Fluorescence-assisted sentinel (SND) and pelvic node dissections by single-port transvaginal laparoscopic surgery, for the management of an endometrial carcinoma (EC) in an elderly obese patient

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HIGHLIGHTS

• Complete vaginal management of a selected endometrial cancer
• Combination of single-port laparoscopic vaginal approach and fluorescence technology
• Option for medically-compromised but operable endometrial cancer patients

Objective. To explore the feasibility of an oncologically acceptable management for an intermediate-risk endometrial cancer (EC) in an elderly, using the combination of transvaginal single-port laparoscopy and sentinel node policy.

Methods. For this 85-years old patient, BMI 32 kg/m², with IB grade 2 endometrioid EC, a single vaginal approach was attempted[1] to perform a total hysterectomy, bilateral salpingo-oophorectomy and pelvic node assessment guided by SND[2]. Injections of indocyanine green (ICG) were performed at 3 and 9 o’clock and 2 depths[3] into the uterine cervix. A simple vaginal hysterectomy was first performed using a 5 mm vessel sealer (LigaSure®-Medtronics) to limit ICG leakage. As poorly accessible, adnexas were divided close to cornuas; uterine corpus was delivered vaginally. Then, a single port device (Gelpoint®-Applied), equipped with 3 trocars for optics and instruments, was installed through vagina. After transvaginal pneumoperitoneum insufflation, bowel loops were cleared from the pelvis. Latero-pelvic peritoneum was incised between external iliac pedicles and ureters. Following the algorithm, node dissection was limited to sentinel node clearly identified on the right side under color-segmented fluorescence (Pinpoint®-Novadaq), but a full pelvic dissection completed an unsatisfactory SND on the left side. Procedure was terminated with salpingo-oophorectomies. After protected vaginal specimen delivery, the single-port device was removed and vagina was closed as usual.

Results. Patient was discharged on the 1st post-operative day. Final pathology confirmed the FIGO stageIB grade2 EC.

Conclusions. A transvaginal laparoscopic pelvic SND after vaginal hysterectomy is feasible. This single-port “NOTES” strategy bridges the previous gaps of a pure vaginal approach and seems interesting in fragile EC patients.

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The authors declare that they have no conflicts of interest with this paper.

Appendix A. Supplementary data

Supplementary data to this article can be found online at http://dx.doi.org/10.1016/j.ygyno.2016.10.010.

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