

Case Report**ABRUPTIO PLACENTAE FROM ABDOMINAL MASSAGE IN A TERTIARY HOSPITAL IN SOUTH-SOUTH, NIGERIA: A CASE SERIES**Oriji PC¹, Allagoa DO¹, Omietimi JE¹, Obagah L¹, Orisabinone IB¹, Tekenah ES¹¹Department of Obstetrics and Gynaecology, Federal Medical Centre, Yenagoa, Bayelsa State, Nigeria.**Correspondence:** Dr. Oriji, Peter Chibuzor; +234 706 423 3209; chibuzor54@gmail.com**Abstract**

Background: Abdominal massage has been practised for a long time by obstetric and non-obstetric patients in various parts of the world, especially in the South-South region of Nigeria. The major reason the obstetric patients go for abdominal massage in this region is because it is the usual cultural practice of pregnant women.

Case Presentation:

The first patient was a 19-year-old unbooked G2 P0⁺¹ who presented with complaints of abdominal pain and vaginal bleeding, both of 4-hour duration at 30 weeks and 5 days' gestational age. Her complaints followed abdominal massage. She was diagnosed of Abruption placentae with live baby, and subsequently had emergency Caesarean section. She was discharged on the 5th day post operation, while her baby was discharged three weeks later from the special care baby unit.

The second patient was a 28-year-old unbooked G3 P2⁺⁰ who presented with complaints of moderate abdominal pain and vaginal bleeding, both of 3-hour duration at 37 weeks and 2 days' gestational age. Her complaints also followed abdominal massage. She was diagnosed of Abruption placentae with live baby, and subsequently had emergency Caesarean section. She was discharged on the 5th day post operation, and went home with her baby.

The third patient was a 36-year-old booked G4 P0⁺³ who presented with complaints of abdominal pain and vaginal bleeding, both of 8-hour duration at 38 weeks' gestational age. Her complaints followed abdominal massage just like the two other patients. She was diagnosed of Abruption placentae with dead baby, and had instrumental vaginal delivery with the use of vacuum extraction. She was discharged home on the 2nd day postpartum.

Conclusion: Abdominal massage has contributed to increased perinatal and maternal morbidity and mortality in our subregion. All hands must be on deck to help stop this harmful traditional practice with the use of public health enlightenment campaigns, education, siting of affordable healthcare facilities close to the communities and provision of accessible roads to the healthcare facilities that are far away from the people. Improving the standard of living of the people will also help prevent them from engaging in harmful traditional practices like abdominal massage.

Keywords: Abdominal massage, Abruption placentae, Perinatal morbidity and Mortality, maternal morbidity and mortality.

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INTRODUCTION

Abdominal massage has been practised for a long time by obstetric and non-obstetric patients in various parts of the world like Central America, Sweden, Asia, China and some African countries like Egypt and Nigeria (especially in the South-South region).¹ The major reason the obstetric patients go for abdominal massage in this region is because it is the usual cultural practice of pregnant women in this environment.² Other reasons are for mild abdominal pain in pregnancy and 'improvement of foetal wellbeing'. It is yet to be scientifically substantiated if abdominal massage in pregnancy is beneficial at all.³

Women of all works of life engage in this practice, which is carried out by TBAs (traditional birth attendants). Abdominal massage has repeatedly been seen in this centre to have negative consequences and complications in pregnancy and labour, even among very literate patients. From our experience, these complications include miscarriages, preterm rupture of foetal membranes, abruption placentae, uterine rupture, retained placenta, intrauterine foetal death and maternal death. A study carried out at the Niger Delta University Teaching Hospital, Okolobiri, Bayelsa State, Nigeria revealed that 78% of women had

abdominal massage in pregnancy; 32.5% and 35% weekly and monthly respectively.³

Despite the complications enumerated above, obstetric patients still engage in abdominal massage in this subregion. The factors responsible for this include illiteracy, ignorance, poverty, underdevelopment, lack of basic health facilities in some communities, and inaccessibility to the already existing health facilities. A major concern is the deep-seated believe that abdominal massage in pregnancy is highly beneficial.

In these case series, we report cases of three women that had abdominal massage in their pregnancies, which were complicated by abruptio placentae.

CASE PRESENTATION

CASE 1

She was a 19-year-old unbooked G2 P0⁺¹ who presented to the labour ward of our facility with complaints of abdominal pain and vaginal bleeding, both of 4-hour duration at a gestational age of 30 weeks and 5 days. Her complaints followed abdominal massage that she had four hours prior to presentation to the labour ward. She had used about 8 comfit pads to contain bleeding before presenting to the hospital for expert management. She went for abdominal massage because it is the usual cultural practice of pregnant women. There was no warning bleed in this pregnancy.

She was immediately admitted into the labour ward and evaluated. She was in painful distress, pale, afebrile, anicteric, not dehydrated and no pedal oedema. Her pulse was 100/min, regular and moderate volume; blood pressure was 90/50 mmHg; respiratory rate was 28/min, and temperature was 36.9 °C.

Symphysio-fundal height was 30 cm which was compatible with her gestational age. The uterus was tense, tender and foetal parts could not be palpated due to abdominal tension. The foetal heart tone was present, but irregularly irregular. Her perineal pad was soaked with frank blood. Cervical os was closed. Bedside ultrasound scan at the labour ward reported an active foetus with a postero-fundal placenta.

A diagnosis of Abruptio placentae with live baby was made, and she and her husband were counselled for an emergency Caesarean section. Written informed consent was obtained, blood was grouped and crossmatched, theatre was booked, and she was reviewed by the anaesthetist. The neonatologist was

invited to receive the baby in theatre. She subsequently had emergency Caesarean section with the delivery of a live male neonate with Apgar scores of 4 at the 1st minute, 6 at the 5th minute and 7 at the 10th minute. Birth weight was 1.5 kg. Fundally situated placenta was delivered by cord traction with retroplacental blood clots of about 300 ml. Placenta weight was 0.3 kg. Estimated blood loss at surgery was 900 ml. She received two units of fresh whole blood intraoperatively and two more units of fresh whole blood postoperatively. She gradually recovered from anaesthesia and improved clinically. Her postoperative packed cell volume was 32%. She was discharged home on the 5th postoperative day, after counselling her to avoid abdominal massage, embrace hospital management and delivery in her subsequent pregnancy. Her baby was discharged from the special care baby unit after 3 weeks of admission. They were both in good condition of health.

CASE 2

She was a 28-year-old unbooked G3 P2⁺⁰ who presented to the labour ward of our facility with complaints of moderate abdominal pain and vaginal bleeding, both of 3-hour duration at 37 weeks and 2 days' gestational age. Her complaints also followed abdominal massage that she had three hours prior to presentation to the labour ward. She had used one of her wrappers to contain bleeding. When bleeding did not stop, she presented to the hospital for expert management. She went for abdominal massage because she had lower abdominal pain. There was no warning bleed in this pregnancy.

She was immediately admitted into the labour ward for evaluation and treatment. She was in moderate painful distress, pale, afebrile, anicteric, not dehydrated, with mild ankle oedema. Her pulse was 104/min, regular and full volume; blood pressure was 90/60 mmHg; respiratory rate was 24/min, and temperature was 36.5 °C.

Symphysio-fundal height was 37 cm. The uterus was woody hard, tender and foetal parts could not be palpated due to abdominal tension. The foetal heart tone was present, but tachycardic. The wrapper she used as perineal pad was heavily soaked with frank blood. Cervical os was closed. Bedside ultrasound scan at the labour ward reported an active foetus with an antero-fundal placenta.

A diagnosis of Abruption placentae with live baby was made, and she and her husband were counselled for an emergency Caesarean section. Written informed consent was obtained, blood was grouped and crossmatched, theatre was booked, and she was reviewed by the anaesthetist. The neonatologist was invited to receive the baby in theatre. She subsequently had emergency Caesarean section with the delivery of a live female neonate with Apgar scores of 5 at the 1st minute and 7 at the 5th minute. Birth weight was 3.4 kg. Fundally situated placenta was delivered by cord traction with retroplacental blood clots of about 200 ml. there was Couvelaire uterus. Placenta weight was 0.6 kg. Estimated blood loss at surgery was 700 ml. She received two units of blood intraoperatively and one more unit of blood postoperatively. She gradually recovered from anaesthesia. Her postoperative packed cell volume was 30%. She was discharged home on the 5th postoperative day with her baby, after counselling her to avoid abdominal massage, embrace hospital management and delivery in her subsequent pregnancy. They were both in good condition of health.

CASE 3

She was a 36-year-old booked G4 P0⁺³ who presented to the labour ward of our facility with complaints of abdominal pain and vaginal bleeding, both of 8-hour duration at 38 weeks' gestational age. Her complaints followed abdominal massage just like the two other patients. The Abdominal pain started at the TBA's place, and before she got home, vaginal bleeding started. She called the traditional birth attendant on phone to inform her that she was bleeding, but was assured that the bleeding would stop. When the vaginal bleeding did not stop, she went back to the TBA's place for her to stop the bleeding. After inserting some herbs into the vaginal to stop the bleeding, but to no avail, the TBA then asked her to go to the hospital for management. She could not quantify the number of comfit pads that she had used before presenting to the hospital. There was no warning bleed in this pregnancy. She was managed for secondary infertility before this conception.

She was immediately admitted into the labour ward and evaluated. She was in intermittent painful distress, pale, warm to touch, anicteric, dehydrated and no pedal oedema. Her pulse was 112/min, regular and moderate volume; blood pressure was 80/50 mmHg; respiratory rate was 30/min, and temperature was 37.1°C.

Symphysio-fundal height was 37 cm. The uterus was woody hard, tender and foetal parts could not be palpated due to abdominal tension. The foetal heart tone was absent. Her perineal pad was soaked with frank blood. Cervical os was fully dilated. Bedside ultrasound scan at the labour ward reported intrauterine foetal death with a fundal placenta.

A diagnosis of Abruption placentae in shock with dead baby was made, and she and her husband were counselled on the findings, diagnosis and instrumental vaginal delivery with the use of vacuum extraction. She was resuscitated with intravenous fluids, blood transfusion, and oxygen by face mask. She had instrumental delivery with the vacuum extractor, with the delivery of a fresh female still birth that weighed 3.2 kg. Placenta was delivered by cord traction with retroplacental blood clots of about 500 ml. Placenta weight was 0.5 kg. Estimated blood loss at delivery was 400 ml. She received three units of blood on the day of delivery and two more units of blood on the second day postpartum. She gradually improved clinically. Grief management was done.

Her postpartum packed cell volume was 33%. She was discharged home on the 2nd day postpartum in good health condition, after counselling her to avoid abdominal massage and embrace hospital delivery in her subsequent pregnancy.

DISCUSSION

Abruption placentae occurs when there is premature partial or complete separation of a normally situated placenta after the age of foetal viability but before the delivery of the foetus.⁴ It occurs in 0.6% – 1% of all pregnancies.^{5,6} It is an important cause of antepartum haemorrhage which contributes significantly to maternal and perinatal morbidity and mortality especially in developing countries. The third patient had perinatal mortality.

The predisposing factors include hypertensive disorders in pregnancy, blunt abdominal trauma like abdominal massage (as all the patients presented had), previous episode of abruption placenta, advanced maternal age (>35 years), multiparity, young women (<20 years), uterine overdistension (from multiple pregnancy and polyhydramnios), uterine anomalies, premature rupture of foetal membrane, short umbilical cord, cigarette smoking, cocaine use, thrombophilia and retroplacental uterine fibroid.⁴

The most common clinical features are abdominal pain and vaginal bleeding, which all three patients presented with. Other features may be foetal distress, intrauterine foetal death, haemodynamic instability, uterine tenderness and preterm labour.⁴ The third patient had intrauterine foetal death.

Abruptio placentae can be asymptomatic or symptomatic. Symptomatic can be mild, moderate, or severe. It is mainly diagnosed clinically. However, obstetric ultrasound scan is helpful, and may be used to exclude placenta praevia. The presence of retroplacental clots and indentation of the maternal surface of the placenta at delivery confirms the diagnosis of abruptio placentae. All three patients had retroplacental clots which confirmed their diagnoses. Abruptio placentae may also be concealed or revealed.

Complications of abruptio placentae are severe haemorrhage, acute kidney injury, disseminated intravascular coagulopathy, shock, postpartum haemorrhage, amongst others.⁷

The management depends on the clinical state of the patient, severity of abruptio placentae/bleeding, gestational age, if the foetus is alive or dead, whether the patient is in labour or not, the presence of other comorbidities and if the cervix is fully dilated or not. Urgent delivery may be through the vaginal route or by Caesarean section. This depends on the factors mentioned above.

The prognosis of abruptio placentae is generally good, especially when the patient presents early to the hospital for management. Abdominal massage is considered a silent killer, as it has contributed to increased perinatal and maternal morbidity and mortality in our subregion.

All hands must be on deck to help stop this harmful traditional practice with the use of public health enlightenment campaigns, education, improvement of literacy, siting of affordable healthcare facilities close to the communities and provision of accessible roads to the healthcare facilities that are far from the people. Improving the economy and standard of living of the people will also help prevent them from engaging in harmful traditional practices like abdominal massage.

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