Incarcerated gravid uterus in a rectal prolapse: A case report

**El-Nafaty Aliyu Usman, Obiano Sunday Kelvin, Mamman Tijjani Hinna,
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ABSTRACT

Uterine retroversion is relatively common in 15% of women and rarely calls for concern. Such women will normally conceive and remain symptomless, as the pregnancy advances the uterus rotates spontaneously between 14–16 weeks to an anteverted position, thus allowing the growing uterus to expand into the abdomen. However, if the uterus become entrapped in the hollow of the sacrum it is then incarcerated, such uterus fails to return to anterior position. This usually presents as an emergency and requires immediate intervention to reposition the uterus. The risk factors include, deep sacral concavity, pelvic adhesions, uterine malformations, and pelvic tumors. Rectal prolapse is commonly seen in the children and the elderly but can occur at all ages. The risk factors include chronic constipation, severe or chronic cough, and pelvic floor dysfunction and pregnancy a contributory factor. The combination of prolapse of an incarcerated uterus in a rectal prolapse is rare and only one case reported in literature. This is a report of the second case of prolapse of an incarcerated gravid uterus in a rectal prolapse occurred in a 25-year-old multiparous. The prolapse incarcerated uterus with the rectum was reduced through laparotomy and an encirclement suture applied at the anal mucocutaneous margin. The pregnancy was carried to term and delivered via spontaneous vaginal delivery of alive female weighing 2.8 kg. There was also no recurrence of the rectal prolapse.

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CASE REPORT

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gravid uterus in a rectal prolapse occurred in a 25-year-old multiparous. The prolapse incarcerated uterus with the rectum was reduced through laparotomy and an encirclement suture applied at the anal mucocutaneous margin. The pregnancy was carried to term and delivered via spontaneous vaginal delivery of alive female weighing 2.8 kg. There was also no recurrence of the rectal prolapse.

Keywords: Incarcerated uterus, Live birth, Rectal prolapse, Thiersch suture

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INTRODUCTION

Uterine retroversion is common phenomenon and considered as normal variation in women with 15% incidence rate. Such women will normally conceive and remain symptomless, as the pregnancy advances the uterus rotates spontaneously between 14–16 weeks to an anteverted position thus allowing the growing uterus to expand into the abdomen. However, in event the uterus fails to antevert and rise into abdominal cavity, it gets entrapped in the hollow of the sacrum and become incarcerated. This condition occurs in about 1:3,000–10,000 pregnancies [1]. The risk factors include, deep

sacral concavity, pelvic adhesions, uterine malformations, and pelvic tumors [1–4]. Patients in this situation often presents as an emergency with acute urinary retention, pelvic pain, back pain and constipation. The treatment requires urgent intervention to dislodge and reposition the uterus [2, 3].

Rectal prolapse is the protrusion of the rectum through the anus, a prolapse can be partial or complete, in the former the mucosal lining of the rectum bulges partly from the anus while a complete prolapse the entire rectum bulges through the anus. It is usually associated with weak pelvic floor musculature, increased intra-abdominal pressure, chronic constipation, lax muscles of the anal sphincter and pregnancy a contributory factor. It is commonly seen in the elderly and children but can occur in all ages. The presentation is usually protrusion after a bowel motion which retracts spontaneously, later protrudes more often, especially with straining, sneezing, etc. finally the rectum prolapses with daily activities such as walking which may progress to continual prolapse and patients may have to replace it manually [5, 6]. Rectal prolapse has been reported to occur in pregnancy [7, 8].

The occurrence of combined incarcerated gravid uterus with rectal prolapse is a rarity and we report a second case of incarcerated gravid uterus inside a massive rectal prolapse in a young lady.

CASE REPORT

A 25-year-old gravida 5 and para 4 with 2 live children (G5P4+0, 2 alive), presented to the gynecology emergency unit of Federal Teaching Hospital Gombe, with complaints of four months amenorrhea and sudden protrusion per rectum. The patient was pounding grains in a mortar when suddenly she felt like defecating, on straining to empty her bowels in the lavatory she suddenly felt the gush of protrusion per anus. She tried to push it back but with no success. She was then rush to a secondary health center where the protrusion was dressed with gauze and subsequently referred to our department.

The past history revealed she had been experiencing the protrusion per rectum since early childhood each time she goes to defecate it used to come out and retreat spontaneously, but since past four months she had to manually reduce the protrusion each time she goes to empty her bowels. There was no associated urinary symptoms or chronic cough but had recurrent episodes of constipation. She had never been to the hospital because of this protrusion.

Obstetrics history, she had four full term pregnancies all delivered spontaneous at home, the pregnancies where not supervised, the fourth delivery was a stillbirth, while the second child died at four years of age due to febrile ailment.

On examination she was in painful distress, afebrile and mild pallor. The vital signs were normal blood pressure 120/80 mmHg, pulse 96 beats/min.

The abdomen was scaphoid soft and non-tender, the bladder not distended, the uterus was not palpable. The other abdominal organs were un-remarkable. On pelvic examination, there was a massive reddish mass, edematous about 20 cm in diameter, in the perineum protruding through the Anus (Figure 1). With oozing of blood from the mucous surface. On digital vaginal examination revealed the cervix was pointing upwards about 4 cm long with OS closed. The fundus was displaced posteriorly deep into the prolapsed rectal swelling.

An ultrasound scan examination with the transducer on the swelling, confirmed a gravid uterus containing a live single active fetus with good cardiac activity and a calculated gestation age of 15 weeks.

Management an intravenous fluids 5% dextrose in water (D/S) 500 ml was set up, urgent pack cell volume (PCV) was 32%. Blood grouping and typing of 2 pints was done. Electrolytes were normal. Analgesia was given and the patient was counsel on the need for immediate intervention and consent for surgery obtained. The risk to the possible loss of the pregnancy was explained.

Procedure under general anesthesia, examination under anesthesia (EUA) was done and the findings confirmed as earlier noted. A manual reduction was attempted but did not succeed. Therefore, a double approach was used with the general surgeons assisting at the perineum. The abdomen was entered through a Pfannenstiel incision, and manually the fundus of the uterus was grasped and with the aid of pressure from the perineum it was dislodged and delivered into the abdomen (Figure 2). It was inspected and was found to be normal, with the tubes and ovaries. The abdomen was closed normally.

A Thiersch procedure was used to apply an encirclement suture round the anus with Nylon 2 to prevent prolapse of the rectum (Figure 3). The postoperative recovery was uneventful, she had analgesics, antibiotics, and Tocolytics and stool softeners. An ultrasound scan on the fifth day postoperative revealed a live fetus with active cardiac activity. She was subsequently counsel and booked for antenatal care. The pregnancy was carried to term uneventfully and she had a spontaneous vaginal delivery of alive female weighing 2.8 kg.

On examination of the perineum six weeks postpartum it was found to be intact the Nylon suture was in place and there was no recurrence of the rectal prolapse and she has been defecating normally (Figure 4), the uterus was in the anteverted position.

DISCUSSION

Uterine retroflexion and retroversion are common occurrence in women and rarely associated with any symptom. Majority will have seamless pregnancy with spontaneous version to the anterior position as the pregnancy advances. However, when spontaneous rotation fails to occur and the uterus gets trapped in the

Figure 1: Rectal prolapse with Incarcerated uterus.

Figure 3: After application of the Thiesch suture.

Figure 2: The dilated Anus after reduction of the prolapse.

Figure 4: Six weeks postpartum.

hallow of sacrum incarceration occurs. Such patients present with acute urinary retention and severe pelvic pains. Immediate intervention is usually required to relief pain by repositioning the uterus [9, 10]. In this case the patient presented because of the prolapse containing the incarceration uterus.

The failure of the patient to seek medical attention for the rectal prolapse since childhood was a clear case of ignorance, even when symptoms worsen during the index pregnancy, that she had to manually reduce it on some occasions still did not make her report to the hospital. This contributed to the occurrence of this complication.

The combination of incarceration and rectal prolapse in pregnancy is rare and only one case reported in literature [11]. The presentation is usually as emergency because of the failure of the prolapse rectum and the uterus to reduce spontaneous or manually. A weak pelvic floor with a lax anterior rectal wall and anal sphincters provides as enabling room for the retroverted uterus to expand and push into the rectum which provokes undue desire to defecate and may carry the uterus along with straining to empty the bowels.

Failure to intervene will result in more complications with risk of losing the fetus, strangulation of the uterus and the rectum. In the first case, reported, manual reduction was done under anesthesia but the patient aborted few days later, undue handling could have contributed in the loss of that pregnancy. Therefore, we opted to do laparotomy and gently reduce the incarcerated prolapse uterus and rectum. This was done with aim to save the pregnancy, which actually allowed the pregnancy to be carried to term. The rectal prolapse was managed with Thiersch procedure which by applying an encirclement of Nylon suture at the anal margin prevented further rectal prolapse during the pregnancy and after. This procedure is simple to perform and associated with limited complications. Other more invasive procedures may not be suitable in a pregnancy state e.g., laparoscopic rectopexy [12], anticipated complications include recurrence of prolapse, constipation and mucosal ulceration, none of these occurred in this case. Recurrence of incarceration has been reported [13].

CONCLUSION

In this case, with a rectal prolapse predating the pregnancy means there was an existing factor that's favors the prolapse of the uterus with rectum. Therefore, obstetricians should be aware of the risk of having uterine prolapse in patients who present with symptoms of rectal prolapse they should be examined to determine if there is retroverted uterus, the risk of combine incarceration and prolapse should be born in mind. The conservative treatment with Thiersch suture has been found useful in this case and vaginal delivery uneventful.

Author Contributions

El-Nafaty Aliyu Usman – Substantial contributions to conception and design, Acquisition of data, Analysis and interpretation of data, Drafting the article, Revising it critically for important intellectual content, Final approval of the version to be published

Obiano Sunday Kelvin – Analysis and interpretation of data, Revising it critically for important intellectual content, Final approval of the version to be published

Mamman Tijjani Hinna – Analysis and interpretation of data, Revising it critically for important intellectual content, Final approval of the version to be published

Rabiu Amina Baba – Analysis and interpretation of data, Revising it critically for important intellectual content, Final approval of the version to be published

Ningi Adamu Bala – Analysis and interpretation of data, Revising it critically for important intellectual content, Final approval of the version to be published

Farouk Halima Usman – Analysis and interpretation of data, Revising it critically for important intellectual content, Final approval of the version to be published

Guarantor

The corresponding author is the guarantor of submission.

Conflict of Interest

Authors declare no conflict of interest.

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REFERENCES

1. Jacobsson B, Wide-Swensson D. Incarceration of the retroverted gravid uterus: A review. *Acta Obstet Gynecol Scand* 1999 Sep;78(8):665–8.
2. Newell SD, Crofts JF, Grant SR. The incarcerated gravid uterus: Complications and lessons learned. *Obstet Gynecol* 2014 Feb;123(2 Pt 2 Suppl 2):423–7.
3. Sweigart AN, Matteucci MJ. Fever, sacral pain, and pregnancy: An incarcerated uterus. *West J Emerg Med* 2008 Nov;9(4):232–4.
4. Hamod H, Chamberlain PF, Moore NR, Mackenzie IZ. Conservative treatment of an incarcerated gravid uterus. *BJOG* 2002 Sep;109(9):1074–5.
5. Hammond K, Beck DE, Margolin DA, Whitlow CB, Timmcke AE, Hicks TC. Rectal prolapse: A 10-year experience. *Ochsner J* 2007 Spring;7(1):24–32.
6. Goldstein SD, Maxwell PJ IV. Rectal prolapse. *Clin Colon Rectal Surg* 2011 Mar;24(1):39–45.
7. Viera AJ, Larkins-Pettigrew M. Rectal prolapse during pregnancy: A case report. *J Reprod Med* 2000 Jan;45(1):45–7.

8. Jamabo RS, Ogu RN. Rectal prolapse in pregnancy: A case report. *J Med Biomed Res* 2005;4(1):92–93.
9. Inaba F, Kawatu T, Masaoka K, Fukasawa I, Watanabe H, Inaba N. Incarceration of the retroverted gravid uterus: The key to successful treatment. *Arch Gynecol Obstet* 2005 Nov;273(1):55–7.
10. Gerscovich EO, Maslen L. The retroverted incarcerated uterus in pregnancy: Imagers beware. *J Ultrasound Med* 2009 Oct;28(10):1425–7.
11. Hassanin IH, Helmy YA, Abbas AM, et al. Incarcerated gravid uterus through a rectal prolapse: First case report. *Eur J Obstet Gynecol Reprod Biol* 2016 Sep;204:127–8.
12. Lee JL, Yang SS, Park IJ, Yu CS, Kim JC. Comparison of abdominal and perineal procedures for complete rectal prolapse: An analysis of 104 patients. *Ann Surg Treat Res* 2014 May;86(5):249–55.
13. van der Tuuk K, Krenning RA, Krenning G, Monincx WM. Recurrent incarceration of the retroverted gravid uterus at term - two times transvaginal caesarean section: A case report. *J Med Case Rep* 2009 Nov 3;3:103.

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