CASE REPORT

Simultaneous Bladder and Uterine Rupture Secondary to Poor Management of Labour by A Traditional Birth Attendant: A Case Report

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ABSTRACT

Nigeria has one of the highest maternal morbidity and mortality globally. Poor health seeking behaviour and lack of adequate training among most Traditional Birth Attendants (TBA) are major contributors to our poor health indices. Uterine rupture is a major obstetric complication with significant morbidity and mortality. Uterine rupture occurring simultaneously with bladder rupture is rare. A major risk factor in our environment is failure to recognise high risk pregnancies as well as unsupervised labour. We report a case of an unbooked 34-year-old $G_5P_4^{+0}$ trader at 39 weeks' gestation who was referred from a traditional birth attendant with simultaneous bladder and uterine rupture.

Key words: *Bladder rupture, Uterine rupture, Rupture, Traditional, Quackery*

INTRODUCTION

Maternal morbidity and mortality in Nigeria, is one of the highest globally.[1,2] Uterine rupture is a major obstetric complication with significant morbidity and mortality.[1,3] Though it can occur anytime in pregnancy, it is however common during labour.[1] It is a significant cause of concern in low income countries. Uterine instrumentation, induction and augmentation of labour, blunt abdominal trauma, multiparity, uterine scar from previous uterine surgery, foetal macrosomia and unsupervised labour are some of the predisposing factors to uterine rupture.[3-6] Uterine rupture occurring simultaneously

with bladder rupture is rare.[7] The simultaneous occurrence of both conditions is a momentous uro-obstetric emergency that results in stillbirth, maternal morbidity, and occasional maternal fatality.[8]

Prompt detection of high risk pregnancies by Traditional Birth Attendants (TBAs) and urgent referral for timely surgical intervention are key to survival. Delay either in diagnosis or transportation to facility with personnel and facility to treat as well as delay in treatment all contribute to adverse outcome.

This case report highlights the danger of not recognising high risk pregnancies and prompt referral by TBAs and the need for relevant stake holders to address the menace.

CASE SUMMARY

An unbooked 34-year-old $G_5P_4^{+0}$ (4 alive) trader at 39 weeks' gestation was rushed to our facility from the home of a traditional birth attendant (TBA). This index pregnancy was uneventful. Patient went into labour spontaneously and presented to the TBA who gave her concoctions that were said to help facilitate the labour. She however laboured for 28 hours and had still not delivered when the TBA gave her more concoctions and urged her to bear down while applying fundal pressure. This continued until she collapsed.

This prompted the relatives to take her out of the place and bring her to our facility.

Her previous deliveries were through spontaneous vaginal deliveries and were uneventful. They were however unsupervised by skilled health personnel. There was no antenatal care and deliveries were either at home or supervised by a traditional birth attendant. Her last child birth was two years prior to presentation. Patient was not a known hypertensive or diabetic and there was no history of elevated blood pressure or elevated blood glucose in the previous pregnancies.

On presentation, patient was in shock. She was pale with a pulse rate of 123 beats/min and blood pressure of 80/50mmHg. There was no sign of foetal activity. She was immediately resuscitated and booked for emergency caesarean section. Bladder catheterization revealed gross haematuria with progressive decline in urinary output.

Patient had emergency caesarean section with the delivery of a fresh still birth male infant weighing 4.5kg. Intra operative findings included haemoperitoneum, anterior lower segment transverse uterine rupture measuring 5cm, posterior and fundal bladder rupture extending from the trigones transversely about 2cm from the ureteral orifices bilaterally and 5cm longitudinally forming a T–shape. Placenta was delivered by controlled cord traction.

The uterine and bladder rupture were repaired in 2 layers separately. Abdominal lavage was done with normal saline, cleaned and the wound sutured in layers. She was transfused two units of blood– one intra operatively and the other post operatively. Bladder catheter was left in-situ for two weeks. Her postoperative recovery was uneventful. At her follow-up visit, the wound was found to have healed very well. She had neither urinary incontinence nor any other adverse sequelae.

DISCUSSION

Many national and international bodies, including governmental, intergovernmental, and nongovernmental bodies, have devoted

resources aimed at curbing the high maternal morbidity and mortality.[9,10]

Every day, about 830 women die either during or following pregnancy and childbirth with 99% of these deaths occurring in developing or low resource countries.[11] Nigeria is a lower middle income country with a population of over 200 million and has one of the worst maternal and child health outcome in the world.[12] This is as a result of unavailable, inaccessible, unaffordable or poor quality care especially at the point of delivery.[11] A good number of Nigerian citizens patronize paramedics and non-health professionals for their medical needs. The reason for this is not far-fetched, including poverty, ignorance, dearth of health facilities and trained health personnel.[13] This has led to significant morbidity and mortality.

The dearth of health facilities and trained health personnel is another major contributor to the problem of quackery in Nigeria and Africa.[14] Health facilities are grossly deficient in the rural area where most of the populace resides.[14] The few health centres present lack basic facilities and adequate trained manpower. Thus the citizens are left with little choice. Thus the Traditional Birth Attendants (TBAs), the Traditional Bone Setters (TBS), the herbalists, the patent medicine dealers and paramedics are sometimes the only available health care providers in these areas. Where private hospitals are present, the fees are usually too much for these rural dwellers who pay out of pocket for health care services. Thus the index patient like most people in her community went to a TBA for her delivery.

According to WHO, a TBA is defined as a person who assists a woman at childbirth and who initially acquired her skills in delivering babies by herself or by working with other TBAs.[15,16] On the other hand, according to WHO, International Federation of Gynaecology and Obstetrics (FIGO), International Confederation of Midwives "A skilled birth attendant is a doctor, nurse, or midwife who has been educated and trained to proficiency in the knowledge and skills needed to manage normal uncomplicated pregnancies, childbirth, and during the immediate postnatal period, and also in the identification, management and referral of complications in women and newborn".[16] The TBAs are seen as healers who reflect the sociocultural beliefs , traditions and norms of the society. Their services are considered as cheaper, friendlier and more acceptable within the rural community.

As noted above, the simultaneous rupture of both uterus and urinary bladder is rare.[7] This was also the case in a tertiary maternity hospital, Kathmandu, Nepal where only a single case of bladder rupture was found in their 20 year review of 251 patients with a ruptured uterus.[17] It is very rare to have urinary bladder involvement in uterine rupture except in the presence of adhesions of the urinary bladder to the lower uterine segment; hence, rare in unscarred uterus.[18] `Where it does occur, it was mainly associated with Vaginal birth after caesarean section.[7] This patient however has not had previous pelvic surgery. Applying fundal pressure by the TBA against a possibly full bladder may have predisposed her to the combined rupture of both uterus and bladder. Also, the concoctions may have some oxytotic properties, and there may have been a cephalo-pelvic disproportion. Oxytotics when given in wrong doses or to the wrong patient causes uterine rupture.[17]

This index patient displayed much of the harmful practices that are still a tradition in some of the rural settings in Nigeria. The harmful traditions include ingestion of concoctions during labour and delivery, and application of fundal pressure under the supervision of traditional birth attendants.[19.] Rupture of an unscarred uterus after application of fundal pressure was reported in a study done by Pan *et al*.[20]

This patient presented with clinical features that were classical of uterine rupture with urinary bladder involvement[8,17,18] She was therefore appropriately managed as a uro-obstetric emergency by prompt resuscitation, evaluation, and laparotomy.[8] The diagnosis was confirmed at laparotomy. The stillborn is a common aftermath in uterine rupture. Fortunately, the patient had an uneventful recovery before her discharge and at consecutive follow-ups. The follow-up in the patient will be all through her reproductive age, however, she was counselled on the dangers of another pregnancy and the need for her to have bilateral tubal ligation done on her, since she already has four living children. But if she still desires to have another child, then the ensuing pregnancy and labour must be medically supervised and delivery should only be in a centre with facility and expertise to handle high-risk deliveries.

Failure to recognise this high risk client during antenatal and poor management of the labour led to the simultaneous rupture of the uterus and bladder. These problems the TBA definitely could not deal with and did not recognize until the patient collapsed and was forcefully taken away by relatives. If not for the prompt intervention of relatives, patient may have died. Several maternal deaths may have arisen from similar circumstances.

Government should as a matter of urgency provide necessary manpower and equipment to health facilities in the rural areas as well as provide incentives to doctors and other health professionals to encourage them stay in rural areas. Basic social amenities should also be provided in these areas to make life comfortable and encourage more health personnel to go to these areas.

About half of all births in developing countries are attended by TBAs at home which increases the risk of death for both mother and child.[16] TBAs, Community Health Extension Workers (CHEWs), etc. make up an integral aspect of primary care manpower. Against this background, there is need for mutual accommodation which is also known as the partnership paradigm. This is the cooperation of biomedical and indigenous systems which can be achieved by training these TBAs on how to recognize emergencies, what to do when they recognise one and the need for referring promptly as appropriate.[16]

Regular supervisions of their activities is also paramount as well as provisions of case definitions to assist them in management and referral. Such supervision can further be enhanced by introducing "Integrated Health Centres" where the services of traditional birth attendants are integrated into the primary health centres (PHCs) where they are adequately supervised.

Universal health coverage should be guaranteed. The National Health Insurance Scheme (NHIS) should be expanded to cover the entire citizenry whether they are employees in the public or private sector or artisans. This will greatly reduce the burden

of healthcare cost on the people and guarantee quality health care. A patient that is registered with a health facility will go to that facility when sick if he/she knows it is free or costs minimally.

Finally, government as well as individuals and groups should fight the menace of quackery head on by applying appropriate legislations, public enlightenment and sensitization on the dangers of visiting quacks and importance of visiting standard health facilities should be intensified.

CONCLUSION

Simultaneous rupture of both the uterus and urinary bladder is uncommon. Thus, a high index of suspicion is very essential in the management. Intervention should be prompt and appropriate so as to reduce the sequel of morbidities and occasional mortality. Stake holders and policy makers should therefore put adequate measures in place to ensure that pregnant women have supervised antenatal care and delivery. TBAs should be adequately trained to be able to recognise high risk pregnancies and refer promptly.

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