

INCISIONAL SCAR EVISCERATION OF FALLOPIAN TUBE IN A PREGNANT WOMAN

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ABSTRACT

Background: Herniation of pelvic and solid abdominal structures like the fallopian tubes especially in pregnancy is extremely rare. We report a case of an eviscerated fallopian tube through an incisional hernia in a pregnant woman. There has been no such report in literature at the time of report.

Case presentation: A case of a 38 year old gravida 3 Para 2 +⁰, Ibo Nigerian who presented with persistent abdominal pain and protrusion of a fleshy mass from the lower aspect of the anterior abdominal wall of one day duration. She was misdiagnosed as granuloma over the ruptured incisional hernia. At laparotomy, she was found to have a herniating fallopian tube secondary to laevo rotation of the pregnant uterus.

This case exhibits one of those rare conditions that could become life threatening and which has a lot of issues to be considered before a decision is made.

Conclusion: Evisceration of a fallopian tube through an incisional hernia in a pregnant woman is an uncommon occurrence which is life threatening and prone to misdiagnoses. It is therefore important that a good index of suspicion is created among health personnel especially gynaecologists and general surgeons on the possibility that the fleshy mass on the incisional hernia may be a vital organ like the fallopian tube. This is an original report of impact to the practice of medicine

Background: Incisional hernias are a common occurrence following abdominal procedures particularly following a sub umbilical midline incision with a reported incidence between 2% and 11%^{1,2}. The usual contents of a hernia are small bowel and omentum. *Herniation of pelvic and solid abdominal structures like the fallopian tubes is extremely rare.* We report a case of an exteriorized fallopian tube through in incisional hernia in a pregnant woman.

Case report: A 38 year old Ibo Nigerian housewife G3 P2 +0 with 2 previous caesarean section presented to the emergency obstetric at a gestational age of 31 weeks with a history of persistent abdominal pain and

protrusion of a fleshy mass from the lower aspect of the anterior abdominal wall of one day duration.

The initial Caesarean section was for prolonged labor 3 years earlier. Eighteen months prior to presentation

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she had had a repeat caesarean section on account of prolonged pre-labor rupture of membranes at 40 weeks 6 days gestational age. This surgery was complicated with wound dehiscence and suppuration.

About 6 months prior to presentation, patient had noticed a swelling on the anterior abdominal wall along the lower part of the scar. This mass gradually increased in size and was reduced spontaneously on lying down. There was associated generalized pain. The pain had gradually progressed in intensity about 2 months prior to presentation. Two days prior to presentation she noticed a small wound at the summit of the swelling through which the fleshy mass later protruded. There was discharge from the mass but no fever. She felt fetal kicks.

The patient had no medical history of note apart from the two surgeries. There was no history of chronic cough or airway obstructive disease

Examination revealed an otherwise healthy gravid woman, 50kg, height 1.63m, BMI of 18.8kg/M². She had a reddish exudating mass protruding through the sub umbilical scar on the anterior abdominal wall. There was generalized tenderness. Symphysis-fundal height was 29cm, singleton fetus with movement readily seen, in longitudinal lie and cephalic presentation. There was no organomegaly.

A provisional diagnosis of a ruptured incisional hernia with a fleshy mass? granulation tissue (to rule out metastasis). This co-existed with a viable pregnancy.

She was co-managed by the surgical and obstetric units and even ultrasonography could not clarify the diagnosis. On the second day of admission she became quite febrile 38.7°C despite antibiotic cover. Her results showed a haematocrit of 33%, all other test results were within normal except for significant hypokalaemia and neutrophilia.

She had a laparotomy under general anesthesia after correction of electrolyte imbalance (hypokalaemia)

and administration of steroids for lung maturation. At surgery the protruding mass was reddish, exudating with slough all over and bled to contact or touch. The anterior abdominal wall was very thin with a very defective rectus sheath up to 20cm wide apart. The right fallopian tube was found partially torsed along with the ovaries and mesosalpinx. The uterus was found to have laevo-rotated on itself and thereby presenting the right fallopian to the incisional hernia.

An emergency caesarean section was decided on during the surgery because she had started having mild uterine contractions, has had two previous caesarean sections and was at risk of a wound break down if the rectus sheath are brought together without a mesh. She was delivered of a live female neonate who had an Apgar score of 7 in the first minute and 10 after 10 minutes. The baby was received by the paediatricians and subsequently admitted in the special care baby unit. The baby unfortunately died of complications of prematurity after 4 days.

A drain was left in situ for 5 days. She has since been discharged home and was doing well during her postoperative review.

DISCUSSION:

When a fleshy mass is seen in or from an incisional hernia the differential diagnoses made usually range from suture granulomas to malignant tumors. Not so commonly, endometriomas/ endometriosis of the anterior abdominal wall have been described and are rarely considered a differential diagnosis of a mass from the incisional hernia^{3,4}. One case in South Africa has been documented of fallopian tube herniating through the Pfannenstiel incisional hernia¹ and another reported in India of herniation through a surgical drain site⁵ and another through a femoral hernia⁶. Fallopian tube herniation have also been reported in history to occur through the sciatic

hernia⁷, and even into the uterine cavity^{1,8}.

Tubal herniation in a pregnant woman is particularly rare and reported cases were not found in literature. The closest similar report was that of herniation of a gravid uterine fundus through an incisional hernia in northern Nigeria⁹.

The fallopian tube is naturally positioned on the supero-lateral aspect of the uterus on two sides and in a pregnant patient is expected to occupy the lumbar region. However, in the event of dextro or laevo-rotation of the uterus, they may become a midline structures as occurred in the index case.

While an incisional hernia through a midline scar is commoner than from other sites, herniation of the fallopian tube in pregnancy through such a scar is quite rare due to the reasons adduced above. This necessitated this report, as the protruding inflamed fimbrial end of the tube could be easily misdiagnosed to as granulation tissue, endometrioma/endometriosis of the incisional scar, or even a metastatic lesion on the anterior abdominal wall.

It is pertinent that a good index of suspicion exists. This is because with a misdiagnosis wrong management measures may be taken and this could be catastrophic. If simple excision biopsy of the lesion is done this would have led to amputation of the fimbrial end of the fallopian tube with the attendant reduction in fertility amongst other complications.

Even without the inadvertent amputation, the protrusion of the fallopian tube exposes it to infection and a possibility of incarceration /strangulation. This could lead to loss of the tubes and its function. The exteriorization of the fallopian tube also predisposes the patient to peritonitis as was the case with our patient and this could be life threatening both to the mother and the fetus.

However, at a G.A of 31 weeks, delivery leads to a case of severe prematurity with the attendant complications. In the presence of a mid trimester ongoing pregnancy, repair of the anterior abdominal

wall with simple apposition using a non absorbable suture was likely to fail particularly as she had very thin rectus abdominus muscles. Also, since she was already having some contractions, if delivery was not done and the contraction not aborted and following two previous caesarean section (the last one 18 months before presentation), there may have been need to return for caesarean during recovery stage following laparotomy. On the other hand if the contraction is successfully aborted, the patient would still be needing surgery (CS) done again barely 6 to 8 weeks after the first on account of having had 2 previous caesarean sections. The probability of successfully aborting the contraction following the laparotomy was slim. This created the dilemma of having to deliver the fetus at a GA of 31 weeks.

This case exhibits one of those rare conditions that could become life threatening and which has a lot of issues to be considered before a decision is made. Our patient already had the complications of electrolyte imbalance, infection and ischemia of the exteriorized fallopian tube.

Procedures for prevention of dextro/ laevo-rotation in pregnancy are not popular coupled with the thinness and divarification of our patient's anterior abdominal wall muscles. Usually repair of an infected /contaminated abdominal wall defect using an abdominal mesh has been widely reported to be safe but with less favorable long time durability¹⁰.

CONCLUSION

Evisceration of a fallopian tube through an incisional hernia in a pregnant woman is an uncommon occurrence which is life threatening and prone to misdiagnoses. It is therefore important that a good index of suspicion is created.

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Consent

Written informed consent was obtained from the patient for publication of this Case Report and any accompanying images. A copy of the written consent is available for review by the Editor-in-Chief of this journal.