RUPTURE OF UTERUS IN MISSED ABORTION FOLLOWING INDUCTION BY OXYTOCIN DRIP

by

HITENDRA NATH MITRA,* M.B.B.S.

and

D. K. SUR ROY,** M.B.B.S., D.G.O., M.R.C.O.G., F.I.C.S.

Though the use of oxytocin drip for induction in missed abortion of second trimester is more or less an established procedure, yet mention of rupture of uterus due to it is sparse in literature. In view of rarity, a case of rupture of uterus in missed abortion following oxytocin drip is reported.

Case report:

Mrs. P.N., 25 years, gravida 4, para 3 was admitted at National Medical College, Calcutta on 13th July, 1978 for amenorrhoea of 28 weeks and loss of foetal movements since 3 weeks.

Menstrual History she had normal cycles and she had her last menstruation on 3rd January, 1978.

Obstetric History: She was P 3 + 0 all the previous pregnancies ended in spontaneous vaginal deliveries. The first and third had been home confinements, terminated in fresh stillbirths.

On examination, her general condition was fair with slight pallor and no peripheral oedema. Her blood pressure was 120/80 mm of Hg. and no abnormality was detected on examination of cardiovascular or respiratory systems.

Per abdomen—uterus was about 20-22 weeks' size of pregnancy with palpable foetal parts. No foetal movements were felt or foetal heart sounds were heard.

Per vagina—cervix tubular with closed internal os. No vaginal discharge present. Straight X-ray of abdomen confirmed the clinical diagnosis of missed abortion.

Management:

On 15th July, 1978, induction of abortion was started with 10 units of syntocinon in 540 c.c. of 5% dextrose solution. The drip rate was gradually increased to 40 drops per minute i.e. 50 milli-units per minute. As there was no response, a second bottle of fluid was started with 20 units of syntocinon and drip rate adjusted to 40 drops per minute i.e. 100 milli-units per minute. After infusion of about 300 c.c. of the fluid, painful uterine contractions started. After infusion of about 100 c.c. of third bottle with same drip rate, patient suddenly complained of severe pain in the abdomen followed by profound shock with thready pulse, unrecordable blood pressure, marked pallor and associated abdominal tenderness. Provisional diagnosis of rupture of uterus was made and laparotomy was decided.

On exploration of the abdomen through an infraumbilical paramedian approach, the abdominal cavity was found to be full of liquid and clotted blood. Intact pregnancy sac was found under the anterior layer of right broad ligament, the posterior layer of which had given away. Quick supravaginal hysterectomy with right sided salpingo-oophorectomy was done. Abdomen was closed in the usual way keeping a narrow rubber sheet drain through the lower end of the incision. Postoperative period was uneventful and patient left hospital 3 weeks after operation.

Examination of hysterectomy specimen showed rupture had involved the right lateral side of the uterus extending from the level of the internal os upwards to a distance of about 3 cms.

*Sr. House Surgeon.

**Registrar.

Department of Obstetrics and Gynaecology, National Medical College, Calcutta.

Accepted for publication on 22-5-79.

Discussion

Due to insignificant bulk of uterine contents in missed abortion where the question of obstructed labour does not arise, large doses of oxytocin in a drip as a method to stimulate uterine contractions have been advocated and used extensively. Loudon (1959), Liggins (1962) reported high rate of success with large doses of syntocinon in these cases. They used upto 200 i.u. of syntocinon per litre of dextrose solution. Myerscough (1971) mentioned his experiences of 2 cases of rupture of uterus with strong syntocinon drip. Undue friability of uterus wall according to him was the possible etiological factor.

In this case large dose of syntocinon probably produced inco-ordinate strong contractions of upper uterine segment while there was associated cervical dystocia, conditions similar to obstructed labour. Moreover, though there was no history of any obstetric interference in her previous deliveries occurrence of fresh stillbirths at her first and third home confinements, naturally leads one to think of the possibility of prolonged labour and occult uterine injury. Expulsion of intact pregnancy sac through the uterine rent renders support to this possible etiology.

It is felt that large dose of syntocinon as a method of induction even in a utedus with insignificant contents should be used with caution and conducted with strict vigilance as is done for term uterus, especially in a multiparous uterus.

Summary

A case of uterine rupture in missed abortion of mid trimester following large dose of syntocinon is reported. The probable causes of rupture of uterus are discussed.

Acknowledgement

We thank Prof. H. Ghosh, Principal-Superintendent and Prof. Tarun Banerjee, Head of the Department of Obstetrics and Gynaecology, Calcutta National Medical College for kindly allowing us to publish this article.

References

1. Loudon, J. D. O.: J. Obstet. Gynec. Brit. C'wlth. **66**: 277, 1959.
2. Liggins, G. C.: J. Obstet. Gynec. Brit. C'wlth. **69**: 277, 1962.
3. Myerscough, P. R.: Operative Obstetrics ed. 7 (Lond.), 1971, Baillire, Tindall and Cassel Ltd. p. 659.