

Belgian experience of robot assisted laparoscopic para – aortic lymphadenectomy for staging of locally advanced cervical carcinoma. A multicentric study.

Maxime Fastrez¹, Frédéric Goffin², Ignace Vergote³, Jean Vandromme¹, Philippe Petit², Karin Leunen³, Michel Degueldre¹

¹ Obstetrics and Gynecology Department, S^t Pierre Hospital, University of Brussels, Belgium

² Obstetrics and Gynecology Department, CHR Citadelle, University of Liège, Belgium

³ Obstetrics and Gynecology Department and Leuven Cancer Institute, University Hospital Leuven, KU Leuven, Belgium

Corresponding author:

Maxime Fastrez, MD

Obstetrics and Gynecology Department, S^t Pierre University Hospital

Rue Haute 322, 1000 Brussels, Belgium

Fax + 32 2 535 34 09

Phone + 32 2 535 33 16

E – mail: maxime_fastrez@stpierre-bru.be

Objectives: FIGO clinical staging, imaging techniques sometimes underestimate extension of locally advanced cervical cancer (LACC). The presence of para-aortic lymph node (LN) metastases in LACC identifies patients with poor prognosis. Laparoscopic para-aortic lymphadenectomy is now proposed as a diagnostic tool. Feasibility and safety of robot assisted laparoscopic para-aortic lymphadenectomy has been reported. We collected data from different Belgian centers to assess its oncological safety and complication rate.

Study design: Three centers participated in the study. Thirty seven patients with LACC underwent a pre treatment robot assisted laparoscopic para-aortic lymphadenectomy. Data was prospectively collected.

Results: The median number of LN collected was 27.5 (1-54) per patient. Five out of 37 patients had para-aortic node metastasis. The false negative rate for PET CT diagnosing para-aortic node metastasis was 10.8% (4/37). We encountered 2 major intra operative complications (5.4%). Post operative morbidity was low (13.5%). Median follow up was 27 months (95% CI 24–30). Median disease free survival (DFS) was 16 months (95% CI 2.4-29.6). Patients with negative LN had a median DFS of 24 months (NA) although patients with positive LN had a median DFS of 9 months (95% CI 6.9-11.9).

Conclusions: In this series we report that robot assisted laparoscopic para-aortic lymphadenectomy provided the surgeon with useful information to avoid understaging in 10.8% of women with LACC, at the expense of low morbidity (13.5%). Presence of

microscopic para-aortic LN metastasis is correlated with shorter DFS. The number of patients with positive LN doesn't allow us to draw any firm conclusion.