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Obstetrics & Gynaecology

KEY WORDS:

UTERINE PROLAPSE IN A 30 YEAR OLD PREGNANT WOMAN: A CASE REPORT

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ABSTRACT

Rationale: Uterine prolapse is the descent of the uterus and cervix down the vaginal canal toward the introitus. Uterine prolapse in pregnancy is a rare condition but this may be highly risky as it may causes antepartum, intrapartum, and puerperal complication. Estimated incidence of uterine prolapse in pregnancy is about 1 per 10,000–15,000 deliveries It is also known that multiparity and advanced age are major risk factors for pelvic organ prolapse which can rarely complicate pregnancy. Patient concerns: A 30-year-old female , married since 17 years, Gravida:7, Para: 5, Live: 5, Mtp: 1with previous all vaginal deliveries with 40 weeks of gestation came to the JJ hospital, Mumbai with complaints of pain in abdomen since 2 hours and uterine prolapse since 2 and half years. **Diagnoses:** On clinical examination of patient we found that, on per abdominal examination – uterus full term with cephalic presentation of baby with fetal heart rate ranges between 140 to 150 per min. On per speculum examination – grade 3 uterine prolapse with edematous, thick and ulcerated cervix. **Interventions:** Due to edematous , thick , ulcerated and prolapsed cervix, decision of cesarean delivery was taken . A live female baby of weight 2400 gram was delivered. The prolapsed uterus recovered following the cesarean operation. It seems to be essential to perform cesarean section because of the risk of possible obstructed labor. We observed a rapid recovery of the anatomy. **Outcomes:** All signs and symptoms of patient relieved. The patient has not experienced any complications.

INTRODUCTION

Uterine prolapse is **the descent of the uterus and cervix down in to the vaginal canal**. Uterine prolapse is one type of pelvic organ prolapse (POP), and it is the second most common after cystourethrocoele (bladder and urethral prolapse). The muscles, ligaments and tissues in pelvis supports uterus, rectum, vagina, bladder and other pelvic organs. A prolapse occurs when pelvic floor muscles, ligaments and tissues are damaged or weakened to the point where they can no longer provide support. This causes your pelvic organs to drop into or out of vagina.

Uterine prolapse was first recorded on the Kahun papyri (ancient Egyptian text discussing mathematical and medical topics) in about 2000 BC. Its many fragments were discovered by Flinder Petrie in 1889. Hippocrates described numerous nonsurgical treatments for this condition. In 98 BC, Soranus of Rome first described the removal of the prolapsed uterus when it became black. [11]

Approximately half of all women older than 50 years complain of symptomatic prolapse. [12] Studies have estimated that 50% of parous women have some degree of urogenital prolapse and, of these, 10-20% are symptomatic. [13]

Uterine prolapse during pregnancy is rare condition but this may be highly risky as it may causes antepartum, intrapartum, and puerperal complication. Incidence of uterine prolapse is 1 in 10000-15000 pregnancies, but this may be highly risky [1]. Almost all cases have seen in third or/and fourth decade ages [2,3]. Only a few cases of uterine prolapse during pregnancy have been reported and the management varies from a conservative approach to laparoscopic treatment. A vaginal pessary for uterine prolapse during pregnancy was first used in 1949. There are various shapes and sizes of pessaries. The silicone coated ring pessary is amenable for self-removal and insertion by the patient [10].

Case Presentation

A 30-year-old female, married since 17 years, Gravida:7, Para:5, Live:5, Mtp:1 with previous all vaginal deliveries with 40 weeks of gestation came to JJ hospital, Mumbai with complaints of pain in abdomen since 2 hours and uterine prolapse since 2 and half years. Before 2 and half years, she had no history of prolapse. Her last delivery was uncomplicated spontaneous vaginal delivery at term near about 3 years back. The weight of newborn baby was 3,500 gm. No any significant medical and obstetric history. There was no history of pelvic trauma or prolapse or any stress incontinence during or after the previous pregnancy.

Abdominal examination done in supine position revealed full term relaxed uterus with longitudinal lie and cephalic presentation. Fetal heart rate was ranges between 140 – 150 / min which was regular. Per speculum examination done in dorsal lithotomic position suggestive of third-degree uterine prolapse. Cervix was lying outside of the vulva. There was congested, edematous, desiccated with decubitus ulcers on cervix. On per vaginum examination, cervical os was parous.

Biophysical profile of the fetus was normal on ultrasonography evaluation. Fetus was at vertex presentation with estimated fetal body weight of 2800 gm , adequate amniotic fluid index, normal doppler study. As there was congested, edematous, thick and ulcerated cervix which was reducible, cesarean delivery was decided due to risk of cervical dystocia and obstructed labour. A live female baby of weight 2400 gm was delivered. No any intraoperative complications occurred. Patient withstood procedure well. Patient was discharged on day 7 with no complaint and partial resolution of the uterine prolapse.

A telephone postpartum follow-up on the 14th day showed that there was no any complaints regarding prolapse.

Figure 1: pre-operative image showing grade 3 uterine prolapse with congested, edematous, desiccated cervix with decubitus ulcers.

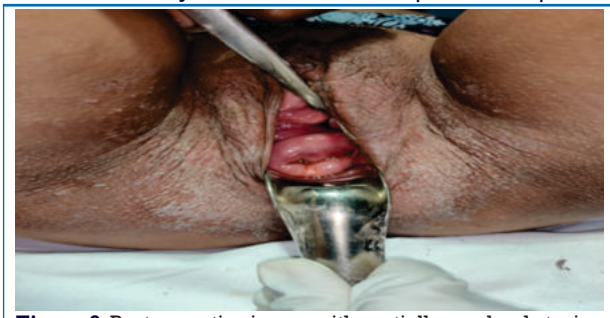

Figure 2: Post operative image with partially resolved uterine prolapse with completely resolved cervical abnormalities

DISCUSSION

Uterine prolapse is a rare complication of pregnancy despite it is a common condition in non-pregnant older women [3]. Many studies have suggested that the prevalence of pelvic organ prolapse increases with age that a risk factor for the development of pelvic organ prolapse, a correlation between age and pelvic floor relaxation [4].

Risk factors associated with pelvic organ prolapse are genetic abnormalities (Marfan syndrome or Ehlers-Danlos syndrome), advanced age , multiparity , congenital weakness , traumatic labour, prolonged labor , instrumental vaginal deliveries , chronic increases intra-abdominal pressure (Chronic coughing or straining Chronic constipation, Repeated heavy lifting), smoking , previous pelvic surgeries , myopathy and collagen abnormalities [5]. The main cause of prolapse of the uterus and vaginal vault is failure of supportive ligaments of the uterus, such as Mackenrodt or cardinal ligaments [6]. Often, a combination of these etiologic factors results in pelvic organ prolapse.

Stages of uterine prolapse are Stage I - Descent of the uterus to any point in the vagina above the level of the hymen, Stage II - Descent to the level of the hymen, Stage III - Descent beyond the hymen, Stage IV - Total eversion or procidentia. Management of uterine prolapse mainly depend on stages of uterine prolapse.

Clinical features associated with uterine prolapse are feeling of heaviness, fullness or pressure in pelvis, pain in lower abdomen or lower back, Pain during sex (intercourse), trouble inserting tampons or other applicators into vagina, constipation, urination problems including urinary incontinence, urinary frequency or urinary urgency.

Uterine prolapse in pregnancy can cause antepartum, intrapartum and postpartum complication. Antepartum complications are abortion, preterm labor , urinary tract infection, acute urinary retention, and maternal death. The main intrapartum complications are inability to attain adequate cervical dilatation, cervical laceration, obstructed labor, hysterorrhexis at the lower segment of the uterus, fetal death, and maternal morbidity and mortality . Postpartum hemorrhage and Puerperal infection due to uterine inertia are common complications after delivery [7]. Lau and Rijhsinghani [8] used Magnesium Solution to prevent cervical dystocia and lacerations for a prolapsed cervix which is edematous.

A pelvic ultrasound examination may be useful to distinguish prolapse from other pathology when the history and physical examination suggest other processes in the differential diagnosis. MRI has been used for staging of prolapse but generally is not indicated as an emergency test.

Successful pregnancy outcome requires individualized treatment with respect to patient's wishes, gestation, and severity of prolapse. Obstetrician should consider the above-mentioned possible complications. The management varies from a conservative management to laparoscopic treatment. Conservative management includes Patient education about risk factors and how to prevent it, local hygiene, adequate bed rest in a moderately Trendelenburg position should be considered as the foremost treatment option. These precautions protect the cervix from trauma, desiccation and reduce the incidence of preterm labor. When conservative management fails, laparoscopic uterine suspension may be another treatment choice during early pregnancy. However, this procedure should be performed with expert and experienced hands due to several failed laparoscopic uterine suspension cases have been reported [9].

Follow-up is necessary, pelvic floor four-dimensional ultrasound can clearly show the spatial relationship of anterior, middle, and posterior compartments in pelvic cavity, and pelvic examination and pelvic floor four-dimensional ultrasound may be a valid method for follow-up.

CONCLUSION

Obstetricians and all involved staff should be aware of this rare condition and early diagnosis is very important for a safe gestation. Conservative treatment of these patients throughout pregnancy can ultimately result into normal, spontaneous vaginal delivery. Management of uterine prolapse in pregnancy and during labor should be individualized depending on the severity of the prolapse, gestational age, parity, and patient's wish.

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