A Study of Midtrimester Abortion using Cerviprime Gel and Extra-Amniotic Prostodin

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Abstract

Background: A study was carried out to evaluate the efficacy of intra cervical dinoprostone gel and extra-amniotic prostodin in midtrimester abortions.

Material and Method: A total of 25 cases were included in this study. Dinoprostone gel was inserted intracervically in the evening and next morning Inj Prostodin diluted in saline was injected extra amniotically. The efficacy and side effects of the method were studied.

Results: The mean induction abortion interval was found to be 17.32 hrs and there were no failures. 04 cases required assistance for removal of placenta. There were no other complications.

Conclusion: Intra-cervical dinoprostone gel combined with extraamniotic prostodin is an effective and safe method of mid trimester abortion.

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Key Words : Mid trimester abortion; Extra amniotic prostaglandin; Intra cervical prostaglandin

Introduction

The subject of an ideal method of midtrimester pregnancy termination that is both safe and effective, has been frequently discussed and evaluated. Different drugs came into prominence over the years starting from quinine, ergot alkaloids, hypertonic saline, urea, ethacridine lactate and many of them have faded into oblivion. Karim and Filshie [1-2] first reported the use of prostaglandin administration. This study was carried out to evaluate intracervical dinoprostone gel and extra amniotic prostodin in midtrimester abortions.

Material and Method

The study was undertaken in a hospital of the Armed Forces from Jan 2002 to Dec 2003. A total of 25 cases between 12-20 weeks of pregnancy reporting for MTP were included. Work up included detailed history, clinical examination, full blood count, urinalysis, blood grouping and ultrasonography. Those with previous caesarean section and bronchial asthma were excluded. After taking an informed consent Cerviprime gel containing 0.5mg of dinoprostone was instilled intracervically in the evening. The next morning 250 mcg of carboprost tromethamine in 01 ml diluted with 09 ml of normal saline was injected extra amniotically. For this, a 16F Foley's catheter was introduced into the cervix till it crossed the internal os. The bulb of the catheter was then inflated with 05 ml of saline. The Prostodin was injected into the extra amniotic space through this Foley's catheter. The catheter was

removed after one hour. Patients were put on Inj Ciprofloxacin 12 hourly after instillation of Cerviprime gel and continued till the completion of the abortion process. The induction abortion interval, the completeness of the process whether spontaneous or assisted and side effects were studied. A check USG was performed on all patients before discharge.

Results

Out of the total 25 cases, 48% were 3rd gravidas and 84% were between 20-30 years of age (Table 1 & 2). The gestational age ranged from 13-20 weeks with a mean of 17 ± 2.3 weeks (Table 3). The mean induction abortion interval (IAI) was 17.32 hours (Table 4). 04 cases aborted after instillation of cerviprime gel only without requirement of prostodin within 10 to 13 hours. The longest IAI was 34.5 hours whereas 21 aborted between 10-22 hours.

Table 5 shows the correlation between the weeks of gestation and the time taken to abort. It was found that patients between 15-16 weeks of gestation took the least time. Only 4 cases required assistance for removal of placenta and completion of the process. None of the patients had side effects of vomiting or diarrhoea nor of fever or significant bleeding affecting the general condition.

Discussion

Prostodin is generally used as repeated intramuscular injection for midtrimester abortions. The most irritating side effect of this method is recurrent vomiting and diarrhoea, reported in up to 50% of cases [3]. The

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Table 1

Distribution as per gravida (n=25)

Gravida	No	Percent
2	2	8
3	12	48
4	9	36
5	2	8

Table 2

Distribution of cases as per age of patient (n=25)

Age (years)	No	Percent
20 - 25	7	28
26 - 30	14	56
> 30	4	16

Table 3

Distribution of cases as per gestational age (n=25)

Gestation (weeks)	No	Percent
13 - 15	5	20
16 - 20	20	80

present study using a single injection of extraamniotic prostodin shows that none had vomiting or diarrhoea.

The mean IAI in this study was 17.32 hours (range 10.5 – 34.5 hrs) and success rate was 100%. The WHO task force study on midtrimester abortion using extra amniotic prostodin has quoted a success rate of 83% with mean IAI of 14.1 hours [4]. IAI with intraamniotic hypertonic saline has been reported to be around 35 hours and success rate of 90% within 48 hours [5]. With extraamniotic ethacridine lactate and intravenous oxytocin the IAI is around 30 hours with success rate of 86% within 72 hours. A study by Tracy and Batwar comparing extraamniotic ethacridine lactate alone and extraamniotic ethacridine plus prostodin showed the IAI to be 30 hrs with the former and 26 hours with the latter. On comparison the results of the present study is definitely better [6]. Owen et al reported a success rate of 87% with mean IAI of 18 hours using intracervical dinoprostone gel followed by oxytocin drip [7]. Though IAI is comparable, the present study has done away with the discomfort of an intravenous line.

Table 4

Induction abortion interval

Time (hours)	No
10 - 12	3
13 - 15	5
16 - 20	12
> 20	5

*Range was 10.5 - 34.5 hours with a mean of 17.32 hours

Table 5

Relation of gestational age and IAI

Gestation (weeks)	Mean IAI (hours)
13 - 14	19.6
15 - 16	15.4
17 - 18	26.8*
19 - 20	17.4

*01 patient in this group took 34.5 hours to abort

Conflicts of Interest

None identified

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