Incarcerated retroverted gravid uterus – A rare complication of fibroid with pregnancy

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Introduction

Incarceration of gravid uterus is a rare entity. It usually presents at 14-16 weeks of pregnancy. We report a case of incarcerated retroverted gravid uterus presenting at 36 weeks of gestation.

Case report

A 26 year old primigravida was referred from the periphery at 36 weeks of gestation. She was having continuous lower abdominal pain since about 20 weeks of gestation. It was diagnosed as being due to red degeneration of a cervical fibroid by her doctor.

Examination showed a tender pregnant uterus of 32 weeks size gestation with mild uterine contractions. A live fetus was present in cephalic presentation. Vaginal examination revealed a large rounded firm mass in the pouch of Douglas the upper limit of which was not reachable. The cervix was pulled high up and could not be felt by the vaginal finger.

Sonography showed satisfactory fetal growth corresponding to the period of amenorrhea. The origin of the pelvic mass could not be delineated. A provisional diagnosis of impacted subserous fibroid was made and an emergency cesarean section planned.

An infraumbilical midline incision was made, uterovesical peritoneum was cut, and bladder was pushed down with difficulty. A transverse incision was given on the lower segment but surprisingly amniotic cavity could be entered only after cutting 7-8cm thickness of myometrium. A healthy female baby weighing 2500g was delivered by breech. After delivering the baby, a careful examination revealed that the fundus of the uterus was incarcerated in the pouch of Douglas due to a large fundal fibroid. The uterine incision which was supposedly taken over the lower segment, had actually transected the cervix and the posterior uterine wall (Figure 1). The normal anatomy was restored and the uterus was sutured in layers – initially the posterior wall of the uterus, then the posterior wall of the cervix and finally the anterior wall of the cervix. Polythene tube was put through the cervix before closing the anterior wall of the cervix to facilitate lochial drainage from the uterus into the vagina.

The puerperal period was uneventful. The polythene tubing was removed on the 15th postoperative day.

Figure 1. Pictorial depiction of intraoperative events.
Discussion

The first case of incarceration of the gravid uterus was described by William Hunter in 1754. This is a rare entity found in approximately 1 in 3000 pregnancies though uncomplicated retroversion is found in 9% pregnancies.

Usually the retroverted uterus undergoes spontaneous correction in the early second trimester. The chief cause of incarceration has been postulated to be an unusually deep sacral concavity with an overhanging promontory, which prevents spontaneous correction. Very occasionally old adhesions or tumors have been responsible for preventing spontaneous correction of the displacement.

Such incarcerated uteri usually present at 14-20 weeks of gestation with abdominal pain and urinary problems. Repositioning of the uterus has been done manually in knee chest position, colonoscopically and laparoscopically. In rare cases hysterotomy followed by repositioning, or even hysterectomy may be required.

Incarceration of the uterus persisting beyond the second trimester has been reported only eight times since 1806. These cases must be differentiated from sacculation where there is a diffuse ballooning of some portion of the uterine wall in a uterus of normal polarity. As the uterine polarity is maintained vaginal delivery is possible in case of true uterine sacculation while it is impossible in cases of incarceration, rupture on the uterus being a probable complication if labor pains persist. Delivery would also be impossible if the presenting part enters the pelvis into the posterior wall sacculation of the uterus.

In our case correction under anesthesia could possibly have been tried as was done by Evans, but it would have been associated with risk of uterine rupture particularly as there was a large fundal fibroid.

Keating et al have reported an interesting case of incarcerated retroverted gravid uterus causing bilateral uterine obstruction.

Jacobsson and Wide-Swensson have reviewed the literature on incarceration of retroverted gravid uterus. They have also reported an interesting case of recurrent incarceration of retroverted gravid uterus.

References