Abstract #608: Hybrid surgery: new approach for high grade multicompartmental prolapse associated with early endometrial cancer

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Hypothesis / aims of study

Pelvic organ prolapse (POP) is a common condition in elderly women leading to a relevant decrease of quality of life(1).
It is estimated that the demand for POP treatment will increase by 35% from 2010 to 2030(1)(3).

Endometrial cancer (EC) is the second most frequent gynaecological cancer in the world with an incidence rate of 15.8 cases /100000 women per year in 2018(1).
The predominant risk factor for EC is obesity, often associated with diabetes, metabolic syndrome and smoking. The incidence of endometrial cancer coexistent with POP varies from 0.2% to 1.2% and it should increase in future (1).
Due to the uncommon association of illnesses, standardized treatment is not established(2)(3).

Standard treatment for early-stage EC in our institution is robotical-assisted-laparoscopy, with pelvic sentinel lymph node dissection, radical hysterectomy and bilateral salpingo-oophorectomy (RRH-BSO).
A potential enhancement to laparoscopy has been provided by the robotic approach with a high 'benefit' in obese women, reducing major complications rate as wound complications and infections (3). Due to lower reintervention rate secondary to vaginal reconstructive surgery, we prefer to adopt native tissue repair (NTR) to correct primary pelvic organ prolapse.
To treat high grade prolapse concomitant with early endometrial cancer our hybrid surgical approach consists in a combination of vaginal route with robotic surgery (2).

Study design, materials and methods

A 70-year-old patient, P2002, complained third degree prolapse (POP-Q III stage prolapse, anterior/posterior wall and central II stage) without urinary incontinence or obstructed defecation.
Due to abnormal uterine bleeding (AUB), she underwent to hysteroscopy.
Histopathological result demonstrated endometrial endometrioid G1 adenocarcinoma, ER and PgR positive, hMSH6 present. CT was negative for signs of distant**.**
She underwent to hybrid surgery, an innovative approach including double access route with robot-assisted laparoscopy (DaVinci Xi) for RRH-BSO, peritoneal lavage, sentinel Lymph node excision and retrograde robotic cystopexy with simultaneous repair of rectocele by vaginal route.
First phase of procedure was the dissection of bilateral pelvic sentinel lymph nodes sent for ultrastaging analysis, followed by RRH-BSO. An innovative approach to anterior prolapse named "Retrograde Cystopexy" was performed with robotically assisted dissection of vesicovaginal space until vesical trigone. A triangular piece of vaginofascial tissue with the apex at the urethrovesical junction was removed. A full thickness running longitudinal suture of the breach was performed.
A robotically inverted McCall suspension of the apex was performed including the cuff of vagina and a running transversal suture of the vault with partial peritonization of cuff completed the first part of our hybrid surgery.
Our native tissue repair (NTR) procedure was completed by vaginal route. A colpoperineorraphy was performed with dissection of rectovaginal septum, its duplication from the perineum to the apex of vagina, and reconstruction of perineal body. Minimal excision of vaginal and skin excess following by a running vaginal suture including perineal skin concluded our procedure.

Results and interpretation

Post-operative course was regular, except for post-void residual volume in second and third days after surgery resolved with intermittent catheterization and cortisone plus alpha litycs. Bowel movement, diuresis and urination were regular at redundancy.
Postpartum checkup confirmed absence of prolapse and good cicatrization. Histopathological results diagnosed endometrial endometroid type 1 (G2) adenocarcinoma, FIGO 1A, staging pT1a, N0, Mx; p53 (+) 50%, ER (+)90%, PR (+) 90%, MSH2 100%, MSH6 100%, MLH1 + 100%, PMS2+ 100%, ki67 80%; Sentinel Lymph nodes, parameters and peritoneal washing were negative for cancer.

Conclusions

Surgical management of high grade multiorgan pelvic prolapse associated with early endometrial cancer is feasible, effective and satisfying, thanks to an innovative proposal named hybrid surgery combining robotics and vaginal approach. This strategy of procedure should become reproducible to treat early endometrial cancer together with high grade prolapse cases.

References

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