Term Gravid Uterus as a Content of Congenital Umbilical Hernia—A Complication in a Multigravida That Presented in Labour

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Received 17 November 2014; revised 20 December 2014; accepted 3 January 2015

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Abstract
Complications arising from neglected umbilical hernia are not uncommon in pregnancy, more especially in developing countries with characteristically poor health seeking behaviour and less encouraging attitude towards surgical intervention for uncomplicated medical conditions. The report is on a 34-year-old para 8 who presented with prolonged labour and an irreducible herniated gravid uterus complicating a neglected congenital umbilical hernia. The patient was resuscitated. She had spontaneous vaginal delivery while preparation was being made for an elective caesarean section.

Keywords
Umbilical Hernia, Gravid Uterus, Term Pregnancy, Labour

1. Introduction
Umbilical hernia is not an uncommon pathology amongst blacks; rate as high as 15% have been reported among pregnant women in the West African sub-region [1]. Umbilical hernia is reported to be more common in Africa compared to the Western world [2]. Gravid women with co-existing umbilical hernia are at high risk because they are predisposed to a wide spectrum of complications which include miscarriage, preterm labour, antepartum haemorrhage, intrauterine growth restriction and intrauterine fetal death. Other complications are pressure necrosis and ulceration of anterior abdominal wall, incarceration of gravid uterus, uterine rupture, rupture of the...
This case report is on herniation of a gravid uterus into the sac of an umbilical hernia with some attendant complications. Congenital umbilical hernia which is usually asymptomatic, is widely and ignorantly conceive to be devoid of complications by most people in sub-Saharan Africa. In adulthood, most will not bother to seek medical treatment since they grew up to know themselves with it.

2. Case Report

A 34-year-old gravida 9, para 8 with 5 children alive presented in labour with 9 months of pregnancy and an umbilical swelling which dates back to childhood. She had been in labour at home for about 48 hours and ruptured membranes about 18 hours prior to presentation. Her last child birth was 2 years ago; a macerated stillbirth, she also had 2 childhood deaths. Index pregnancy was unintended and she did not receive any form of antenatal care although the pregnancy was relatively uneventful. All previous pregnancies were unbooked and all deliveries were at home.

On assessment, she was a young woman in distress, dehydrated with temperature of 37.7 degrees centigrade. She was not pale, anicteric and no pedal oedema. The pulse rate was 130 per minute and blood pressure of 140/90 mmHg. The abdomen was pendulous with huge peri-umbilical swelling, distended veins and multiple decubitus ulceration discharging purulent effluent (Figure 1 and Figure 2).

Defect in the anterior abdominal wall was estimated to be 30 cm × 30 cm with the content being the uterus and bowel; not reducible. It was difficult to delineate the fetal parts as such fetal lie and presentation could not be ascertained. Ultrasound scan showed a live singleton fetus with head in the right iliac fossa and the placenta was antero-fundal. Vulva and vagina were normal and cervix could not be reached. A diagnosis of herniated gravid uterus in a term pregnancy was made.

Patient was immediately commenced on resuscitative measures with intravenous fluid, antibiotics, analgesic and anti-hypertensive while preparation was being made for an emergency caesarean section. The general surgeon team reviewed and suggested repair of hernia after the puerperium. She had a spontaneous vaginal delivery of a female fresh stillborn about 2 hours following admission. The puerperium was uneventful. She was
3. Discussion

Umbilical hernia is a common pathology seen in children, and it may be associated with rare life threatening complications like rupture of the hernia and evisceration of urinary bladder [5]. Most umbilical hernia in adulthood are congenital and dates back to childhood, as was the case in the patient reported. In adult, umbilical hernia could also occur from weakened cicatricial tissue closing the umbilical ring [6]. Predisposing factors of adult onset umbilical hernia are pathology that would increase intra-abdominal pressure like obesity, multiple pregnancy, prolonged labour, ascites and large intra-abdominal mass [6] [7]. Surgical treatment for umbilical hernia done in childhood is effective and recurrence is rare [6]. The complication reported in this patient could have been averted if surgical intervention was instituted in childhood; this may not be unconnected to ignorance, poor health seeking behaviour and accessibility to health care services in the developing world. Similar reports in the literature were mainly in multigravida like this case although Mbuagbaw et al. reported a case in a primigravida [8]. Preponderance among multigravida can be explained by repeated pressure effect on the umbilical ring resulting in widening ring and laxity of the anterior abdominal wall from pregnancies and labour of previous conceptions and parturition [6] [9]. Besides multigravida, other factors in this report that may have aided the worsening of this complication, are non enrolment for formal antenatal care in all her pregnancies including the index one, and unsupervised home birth in all her deliveries. Supervision of pregnancy and delivery by trained personnel still remain an insurmountable predicament despite multi-layered governmental and non-governmental multifaceted focused approach in most sub-Saharan Africa settings.

The patient reported presented with prolonged labour, multiple foci of infected anterior abdominal wall decubitus ulceration with an intact skin over umbilical hernia harbouring the gravid uterus, even though authors have reported labour and large infected ulceration on anterior abdominal wall as predisposing factors to rupture of umbilical hernia [6] [10]. Emergency caesarean section was to be the method of delivery in this case, because of prolonged labour and doubt as to the integrity of the anterior abdominal wall to withstand labour in consonant with other reports [11]. This patient however delivered spontaneously per vagina while awaiting caesarean section. Decision to delivery interval by caesarean section has remained a challenge in most resource constrained sub-Saharan health facility mainly from multifactorial reasons. Elective repair of umbilical hernia after the puerperium was the line of management in this case. Elective postpartum repair is favoured because the over stretched abdominal wall that may interfere with repair would have returned to normal, low risk of wound dehiscence and infection and less likelihood of recurrence [12] [13]. On the contrary, some authors prefer to perform herniorrhaphy during caesarean section with no associated wound infection and recurrence [4] [13]. We were not entangled in this controversy because our patient had multiple foci of infected ulceration which would not have allowed concomitant herniorrhaphy during caesarean section. In conclusion, congenital umbilical hernia though a common but asymptomatic surgical condition can be associated with complications, mass dissemination of information especially highlighting the possible complications may be the best way to encourage affected persons to seek treatment.

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