"THE USE OF AN OXYTOCIC AGENT IN THE MANAGEMENT OF THE THIRD STAGE OF LABOUR"

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SUMMARY
Our objective was to find the most appropriate time a sole accoucheur should give an oxytocic agent in the management of the third stage of labour.

The outcome of the management of the third stage of labour of 440 parturients was studied. Various time schedules for the administration of an oxytocic and the consequences of these were analysed. The administration of an oxytocic at the crowning of the head or the delivery of the anterior shoulder of the foetus is a method practised mainly at the Korle-Bu Teaching Hospital in Accra (capital city of Ghana). At the Volta River Authority (V.R.A.) district hospital at Akosombo (a rural area in the Eastern Region of Ghana, where the midwives usually do deliveries alone) the drug is mainly given after the delivery of the baby or placenta.

For single, unaided accoucheur, the administration of the oxytocic after the delivery of the baby followed by controlled cord traction that is, the Brandt-Andrew’s method of delivering the placenta appears the most practical approach to the management of the third stage of labour because the complications are few.

INTRODUCTION
The third stage of labour, starting from the delivery of the baby to the delivery of placenta, is quite important because its mismanagement causes high morbidity and mortality form haemorrhage, infections and shock.

After the delivery of the baby, the uterine volume decreases. The intrauterine pressure builds up as the tension (contractility) in the myometrium is maintained. The tension is increased by the administration of an oxytocic. This helps placental separation and reduces blood loss.

The Brandt-Andrew’s method and the conservative method, (which involves spontaneous separation of the placenta and its delivery) followed by the administration of the oxytocic have been the most practised ways of delivering the placentae in the labour wards. Either method involves the administration of an oxytocic which is given at different times. The passive physiological method is not practised in our labour wards.

OBJECTIVE
The purpose of this study is to evaluate the timing of the administration of the oxytocic with the view to finding out the best option for the sole accoucheur.

MATERIALS AND METHODS
Four hundred (400) parturients from Korle-Bu and 40 patients from the V.R.A Hospital, Akosombo who delivered vaginally were studied between January 1st 1995. Their labour and delivery records were reviewed.

Excluded from the study were those with incomplete notes as were as those with gestational ages less than 28 weeks.
These deliveries were mostly done by midwives who were supervised by the Obstetricians and MedicalOfficers. Some deliveries were done by Medical Students and Midwives in training at Korte-Bu. The V.R.A. Hospital is a district hospital where midwives do all the deliveries.

The study population was grouped into four:
Group A: Sixty-six (66) parturient from Korte-Bu and 5 from the V.R.A. Hospital had stimulation of labour and had oxytocic drip throughout the third stage as well as the next hour (4th stage).
Group B: One Hundred and Eighty-one (181) parturients from Korte-Bu and 8 from the V.R.A. Hospital had parenteral oxytocic administered to them upon the delivery of the anterior shoulder of the foetus.

Group C: One Hundred and Two (102) parturients from Korte-Bu and 8 from the V.R.A. Hospital had parenteral oxytocic administered to them upon the delivery of the foetus.

Group D: Forty-one (41) parturients from Korte-Bu and 16 form the V.R.A. Hospital had the oxytocic after delivery of the placenta. 12 of these were breech deliveries.

The age, parity, duration of the third stage, the estimated blood loss and other complications were analysed. The type of accoucheur, (Midwife, Medical Students, or Doctor) was also analysed.

<table>
<thead>
<tr>
<th>Table 1: Timing of Administration of Oxytocics</th>
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<tr>
<td><strong>Group A</strong></td>
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<tr>
<td><strong>Age Range (Yrs)</strong></td>
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<td><strong>Parity</strong></td>
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<td><strong>Duration of 3rd Stage in mins</strong></td>
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<td><strong>Blood loss (mls)</strong></td>
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<td><strong>Complications</strong></td>
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PPH = Post Partum Haemorrhage
RESULTS
As illustrated by the table, the age and parity distribution of the four groups was similar. The mean duration of the third stage was longest 23 min (SD 5.3 min) with the patients who had an oxytocin after the delivery of the placenta (Group D). This group also showed the highest average blood loss 468 ml (SD 262 ml). However, retention of the second twin was never a complication.

Groups A and B had similar average duration of the third stage of about 13 min. The blood loss was least among patients who had had stimulation of labour and the oxytocic drip administered throughout the third stage and the next hour (4th stage). (Group A).

When the oxytocic was given after the delivery of the baby, (Group C) there was no retention of a second twin. In addition the incidence of postpartum haemorrhage was similar to that in the groups who had continuous oxytocic drip (Group A) and those who had the oxytocic at the delivery of the anterior shoulder. (Group B)

Retained placentae occurred in all the groups, with the highest proportion occurring in Group D.

DISCUSSION
In this study the techniques of the recovery of the placenta were applied according to the skills and preferences of the accoucheur. The Medical Students and trainee Midwives at Korle Bu faithfully gave the oxytocic at the delivery of the anterior shoulder, followed by the Brandt-Andrew’s method. Most Midwives at the VRA Hospital and some at Korle Bu preferred to give the drugs after delivery of the baby. This minimised interference with the mother and baby.

It appeared from the study that the administration of the oxytocic after the delivery of the baby was attended by a shorter delivery time and less bleeding than when the oxytocic is given after delivering the placenta. However, the risk of retaining the placenta was still there when controlled cord traction was not applied. Again the outcome in the former in terms of the incidence of postpartum hemorrhage was not significantly different from that obtained from giving the oxytocic at the delivery of the anterior shoulder (Group B) (P > 0.05).

Some Midwives, delivering the babies without any assistance, gave the oxytocic after delivering the placenta. This caused significantly more bleeding and prolonged third stage than any other group (P < 0.05). However, there was no retention of a second twin.

When the oxytocic was used for stimulation of labour and this was continued after the delivery of the placenta, the delivery time was short but in a few instances when the rate was not increased or the infusion stopped prematurely, bleeding from uterine atony was considerable.

CONCLUSION
The administration of the oxytocic with the delivery of the anterior shoulder is mostly practised at Korle-Bu. Even at Korle-Bu, and in the district as well, the accoucheur may prefer to give the drugs after the baby or placenta has been delivered. The most practicable method for the sole accoucheur appears to be to give the oxytocic after delivery of the bay, followed by controlled cord traction. Continuing an oxytocic drip after stimulation appears safest but in the district midwives are not in a position to apply this method often.

RECOMMENDATIONS
The spectre of a sole Midwife taking delivery of the baby, resuscitating it, coming back to deliver the placenta, and making the mother and baby comfortable all by herself is disheartening. But until assistance becomes mandatory in district practice, she should give the oxytocic after delivering the baby and in addition apply controlled cord traction. This allows for the resuscitation of the baby and at the same time prevents retention of the placenta thus reducing blood loss.
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REFERENCES