

**ES25-0212 - P\*015**  
**Best Selected Posters****Prosepctive analysis of indocyanine green sentinel lymph node mapping in robotic and laparoscopic: surgery preliminary experience**

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**Background**

Sentinel lymphnode (SLN) mapping with Indocyanine Green (ICG) is the new frontier for the surgical staging of apparently early stage cervical (CC) and endometrial cancer (EC). The near-infrared technology, built in the Da Vinci Xi system and In the Karl Storz (NIR/ICG) laparoscopic system, provides an enhanced real-time imaging system that improves the advantages given by ICG.

We aimed to evaluate the accuracy and operative outcomes about robotic and laparoscopic SLN biopsy guided by cervical indocyanine green (ICG) injection, in patients with endometrial and cervical cancer

**Methods**

This prospective analysis was conducted between 36 not consecutive patients with diagnosis of endometrial (EC) or cervical cancer (CC) undergoing ICG SLN mapping at our Hospital from January 2014 to April 2016. All patients underwent cervical ICG injection (1 cm deep in the stroma at hours 3-9, with a total of 4 ml of ICG at concentration of 1,25 mg/ml). SLNs were located using the robotic camera (Firefly System) and laparoscopic camera (Karl Storz) and excised. Following surgery consisted in: SLN biopsy only, systematic pelvic (PLND) ± paraortic lymphadenectomy (PALND) associated with radical hysterectomy type A, B or C sec Querleu-Morrow and bilateral salpingo-oophorectomy.

**Results**

We collected 36 patients: 25 underwent robotic surgery (22 EC and 6 CC), 3 underwent singleport robotic surgery (3 EC) and 8 underwent laparoscopic surgery (7EC and 1 CC). Of 36 patients, 10 underwent only SLN biopsy, 20 underwent SLN mapping followed by PLND and 3 underwent SLN mapping followed by PLND and PALND; 3 patients didn't undergo lymphonodes mapping. Overall detection rate was: for robotic technique 85.7% - 24/28 - (70.8% bilateral and 29.2% unilateral); for laparoscopic technique, 75% - 6/8 - (66.7% bilateral and 33.3% unilateral). In 2 robotic patients we found SLN metastasis: one micrometastasis and one lymph nodes with isolated tumor cells. The median number of removed SLNs, pelvic and para-aortic LNs was: 2 (range 0-6), 19 (range 0-37) and 16 (range 14-19), respectively We didn't find metastasis in PLN and PALN. The mean operative time was 209,97 minutes for robotic patients and 158.36 for laparoscopic, significantly lower in both patients undergoing SLN mapping only. No intra- or postoperative complications were noted.

**Conclusions**

Sentinel lymphnode mapping can play a significant role in lymph node assessment and staging in early-stage of EC and CC. In this preliminary experience Robotic and laparoscopic ICG SLN mapping have an excellent overall and bilateral detection rates. More cases are need to compare the two approaches.