmotic properties. The danger of mannitol even if absorbed into the circulation is minimum.

A total of 40 cases were done following the same schedule as reported by Deshmukh *et al* (1975). One patient died presenting the picture of severe coagulation failure with irreversible shock. This case is being reported to highlight the serious complication of a safe method of induction of abortion by 20% mannitol.

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CASE REPORT

Patient M., 25 years female, para 3 was admitted in Medical College, Rohtak in March, 1980 with 14 weeks pregnancy for MTP. One and half months back in a primary health centre pregnancy was missed at the time of tubectomy. Abortion was induced with 20% mannitol as per dosage schedule of Deshmukh et al. After 8 hours of induction 40 I.U. of oxytocin in 500 cc of 5% glucose at a rate of 8-10 drops/min. was started to accelerate the process. Patient had very frequent and strong uterine contractions and hence the drip was discontinued after 4 hours. A total of 750 cc of 20% mannitol was injected. Abdominal examination revealed a nontender, soft, 16 weeks size uterus with normal contour. Uterine contractions of mild nature were palpated at interval of 5 to 7 minutes lasting for 35-45 seconds. Vaginal examination revealed cervix 3 cms, dilated and no products of conception felt within the reach of examining finger. Oxytocin drip 40 units in 5% dextrose was restarted at a rate of 12 drops/min. A repeat P/V examination after 4 hours revealed a circular depres-

sion of finger tip size on the anterior wall of the uterus just above the level of internal os. Oxytocin drip was discontinued and patient was shifted to the operation theatre for examination under anaesthesia. Pulse and blood pressure were within normal range and there was no bleeding P/V. Patient had a bout of vomiting of altered blood after 10-15 minutes and a fall of B.P. to 90 mm of Hg systolic. Her pulse rate increased to 120/min.

Immediate laparotomy was done. There was no blood in the peritoneal or abdominal cavity. On gross examination uterus was 16 weeks size, very soft and friable, and chocalate colour. There were multiple patches of subperitoneal haemorrhages varying in diameter from 1-3 cms. There was a circular hole 1.8 cms. in diameter covered with serosa and a few interlacing muscle fibres in the anterior wall of uterus just above the internal os. which could be due to palpation by finger in friable uterus. Uterus looked like a couvelair uterus. Hysterotomy incision was given on the ant. wall but uterus was friable and chocalate in colour, hence subtotal hysterectomy was done.

Cut Section: of gravid uterus showed chocalate coloured muscle fibres with clots and a necrotic mass of foetus and placenta. Biopsy from the uterus and placenta was sent for histopathology.

Blood pressure of the patient was maintained at 100 mm of Hg with nor-adrenalin drip postoperatively. Eight bottles of fresh blood transfusion were given. Urine sample after the operation showed gross haematuria. A Ryles tube was put just after the operation and coffee coloured fluid was aspirated from the stomach. She had multiple purpuric spots all over the skin. She went into irreversible shock and developed renal failure on the 2nd postoperative day. Post-mortem was not done as the patient was taken against medical advice when she was gasping and subseqently died at home.

Investigations

On admission	*After induction of abortion*
Hb. 10.0 gm%	9.6 gm%
BT-2'-00"	22'-00"
CT-4'-00"	10'-00"
CRT-40'-00"	95'-00"
TLC-10,000/cmm	12,550/cmm
Platelet-Not done	49,000/cmm
count	
Urine-M/E-NAD	Full of RBCs, no pur cell
Blood C/S	Sterile
Vaginal swab C/S	Show E. Coli sensitive to
	— Gentamycin
	— Streptomycin
X-ray chest	Showed pneumonitis patch in the left lower zone
ECG	With in normal limits

Investigations

Histopathology: Histopathology of the uterine wall showed blood within interlacing fibres of the uterine musculature with leucocytic infiltration.

Placenta: Except infiltration with leucocytes no other abnormality was detected.

The clinical picture was similar to a severe case of coagulopathy. An increase in bleeding time, clot retraction and clotting time with fall in platelet count supports the clinical findings. Haemorrhage in the myometrium also favours the diagnosis. Endotoxic shock aggrevated the haemorrhagic shock causing the death of the patient.

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