Cervical Ectopic Pregnancy: A case report
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Citation

Abstract
Cervical pregnancy is an infrequent form of ectopic gestation which accounts for 0.15% of all ectopic pregnancies. Early detection by endovaginal ultrasound is desirable in order to plan management early and avoid serious and often life threatening complications. We report a case of cervical pregnancy at 18 weeks, resulting in hysterectomy.

INTRODUCTION
Cervical pregnancy is one of the rarest forms of ectopic gestation and should be considered in differential diagnosis of abnormally low gestation sacs on scan.

CASE REPORT
A 37 yr old gravida four Para 2 with two previous caesarean sections and a miscarriage at 20 weeks booked at 10weeks. She had a dating scan at 12 weeks gestation, which reported a gestation sac and a viable singleton pregnancy located at the inferior portion of the uterus. A sonographic diagnosis of pregnancy in a bicornuate uterus was made. The patient was admitted with vaginal bleeding and crampy lower abdominal discomfort at 18+ weeks gestation. A pelvic ultrasound scan was arranged which reported absent foetal heart pulsation with markedly reduced liquor. Following counselling, medical evacuation of the uterus using misoprostol was planned. She subsequently had 2 courses of misoprostol but failed to deliver. On vaginal examination foetal parts were felt in the vagina. She was therefore scheduled for examination under anaesthesia in theatre.

On examination, under anaesthetic the cervix was oedematous and the foetus was felt in the vagina. The foetus was gently and easily extracted but the placenta was retained. The uterus was therefore digitalized to manually remove the placenta. However, torrential haemorrhage of about a litre ensued within minutes. Curettage was attempted to remove pieces of placental tissue but heavy bleeding persisted, despite use of ergometrine, oxytocin and repeated haemobate injections.
A Foley’s catheter was inserted in the uterus, which also failed to stop the bleeding. The bleeding was observed to be coming from below the level of balloon. Due to persistent and rapid massive haemorrhage, a decision was made for an emergency hysterectomy. At laparotomy, the uterus was normal sized but the cervix was grossly dilated to almost the same size as the uterus. A total abdominal hysterectomy was performed. The patient received 9 units packed cells, 4 units fresh frozen plasma and 2 units of cryoprecipitate, during the procedure. Postoperatively, she recovered well and was discharged on the sixth day. The histology confirmed placental site reaction and chorionic villi in the cervix.

COMMENT
Cervical pregnancy is a rare form of ectopic pregnancy, which occurs in 1-in 1000 to 1 in 18000 pregnancies (1,2). The exact aetiology is unknown though many predisposing factors have been postulated. These include previous endometrial damage due to uterine curettage, anatomic anomalies (myomas, synechiae), intrauterine device (IUD) use, assisted reproduction, diethylstilbestrol exposure and previous caesarean section. (3, 4)

In the past, the diagnosis of cervical pregnancy was made primarily after hysterectomy for uncontrolled bleeding. But more recently, the use of Trans-vaginal ultrasound has facilitated an earlier diagnosis, leading to a wider range of conservative management options. Cervical pregnancy can be confused with product of conception in transit through the cervical canal during a miscarriage. Doppler study to identify the peritrophoblastic flow can help to distinguish between these conditions.

Management options vary and depend on the gestational age by ultrasound at diagnosis and general condition of the patient. Most published cases of cervical pregnancy beyond
12 weeks have ultimately resulted in hysterectomy. Hysterectomy has therefore been suggested as a reasonable primary therapy in advanced cases in order to prevent maternal morbidity or mortality from haemorrhage. (5)

However, in the first trimester, several conservative measures have been shown to be effective. In the past, curettage with packing of the cervix, for the almost inevitable bleeding, was commonly done. Foley catheter placed gently past the external os and inflated for tamponade has also been used with some success (6). Other methods like cervical cerclage, vaginal ligation of the cervical arteries, uterine artery ligation, internal iliac artery ligation, and angiographic embolization of the cervical, uterine, or internal iliac arteries have also been described. (5)

The use of methotrexate intra-amniotically under ultrasound guidance or systemically is the current preferred method for managing early cervical gestation. Intra-amniotic methotrexate may be performed alone or with foeticide using potassium chloride. Most reports of successful conservative therapy however involve the use of methotrexate in combination with cervical evacuation and use of a haemostatic technique.

This is the first reported case which highlights the potential of misdiagnosing cervical pregnancy with bicornuate uterus. Although rare, cervical pregnancy should be included as a differential diagnosis in women with abnormally located gestation sacs. An earlier diagnosis could have led to conservative management options and avoidance of hysterectomy with reduced morbidity in our patient. We suggest that an endo-vaginal ultrasound should always be performed in early pregnancy when a uterine anomaly is suspected or with an abnormally located gestational sac, to exclude cervical pregnancy.

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