

## Case report

# Non-puerperal uterine inversion in a virgin woman

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### Abstract

**Background:** Inversion of the uterus is very uncommon. Patients may present with pelvic pain, vaginal discharge, or hemodynamic shock.

**Case:** We report a case of 35 years old women (virgin) who was admitted with profuse vaginal bleeding and cramps of uterus. In the vaginal examination at lithotomy position a mass of 5×8 cm in size was protruded from the vagina. At first myomectomy was performed and after that laparotomy with total abdominal hysterectomy was done.

**Conclusion:** Early diagnosis, immediate treatment of shock, and replacement are essential in uterine inversion.

**Key words:** Non-puerperal, Inversion, Uterine, Myoma.

### Introduction

Inversion of the uterus is very uncommon (1-7). Inversion of the uterus may be puerperal or non puerperal. Puerperal inversion is more common in primiparous women. Although the precise cause is unknown, it is postulated to be caused by the mismanagement of the third stage of labor with premature traction of the umbilical cord and fundal pressure before placental separation. Incidence of this problem is about 1 in 2100 (8). Non puerperal uterine inversion is associated with a mass as myoma, polyp or sarcoma in the uterine fundus (9).

### Case report

A 35 years old woman (virgin) was admitted in the hospital because of protruding a mass from the vagina with profuse vaginal bleeding and cramps of uterus.

She had a report of pelvic sonography with diagnosis of uterine fibroma two weeks before admission. She had intermittent protrusion of mass from the vagina with uterine cramps (5-9 days before continues protrusion of mass).

Vaginal examination at lithotomy position revealed vaginal bleeding and a mass of 5×8 cm in

size that was projected from the vagina. The patient was transferred to the operation room and was examined under general anesthesia. A mass of about 5×9cm adherent to uterine fundus was seen that was completely inverted.

The mass was completely dissected and then we tried to locate the inverted uterus in normal site. This was not successful.

Then laparotomy and incision of the cervix was done for reverting the uterus to normal site but this was not also successful so hysterectomy was done with the same position as a life saving procedure.

### Discussion

Uterine inversion may be puerperal or non puerperal (7). Puerperal inversion is more common in primiparous women. Complete inversion after delivery is a consequence of traction on the umbilical cord attached to the placenta implanted in the fundus (8). Non-puerperal uterine inversion is extremely rare (10).

A classification of genital inversion has been described as follows; stage 1: inversion of the uterus remains within the activity, stage 2: complete inversion of the uterine fundus through the fibro muscular cervix, stage 3: total inversion, whereby the fundus protrudes through the vulva. Stage 4: the vagina is also involved with complete inversion through the vulva alone or with an

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inverted uterus. It has been described that the symptoms associated with non puerperal uterine inversion are vaginal bleeding, vaginal tumor, lower abdominal pain and urinary disturbance (10). Non puerperal inversion happens chiefly when fibromyoma or polyp is presented with fundal attachment, but endometrial carcinoma and sarcoma and the mixed mesodermal tumors may have the same effect (9). Sometimes uterine inversion is chronic and the permanent symptom of this situation is irregular vaginal bleeding. In addition the patient may complain of the pressure in the vagina or of something protruding or coming down (2). In chronic cases diagnosis is difficult. In our case due to patient history we guess that uterine inversion was acutely happened. In these cases the appropriate treatment depends on the stage of inversion. In our case (stage 3) replacement of uterus was not successful and the situation was managed by laparotomy and removal of the uterus in the same position.

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