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Case Report

Post-Partum Giant Hysterocele: about an Uncommon Case Report

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Abstract

Background: Pelvic organ prolapse affects more than 30% of the female population and preferentially concerns postmenopausal women. The main risk factors are vaginal parity, obesity and aging. However, cases of prolapse during pregnancy have been reported in the literature with a prevalence varying between 1/100000 and 1/15000 deliveries in the United States. The management is different according to the team and essentially depends on the term of the pregnancy and the complications due to the prolapse.

Case Presentation: We present herein the case of a 42 years old patient, highly multiparous Gravida 12 para 9, presenting a stage 3 uterine prolapse with an exteriorized but reducible uterus during pregnancy. Three months after a vaginal delivery, the patient came back to the hospital for non-regression of the prolapse. The physical examination revealed a stage 4 non reducible uterine prolapse completely exteriorized. She benefited from an inter-annexal hysterectomy by vaginal approach. The postoperative course was uneventful and she was discharged on day 3.

Conclusions: Prolapse of the gravid uterus is an uncommon event. Numerous complications are associated with it. The management of this pathology remains controversial and must be tailored to the severity of the prolapse, the gestational age gestational age and the patient's wishes. A complete evaluation assessment is essential in the post-partum period, especially in case of a desire for a subsequent of a subsequent pregnancy.

ABBREVIATIONS

POP: Pelvic Organ Prolapse

INTRODUCTION

Pelvic organ prolapse affects more than 30% of the female population and preferentially concerns postmenopausal women [1]. The main risk factors are vaginal parity, obesity and aging [2]. However, cases of prolapse during pregnancy have been reported in the literature with a prevalence varying between 1/100000 and 1/15000 deliveries in the United States [1]. The management is different according to the team and essentially depends on the term of the pregnancy and the complications due to the prolapse.

In our department, we have managed few cases of pelvic organ prolapsed during pregnancy or in the immediate postpartum. We hereby present the uncommon case of a 42-year-old female patient, highly multiparous, with a uterine prolapse reaching the vaginal orifice during pregnancy (stage 2), which rapidly evolved three months after vaginal delivery into a non-reducible uterine prolapse completely out of the vagina (stage 4).

CASE PRESENTATION

We hereby present the case of a 42-year-old woman, highly multiparous, gravida 12 para 9, admitted for premature ruptured membranes in a pregnancy of 39 weeks of amenorrhea and 4 days. She had a history of 8 full term vaginal deliveries with birth weights ranging from 3000 to 4100g. The patient reported the notion of pelvic organ prolapse with the onset of labor, and had no history of prolapse before the pregnancy. The physical examination showed a stage 3 uterine prolapse with an exteriorized but reducible uterus, with a favorable bishop at the vaginal examination. The ultrasound examination showed a monofetal pregnancy evolving at 39 SA, antero-fundial placenta and usual quantity of amniotic fluid. An induction of labor after 24 hours of ruptured membranes was decided with a harmonious labor and birth of a female baby with a birth weight of 4150g. The immediate postpartum period was complicated by a delivery hemorrhage due to a uterine inertia, with a blood loss quantified at 750 cc, which was managed by a medical treatment based on 40 IU of oxytocin in IVL. The immediate physical examination revealed a stage 4 POP (pelvic organ prolapse), a non-reducible prolapse completely exteriorized with a good safety globe. The patient and her daughter were discharged the day after delivery.

Three months later, the patient came back to the hospital for non-regression of the prolapse, wanting a hysterectomy (**Figure 1**). She was suffering from pelvic pain of the type of heaviness

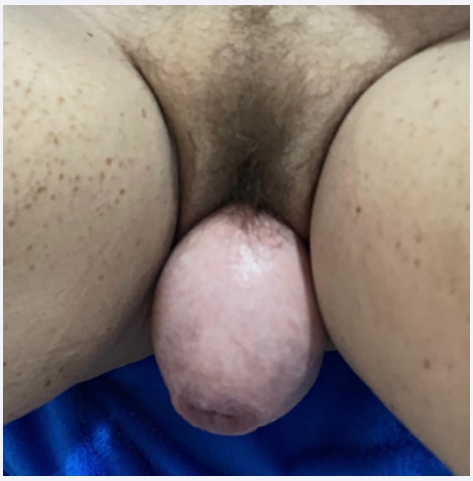

Figure 1 Stage IV Hysterocele with complete eversion of the uterus through the vulva.

with mictional discomfort. The physical examination revealed a stage 4 non reducible uterine prolapse completely exteriorized. Ultrasound examination did not reveal any urological impact upstream. After a multidisciplinary staff with the urology team, it was decided to grant her request. An inter-annexal vaginal hysterectomy was performed. The blood loss was estimated at 250 cc. The patient was discharged from the hospital on day 3 of the surgery. The anatomopathological examination of the uterus was normal.

DISCUSSION

Pelvic prolapses were described in the Ebers papyrus, one of the oldest preserved medical treatises, dating back to 1500 BC, during the time of the Pharaohs [3]. Multiple therapeutic modalities can be attributed to Hippocrates, including the Hippocratic succussion: he suspended the woman upside down from a ladder [4]. Other methods included tying the lower limbs and inserting pieces of soaked linen to serve as pessaries [3]. A change occurred in the 1500s, when the first vaginal hysterectomy was performed by Berengario da Carpi [5]. The procedure consisted in tightening a tie placed around the prolapsed uterus until gangrene caused its separation. In reviewing the literature there is little data on the evolution of prolapses externalized in the postpartum period, those reported persist in the immediate and early postpartum period [2,3], rarely a favorable evolution of the prolapse in the postpartum period [4].

Several risk factors contributing to the onset of POP have been identified. A history of prolapse during or outside pregnancy, multiparity, coughing and chronic constipation, long labour, significant or repeated physical efforts, congenital damage to the supporting aponeurotic tissues are the main factors involved [2, 5 – 6]. In our case, we found multiparity, the notion of dystocic delivery with abdominal expression but also a long labor.

Some authors argue that pregnancy in itself constitutes an independent risk factor for genital prolapse, especially of the uterine cervix. O'Boyle et al. [7], examined pregnant nulliparous women (n =21), and non-pregnant nulliparous women (n =21), aged 18 to 29 years. In her study, all the non-pregnant women had a stage 0 or 1 prolapse (POP-Q) whereas more than 40% of the pregnant women, examined at a mean term of 28 SA, had a stage 2 prolapse or higher. The difference between the two groups was significant for the points Aa and Ba, Ap and Bp and the anovulvar distance (pb). According to the authors, pregnancy seems to be associated with more severe stages of prolapse [7]. Perineal ultrasonography can also demonstrate the increase in mobility of the pelvic organs during pregnancy, particularly in the third trimester [6]. The changes in pelvic statics during pregnancy seem to be linked to the alterations in collagen induced by the hormonal changes of pregnancy. Rahn et al. [8], also argue that pregnancy causes significant changes in the vaginal wall, such as increased distensibility and decreased stiffness and maximal tension, which may contribute to the poor durability of many surgical procedures to eliminate prolapse.

The presence of a prolapse during pregnancy appears to be responsible for complications such as premature delivery or premature rupture of membranes [8]. Moreover, during labor, cervical edema may occur as a result of the mechanical obstruction caused by the prolapse and thus lead to several other complications including mechanical and dynamic dystocia. Cervical lesions and uterine rupture have also been described [9 – 10]. In our case, the pregnancy was complicated by a premature rupture of the membranes but also by uterine inertia. However, the high multiparity and macrosomia are more likely to have caused the latter.

The cornerstone of treatment of prolapse remains prevention with the following recommendations that should be given to women: reduction of workload and avoidance of heavy lifting during pregnancy as well as postpartum [11,12]. In case of prolapse during pregnancy, some authors recommend the use of a pessary, which should be applied continuously until labor [9, 13]. During labor, according to Tsikouras et al. [14], misoprostol and fundal pressure should be avoided at all costs, as they would aggravate the prolapse and cause edema and the other complications mentioned above. Finally, in the post-partum period, the treatment should be as conservative as possible until the patient has fulfilled her maternal desire, in which case hysterectomy will be recommended as in our patient's case [14].

CONCLUSIONS

Prolapse of the gravid uterus is an uncommon event. Numerous complications are associated with it. The management of this pathology remains controversial and must be tailored to the severity of the prolapse, the gestational age and the patient's wishes. A complete evaluation assessment is essential in the post-partum period, especially in case of a desire for a subsequent of a subsequent pregnancy.

DECLARATIONS

Ethical approval

Ethics approval has been obtained to proceed with the current study.

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.

Author contribution

AS: study concept and design, data collection, data analysis and interpretation, writing the paper. MM: study concept, data collection, data analysis, writing the paper. HL: study concept, data collection, data analysis, writing the paper. AL: study design, data collection, data interpretation, writing the paper. AK: study design, data collection, data interpretation, writing the paper. AB: study concept, data collection, data analysis, writing the paper.

Guarantor of Submission

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Availability of data and materials

Supporting material is available if further analysis is needed.

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