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2ND Trimester Abortion with Normal Saline Instillation- Study of 30 Cases

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ABSTRACT

To evaluate the efficacy and safety of second trimester abortion using transcervical cathater insertion and Extra-amniotic normal saline administration.

Method(s) : 30(thirty) women admitted for termination of pregnancy at 16-20 weeks gestation had transcervical catheter inserted and 150ml normal saline administrated. Success rate was recorded, measured by induction of abortion within 24 hours in 76.6%, 16 hours in 10% and 20 hours in 13.3%. There were no severe complications.

Conclusion : transcervical cathater insertion for extra-amniotic normal saline administration is effective for inducing second trimester abortions. This method has been shown to be safe and well tolerated by the women and can be considered in areas with limited resourses.

KEYWORDS: Extra amniotic balloon, Mid-trimester, Normal saline

INTRODUCTION

Ever since the liberation of abortion law world wide, there is an increasing demand for legal abortion. In spite of various methods described in literature and practises by obstretician, still there is search for a better, safer, quicker, cost effective, convenient and feasible method of termination in second trimester.

Second trimester abortions put tremendous pressure on women because they are later than most abortions and depending on technique, might take longer time are associated with physical pain and emotional burden. As the india is still developing country, its 25% of total population is living below poverty line, most of them in rural area and 44% of them live on $1 a day. With limited financial resourses in developing countries, even preparation like ethacridine lactate and prostaglandins are becoming increasingly unavilable so there is need to be develope less expensive and equally effective method for the same pourpose.

Extra-amniotic saline infusion is as effective adjuvant as other. Advantages of extra-amniotic normal saline infusion include reversibility and lack of systemic side effects, readily and freely avilable to patients in public hospitals. In view of its cost effectiveness, simple care of administrstion and its easier storage, this study was undertaken to evaluate the safety and efficacy of normal saline instilation in inducing 2nd trimester abortion and if effective to be considered in areas with limited resourses.

MATERIAL AND METHOD(S)

A study of 30 cases of second trimester (range 16 to 20 weeks) abortion was done in N.H.L. medical college Ahmedabad. All women were admitted in hospital and USG was done to confirm placental localization. Inclusoin criteria were (1) Singleton gestation (2) Intact memberanes (3)Bishop score <4. patients were excluded for the following reasons: (1) Placenta previa or unexplained vaginal bleeding. (2) Previous uterine surgical procedure. (3)Evidence of chorioamnitis.

After informed consent was obtained, women were assigned to receive extra-amniotic normal saline. All women underwent a speculum examination. the cervix was prepared with povidine iodine (betadine) solution under aseptic precuations (an 18 "no. french gauge foley's) cathater was inserted transcervically into extra-amniotic space above the internal cervical os. The balloon was inflated with 30 ml of sterile water and 150 ml with 5-6 drops of betadine was instilled through the central lumen of the foley's cathater & 200-250 ml of any pint (for weight purpose) was tied at the end of foley's cathater traction was given to obliterate internal os. prophylactic antibiotics were given to all patients.

The foley's cathater was removed for following reasons (1) 24 hours has elapsed since the initial placement (2)spontaneous rupture of membranes occurred and (3)the cathater was expelled spontaneously. Oxytocin infusion was started. Abortion was completed if placenta and fetal membranes were delivered- spontaneously within 1 hour of fetal expulsion. The induction to delivery interval was recorded as time from cathater insertion to placental expulsion. The complications of cathater insertion (bleeding, rigor, pyrexia, sepsis) and after (excessive uterine bleeding) were evaluated.

RESULTS

All women completed the study; hence data was avilable from all the patients.

TABLE:-1 Parity of patient under study

In table 1 include the parity of patients. Most of the women requiring termination in multipara.

No.	Parity	Cases	Precentage(%)
1	Primipara	05	16.6
2	Multipara	19	63.3%
3	Grand-Multipara	06	20%

16.6% women were primipara, 20% women were Grand-multipara and 63.3% women were multipara.

TABLE:-2 Patient profile requiring abortion

No.	Parity	Cases	Precentage(%)
1	congenital anomaly 1.Anecephay 2.Cariac Anomaly & Spinal bifida 3.Others(Hydrocephalus)	10 3 6 1	33.3%
2	Intra uterine death	13	43.3%
3	Severe- pre eclampsia	7	23.3%

The dominant indication of this study was IUD.

43.3% patients required termination for the indication Intra Uterine Death. 33.3% women had fetus with congenital anomaly for which termination was done in congenital Anomaly includes cardiac anomaly, spina bifida, Anencephaly & Hydrocephalus and 23.3% women had

severe pre- eclampasia which required termination.

TABLE:-3 Inducation – to abortion interval Time.

Time interval (hours)	No. of cases	Percentage
12	23	76.6%
16	3	10%
20	4	13.3%

The rate of successful induction, defined as an induction to delivery interval was 24 hours or less.

In this study 76.6% patients were aborted completely within 12 hours of induction, 10% in 16 hours and 13.3% in 20 hours.

TABLE:-4 Type of abortion

No.	Abortion	No. of Cases	Precentage(%)
1	Complete	29	96%
2	Incomplete	1	4%

96% patients were aborted completely only, 1 patient required dilatation and Evacuation for the removal of placenta.

TABLE:-5 Post – abortal complications

No.	Complication	No. of Cases	Precentage(%)
1	Hemorrhage	Nil	0%
2	Fever	4	16%
3	Infection	Nil	0%

Minor complications were seen among which 16% of the women had mild fever (99*-100*) with in 48 hours following abortions. There were no evidence of genital infection of hemorrhage.

CONCLUSION

Extra – amniotic Saline infusion is an effective method for cervical ripening, whose effectiveness has been demonstrated by various authors both on live and dead fetuses in term pregnancies, and also in second trimester abortion. Through this study, it has been noted that it is not the drug but the fluid that is safe and relatively quick method of pregnancy termination. This method is safe, cheap and entirely without contraindications. Maternal side effects and complications were infrequent. Therefore, it may be considered in area with limited resources and can be used in cases when other methods would have been dangerous or failed. As for the mechanism of action of extra amniotic instillation of normal saline is probably by the secretion of intrinsic prostaglandins produced by the decidual cells and the catheter left- in-situ aids in mechanical stimulation of uterus, which realeses oxytocin and initiates uterine contraction.

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