

# NON- PUERPERAL UTERINE INVERSION: A CASE REPORT

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**Abstract-** A rare case of non-puerperal uterine inversion caused by a large fundal leiomyoma in a 39 year nulliparous, infertile woman resulting in intractable haemorrhage was reported after a myomectomy. Attempts to reduce the inversion vaginally by transecting the anterior and posterior cervix was unsuccessful and a laparotomy was performed. The inversion was not successfully corrected and hysterectomy was done.

*Acta Medica Iranica*, 41(1): 59-61; 2003

**Key Words:** Uterine inversion, leiomyoma

## INTRODUCTION

Chronic uterine inversion was reported during the puerperium resulting in severe and dangerous hemorrhage six weeks postpartum caused by a large placental polyp (1).

Of the 77 cases reported 75 (97.4 %) were tumor produced and 20% of these tumors were malignant. The importance of taking biopsies from tumors before definitive surgery is highlighted (2,3). Association of uterine inversion with malignancies such as endometrial carcinoma or sarcoma is very rare (4-7). We describe a 39 year old nulliparous woman with chronic uterine inversion in Iran.

### Case report

A 39-year-old woman was referred to our clinic with intractable vaginal bleeding due to a fundal submucosal myoma that had caused chronic uterine inversion.

In the vaginal examination very large (9×5×4) cervical mass was palpable. One month before admission another surgeon had tried to remove cervical mass vaginally which was impossible. So at the same time laparotomy was done. In the pelvis only ovaries and distal part of tubes were seen, uterus and proximal part of tubes were absent. Surgeon closed the abdomen and referred her to us with the diagnosis of chronic uterine inversion due to submucouse (fundal) myoma. She was married and had primary infertility for 3 years. She had no history of any operation in the abdomen or

uterus, so this chronic uterine inversion was caused by the fundal myoma, and we do not know when it had happened. The patient's complaint of severe vaginal bleeding was for 10 years and had postcoital bleeding also for 3 years after marriage. She was anemic (Hemoglobin: 5 mg/dl), in the sonography report ovaries were intact and uterus could not be seen. We tried to replace inverted uterus vaginally and transabdominally which was impossible, so because of severe vaginal bleeding, hysterectomy was done. Pathologist reported ulcerated endometritis (inversion) and leiomyoma (Fig. 1).

## DISCUSSION

Under certain circumstances, usually postpartum, the uterus can turn inside out. When the condition is acute, there may be accompanying shock, and the uterus can be reverted by intravaginal manipulation. Rarely, when the patient has survived this event and a diagnosis is not previously established, the condition, may be discovered several months later in the course of a pelvic examination to evaluate a chronic bloody discharge. This is so called "chronic" inversion and requires surgical relief (8,9). When the patient no longer wishes to retain the uterus, hysterectomy is offered, usually by the vaginal route. If she wants to retain her fertility, the integrity of the uterus must be surgically restored and this can be done transvaginally using either the Spinell technique or the lesser known Kusther operation.

The Spinell technique (Fig. 2) requires dissection of the bladder from the inverted uterus, however it poses a more complex surgical problem than does the kustner operation (8). In the kustner's technique, the incision through the cervix and myometrium is made in the posterior wall of the uterus, sparing any dissection of the bladder but putting the repair on the posterior uterine wall instead of the anterior uterine wall.

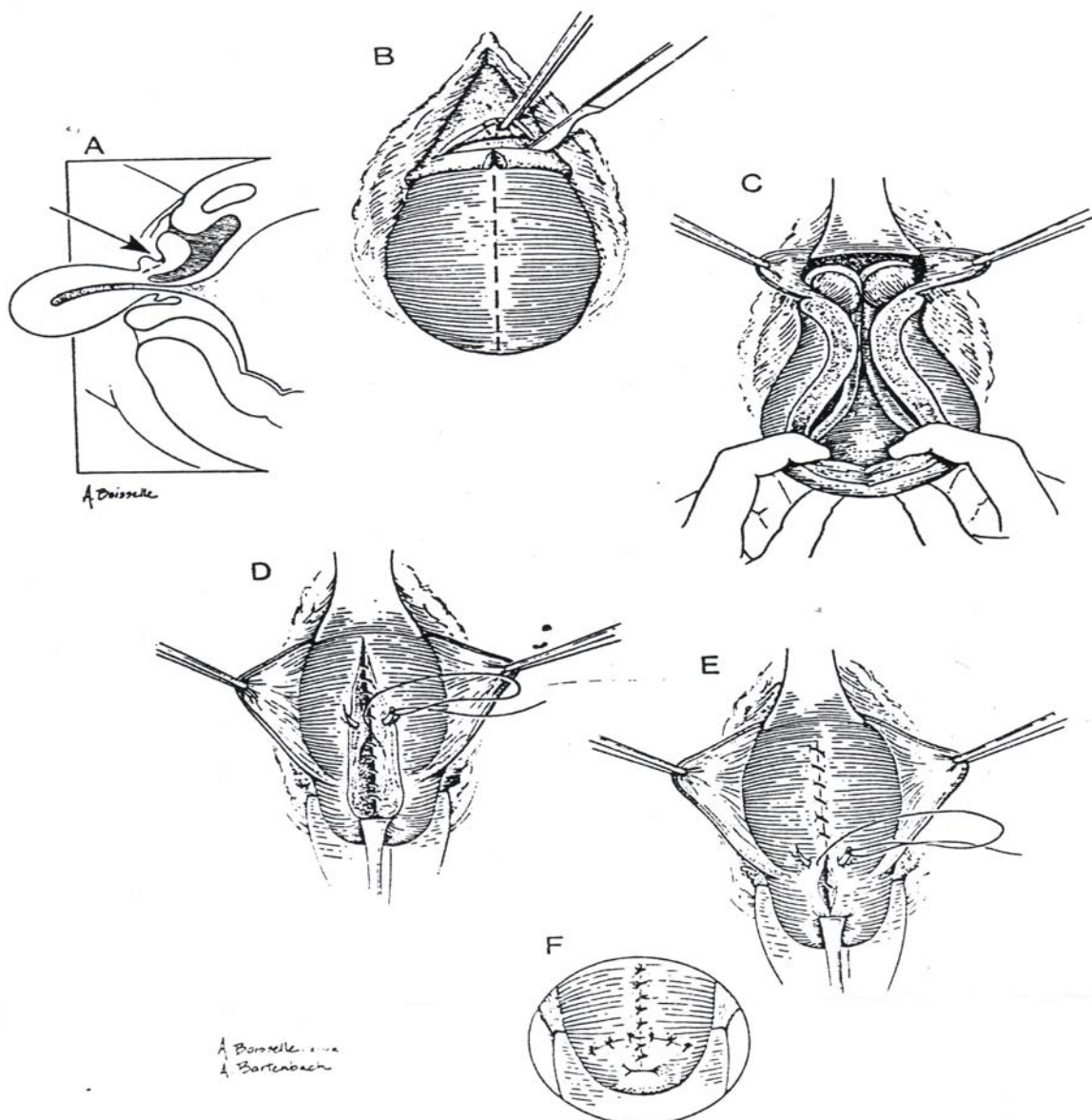
Received 7 November 2001; accepted 11 December 2002

### Correspondence:

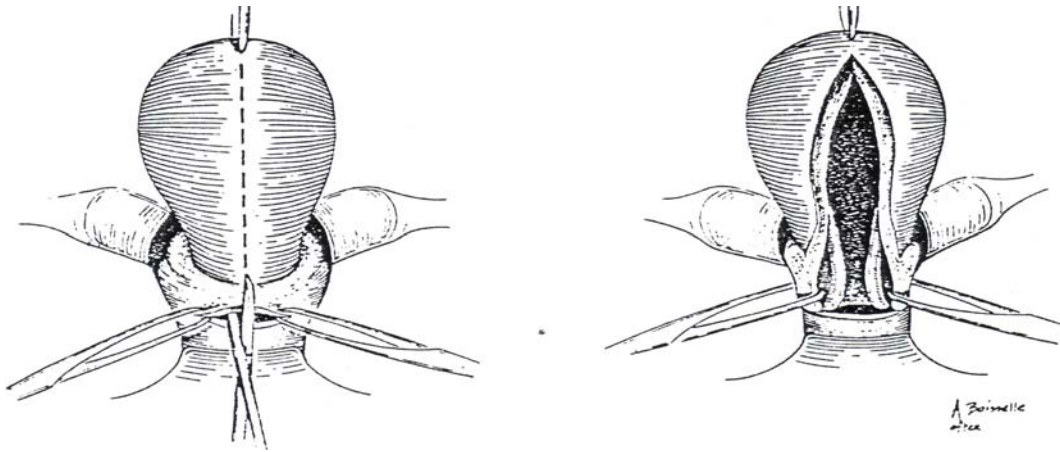
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**Fig. 1.** Microscopic view of uterine inversion



**Fig. 2.** The Spinell's operation for chronic inversion of the uterus is illustrated. The cervix is split in the midline and carefully separated from the bladder as shown by the dotted line in A. The anterior wall of the everted uterus is split along the path of the dotted line in B. By pressure with the operator's index fingers and thumbs, as shown in C, the uterus is turned outside in. The myometrium is reapproximated by two layers of running PGA suture, as shown in D, and the serosal surface by a single layer as shown in E. The vaginal skin is reapproximated with interrupted sutures, as identified in F, as is the full thickness of the cervix.



**Fig. 3.** The kustner's operation for chronic inversion of the uterus is shown. The posterior cul-de-sac has been opened, and the cervix and posterior wall of the uterus incised along the path of the broken line as shown in the drawing on the left. When this has been completed, as shown in the drawing on the right, thumb pressure along the sides of the uterus produce reversion, the wounds are closed with interrupted sutures, and the uterus replaced in the pelvic cavity. The colpotomy is then closed.

The kustner's operation as described by Halban is performed as follows: the cul-de-sac of douglas is opened by posterior colpotomy. The index finger of the operator's left hand is inserted in to the peritoneal invagination of the uterus. The posterior uterine wall is incised (Fig. 3). The surgeon's thumbs make pressure upon the rear wall of the uterus leading to reversion, restoring it to its normal position within the pelvis. The corpus is flipped through the posterior colpotomy and the incision in the posterior uterine wall is repaired, having trimmed any myometrium if necessary to achieve reapproximation of the serosal surface. The uterus is replaced within the pelvis and the colpotomy is closed.

These techniques are not always successful like our case. Dissection of the bladder by Spinell's technique failed because of severe adhesion perhaps due to previous operation, so we tried kustner's technique to replace inverted uterus transvaginally, and transabdominal but they also failed again.

Hysterectomy was done for intractable vaginal bleeding of the patient. She was nulliparous and her uterus was larger than normal.

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