

Outcome data are presented in Table 2. Induction-abortion interval (complete or incomplete) was slightly more in Gr A (particularly in those who never had a previous vaginal delivery) but this was not statistically significant (15.4 hrs vs 14.6 hrs $p=0.08$). Primigravidas in Gr B also took a longer time to abort. There were also little differences in other outcome characteristics ($p=$ always $>.1$) e.g. partial failure, incomplete process, blood loss, sepsis etc. Partial failure (21 in Gr A; 20 in Gr B) of the standard regimen of misoprostol required surgical evacuation (no mechanical dilation of cervix was required) in 15 women in Gr A and 14 in Gr B who had gestational age up to 15 weeks. Additional doses of misoprostol was administered in 6 women in Gr A and 5 women in Gr B. One woman in Gr B received supplementation with concentrated oxytocin. Two women in each group underwent hysterotomy and sterilization (tubectomy) due to poor response to misoprostol. Placental retention and incomplete abortion required surgical intervention in 24 women in Gr A and 22 in Gr B. Significant blood loss of >250 ml occurred in 9 women of Gr A and 8 of Gr B requiring blood transfusion in 4 patients of each group. Sepsis was uncommon, mild sepsis in 7 patients (out of 160 total) could be easily controlled with antibiotics.

Table 2 : Outcome of misoprostol administration

| Characteristics | Group A (prior CS) n=80 | Group B (no prior CS) n=80 |
|---|------------------------------|--------------------------------|
| Induction-abortion interval in hrs, (median and range) | 15.4 (10-21) | 14.6 (9.6-20) |
| Partial failure requiring- | | |
| a) surgical evacuation | 15 (18.75%) | 14 (17.5%) |
| b) additional doses of misoprostol | 6 (7.5%) | 5 (6.25%) |
| c) concentrated oxytocin | 0 | 1 |
| Failure leading to hysterotomy & tubectomy | 2 (2.5%) | 2 (2.5%) |
| Incomplete abortion | 24 (30%) | 22 (27.5%) |
| Blood loss >250 ml | 9 (11.25%) | 8 (10%) |
| Therapeutic blood transfusion | 4 (5%) | 4 (5%) |
| Sepsis | 3 (3.75%) | 4 (5%) |

DISCUSSION

The need for pregnancy termination in women with previous CS is not uncommon but information on efficacy and safety profile of any termination technique is limited. The authors are using various prostaglandin preparations for 1st and 2nd trimester termination of pregnancy since long⁹. Misoprostol is increasingly gaining

popularity in India^{10,11} replacing other techniques of pregnancy termination. Most of the studies mentioned either oral or vaginal route for misoprostol administration, it was only in 2001-02 that sublingual use of misoprostol was reported^{12,13} and the route was found almost as effective as that of vaginal administration, being easy to use at the same time.

The incidence of scar rupture and major hemorrhage following induction of labor at term in post cesarean pregnancies using prostaglandins (including misoprostol) have been reported to be more particularly when intravenous oxytocin was used for augmentation. From the available data it would appear safe to avoid or minimize use of oxytocin in women with scarred uteri. Most of the reports showed misoprostol to be relatively safe for use in women with prior cesarean sections⁵⁻⁸. Our study did not find any increase in complications following vaginal or sublingual use of misoprostol in terminations of post CS pregnancies.

CONCLUSION

Presence of a scarred uterus is not a contraindication for the judicious use of PGE₁ analogue, misoprostol, in late-first and mid-trimester pregnancy terminations.

REFERENCES

1. Chapman SJ, Crispens M, Owen J, et al. Complications of midtrimester pregnancy termination: the effect of prior cesarean delivery. *Am J Obstet Gynecol* 1996; 75: 889-92
2. Chen M, Shih JC, Chiu WT, et al. Separation of cesarean scar during second-trimester intravaginal misoprostol abortion. *Obstet Gynecol* 1999; 94: 840
3. Philips K, BERRY C, Mathers AM. uterine rupture during second-trimester termination of pregnancy using mifepristone and a prostaglandin. *Eur J Obstet Gynecol Reprod Biol.* 1996; 65: 175-6.
4. Berghalm L, Christensen D, Droste S. Uterine rupture during second-trimester abortion associated with misoprostol. *Obstet Gynecol* 2001; 98: 976-7.
5. Rouzi AA. Second-trimester pregnancy termination with misoprostol in women with previous cesarean sections. *Int J Gynecol Obstet* 2003; 80: 317-8
6. Debby A, Golan A, Sagiv R, et al. Midtrimester abortion in patients with a previous uterine scar. *Eur J Obstet Gynecol Reprod Biol* 2003; 109: 177-8.
7. Pongsatha S, Tongsong T. Misoprostol for second-trimester terminations of pregnancies with prior low transverse cesarean section. *Int J Gynecol Obstet* 2003; 80: 61-2.
8. Dickinson JE. Misoprostol for second-trimester pregnancy termination in women with a prior cesarean delivery. *Obstet Gynecol* 2005; 105: 352-6.
9. Bhattacharjee N, Mukhopadhyay G, Das C, et al. *J Obstet Gynecol India* 2001; 51: 111-13.
10. Sahu L, Chakraverty B. Comparison of prostaglandin E₁ (misoprostol) with prostaglandin E₂ (dinoprostone) for labor induction. *J Obstet Gynecol India* 2004; 54: 139-42.
11. Sakhare AP, Mahale AR, Kardile GP. Vaginal misoprostol for medical evacuation of missed abortion. *J Obstet Gynecol India* 2005; 55: 178-9.
12. Tang OS, Ho PC. Pilot study on the use of sublingual misoprostol for medical abortion. *Contraception* 2001; 64: 315-17.
13. Wagaarachchi PT, Ashok PW, Smith NC, et al. Medical management of early fetal demise using sublingual misoprostol. *Br J Obstet Gynecol* 2002; 109:462-5

Conference News

13th ANNUAL INTERNATIONAL CONFERENCE OF INDIAN ACADEMY OF ECHOCARDIOGRAPHY will be on **February 8-10, 2008 at Ashoka Hotel, New Delhi (India)**

SCIENTIFIC HIGHLIGHTS OF CONFERENCE

Stress on clinical echocardiography with emphasis on role in management issues; Lectures to cater to all levels of echocardiographers & cardiologists; Meet the expert sessions with active interaction with faculty; Interesting live workshops; Daily sessions on interesting case studies; Young Investigator award session; Orations of general interest for participants; **Natesa G Pandian Gold Medal For Best Case Presenter:** (a) The award is applicable to members of IAE (b) age of the presenter must be below 45 years (c) presentation time will be 8 mins (d) the relevant CD containing brief history, relevant investigations, well edited echo images and final diagnosis must be sent to HQ, IAE by 30 November, 2007. (e) 10 best cases will be selected and the presenters will be informed by 31st December, 2007; Free paper sessions will be encouraged; An excellent scientific program of practical importance will be presented;

| | | | | | |
|----------------------------|-----------------------|---------------------------|----------------------------|----------------------------|------------------------------------|
| Organizing Chairman | Org. Secretary | Secretary | Scientific Chairman | Scientific Chairman | Adviser, Scientific Program |
| S.K. Parashar | Rakesh Gupta | Sameer Shrivastava | H.K. Chopra | R.R. Kasliwal | J.C. Mohan |
| 9810146231 | 9811013246 | 9810154522 | 9811090204 | 981002512 | 9811061392 |

For further details contact : Dr.Rakesh Gupta/ Dr.Sameer Shrivastava IAE Headquarter: Echo and Color Doppler Centre, Jrop Healthcare, C1/16, Ashok Vihar, Delhi – 110057, PH : 011-2741-5646, 2713 – 4839, Mob : 9811013246, E-mail : jrop2001@yahoo.com, jrop2001@gmail.com Website: www.iaecho.org