

## **Self Medication with Vaginal Misoprostol in a Term Pregnancy: Case Report.**

*Lydia R. Airede and Aaron E. Ukwu*

Department of Obstetrics & Gynaecology, Usmanu Danfodiyo University/Teaching Hospital, Sokoto, Nigeria.

### **Abstract**

The case of a woman with one previous Caesarean section, and severe pre-eclampsia at term, who self administered misoprostol by the vaginal route - without its being prescribed - in an attempt to avoid repeat Caesarean section, is described. She eventually had vaginal delivery of a live female infant with cardiopulmonary depression; the delivery was not complicated by symptomatic uterine rupture. The potential for abuse of misoprostol, and the need to control distribution of the drug are discussed.

**Key Words:** Misoprostol; Induction Of Labour; Abuse; Previous Caesarean Section; Self-Medication.

### **Introduction**

Misoprostol, a synthetic Prostaglandin E1 analogue, has become an important drug in obstetrics and gynaecology due to its uterotonic and cervical ripening activity<sup>1</sup>. It is widely used for induction of abortion and of labour<sup>2</sup>, being effective after oral or vaginal administration<sup>2,3</sup>. Several reports exist, of the abuse of. We are however unaware of

We report the case of a patient with one previous Caesarean section, who self-administered misoprostol in a term pregnancy with the intent of inducing labour and thus avoiding repeat Caesarean section.

### **Case Report**

Mrs A. M., a 32 year old booked Para 3 + 1 presented one day after her estimated date of delivery for routine antenatal care. She was not a regular attendant at the antenatal clinic and had missed her last three appointments because she traveled out of town. She had no complaints. Her first pregnancy ended in a spontaneous mid trimester abortion, her second confinement was uneventful with delivery of a live female infant, and her third pregnancy ended in preterm delivery of a still born male infant. Her last child birth, 2 years before presentation, was by Caesarean section for severe pre-eclampsia. She had 2 living children. She was a full-time housewife, and had received secondary level education.

On clinical examination, she was found to be 165cm tall, 112kilogramme in weight, with a blood pressure of 190/120 mm Hg. The symphysio-fundal height was 41centimetres, and there was a singleton fetus in longitudinal lie with cephalic presentation. The fetal heart rate was normal. Clinically estimated fetal weight was 4000g. The modified Bishop score was 3.

Her packed cell volume was 27% and urine protein by dipstick was +. An assessment of term pregnancy, previous Caesarean Section, severe pre-eclampsia, and anaemia was made. She was admitted to the Obstetrics

ward, and commenced on intravenous hydralazine and diazepam. Relevant investigations including grouping and crossmatching of 2 units of blood were requested. She was counseled for repeat Caesarean section, but refused to consent.

While on admission in hospital, Mrs M. A. obtained misoprostol, from, and on the recommendation of, another inpatient for which it had been prescribed, which she digitally inserted into her vagina. The exact quantity of misoprostol she inserted is unknown.

She subsequently went into labour and achieved full cervical dilatation in 11hours. There was delay in the second stage, due to an occipito-posterior position of the fetus, which lasted for six hours. She still declined surgical intervention. She eventually had vaginal delivery of a baby girl, with Apgar Scores of 3 and 4 at 1 and 5 minutes, respectively, who weighed 3000grammes. The third stage was managed actively with intravenous oxytocin, and there were no postpartum complications. The baby responded to active resuscitation and was discharged to the mother after a period of observation by the neonatologist.

Mother and baby were discharged home in satisfactory condition one week later, the mother on antihypertensive therapy and hematinics.

### **Discussion**

Misoprostol is inexpensive and stable at room temperature<sup>1</sup>. Studies in centres, such as ours, which lack sophisticated means of intrapartum monitoring of mother and fetus, have demonstrated its efficacy and relative safety in cervical ripening and induction of labour in carefully selected cases<sup>4</sup>. These factors are

*Correspondence:* Lydia R. Airede, Department of Obstetrics & Gynaecology, Usmanu Danfodiyo University/ Teaching Hospital, PMB 2370, Sokoto, Nigeria.  
*E-mail:* airedelydia@yahoo.com

likely to establish misoprostol as a 'wonder drug' in obstetric practice in the developing world.

On the other hand, several workers have found the use of misoprostol to be a significant risk factor for uterine rupture in women attempting vaginal birth after Caesarean section<sup>5</sup>. Wing et al in a randomized controlled study had an 11.8% incidence of disruption of the uterine scar<sup>6</sup>, while Plaut et al found a 5.6% incidence of uterine rupture<sup>7</sup>. In both studies, misoprostol was used for induction of labour in women with a previous Caesarean section. This complication may not be unrelated to the tendency of misoprostol to result in uterine hyperstimulation<sup>2,8</sup>. Consequently, the current consensus is to avoid the use of misoprostol in women with a uterine scar<sup>19</sup>. Its use in this patient was thus contraindicated.

The practice of obstetrics and gynaecology in the tropics remains a challenge for several reasons, not the least of which is the patient who, despite intensive counseling, declines sensible medical advice and chooses to "do her own thing". A case in point is the one reported in which, despite a history of hypertension, Caesarean section and stillbirth, the patient attended antenatal clinic sporadically and thus presented postdate with severe hypertensive disease in pregnancy. Good obstetric management in a co-operative patient would have forestalled such a development by delivering the baby earlier(). Having self-administered misoprostol, she still refused surgical intervention even when there was delay in the second stage of labour. Fortunately, our patient did not suffer a symptomatic uterine rupture but, the baby had cardiopulmonary depression. Only time will tell the long term effects on mother and child.

The reluctance of our patient to have a repeat Caesarean section was not entirely unexpected given the oft noted

aversion of Nigerian women to Caesarean Section<sup>10</sup>. What did come as a surprise to the authors was the self-administration of the drug by the vaginal route with the intent of inducing labour, and thus avoiding Caesarean section. This was even more so as the patient had only received secondary level education, and no medical or paramedical training whatsoever! While the abuse of misoprostol for induction of abortion is not new, this is probably the first reported case of its self-prescription and administration for induction of labour certainly in Nigeria.

Should this case add fuel to the raging controversy on misoprostol?<sup>1</sup> Probably. The manufacturer of misoprostol (Cytotec, Searle) has distributed a letter to clinicians in the United States warning against the use of misoprostol in pregnant women<sup>11</sup>. The authors are unaware of any country - Nigeria inclusive where the use of misoprostol for obstetric/ gynaecologic indications is licensed by the drug regulatory authorities. The rights or wrongs of misoprostol use notwithstanding, our experience with this patient should act as a cautionary note to doctors, nurses, pharmacists and drug regulating agencies that, while a useful - and some may say revolutionary - drug, misoprostol has an enormous potential for abuse and should therefore be prescribed, administered and stored with care. In developing countries, widespread illiteracy prevent the general public from reading drug labeling and the accompanying literature. Consequently, if drugs such as misoprostol are not carefully controlled, catastrophic results may follow. This is one drug that should not be available 'over the counter', but by prescription only. Certainly, following this experience, there has been a general overhaul in our department in the handling of misoprostol which is now treated like any other dangerous drug!

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