Utilization of Lymph Node Evaluation at Time of Hysterectomy for Cervical Carcinoma in-Situ

Amin Tavakoli*,1 Kelly Donovan,1 Rachel Mandelbaum,2 Maximilian Klar,1 Lynda Roman,1 Jason Wright,1,4 Koji Matsuo.3
1Columbia University, Obstetrics and Gynecology, New York, USA
2University of California, Gynecologic Oncology, Los Angeles, USA
32University of Freiburg Faculty of Medicine, Department of Obstetrics and Gynecology, Freiberg, Germany
4Columbia University, Obstetrics and Gynecology, New York, USA; 5University of Southern California, Gynecologic Oncology, Los Angeles, USA

Objectives To examine the utilization and characteristics of lymph node evaluation at time of hysterectomy for carcinoma in-situ of the cervix.

Methods This retrospective cohort study queried the National Inpatient Sample, evaluating 7,395 patients with cervical carcinoma in-situ who underwent hysterectomy from 2016 to 2019. A multivariable binary logistic regression model was fitted to identify independent characteristics related to lymph node evaluation at hysterectomy. A classification-tree was constructed with recursive partitioning analysis to examine utilization patterns of nodal evaluation.

Results Lymph node evaluation was done during hysterectomy in 4.6% of the study population. In a multivariable analysis, older age, higher household income, use of robotic-assisted hysterectomy, and surgery at large bed capacity or urban teaching centers in Northeast U.S. region were associated with increased likelihood of lymph node evaluation (all, P<0.05). Of those independent factors, robotic-assisted surgery exhibited the largest effect size (adjusted-odds ratio 3.23, 95% confidence interval 2.54–4.10), followed by urban teaching hospital (adjusted-odds ratio 2.96, 95%CI 2.13–4.10). Utilization pattern analysis identified 9 unique characteristics, of which robotic-assisted surgery was the primary indicator for cohort allocation (12.4% versus 3.2%, P<0.001). Three of nine patterns had the lymph nodal evaluation rate exceeding 10% and all were associated with robotic-assisted surgery. The rate difference between the highest and lowest groups were 33.3% (range, 0% to 33.3%).

Conclusions Overall, one in approximately 22 patients with cervical carcinoma in-situ underwent lymph node evaluation during hysterectomy in this population. Marked association between robotic-assisted surgery and lymph node evaluation at time of hysterectomy for cervical carcinoma in-situ warrants further investigation to determine the long-term risks and benefits of the procedure in this setting.

Abstracts

THE CLINICAL IMPLICATIONS AND IMPACT OF HYDRONEPHROSIS IN CERVICAL CANCER AT REGIONAL CANCER CENTRE IN EASTERN INDIA

1Manisha Vernekar*, 2Puja Chatterjee, 3Sreeya Bose, 4Aparna Mandal, 5Ranajit Mandal, 1Arzina Mukhopadhyay, 1Chittaranjan National Cancer Institute, Gynecological Oncology, Kolkata, India; 2Chittaranjan National Cancer Institute, Kolkata Gynecological Oncology Trials and Translational Research Group, Kolkata, India

Objectives The current study sought (1) to analyze the prognostic effect of hydronephrosis and associated morbidity (2) to determine the clinical profile of patients with urinary complications of advanced cancer cervix and the clinical outcome of the various therapeutic options administered.

Methods The study data were acquired by prospective analysis of the patient records from the Dept of gynecological oncology, from January 2021 to January 2022. In this study, 47 patients with advanced cancer cervix previously treated or untreated, who had obstructed uropathy were evaluated to know the type of urological complications, their management and their effect on the primary disease. Various methods of urinary reconstruction were tried and the clinical outcomes of these approaches were analyzed.

Results A total of 47 patients included in the study, 16 (34%) were uraemic at presentation, majority of them being in stage IIIIB of carcinoma cervix with 21 cases (44.7%) having bilateral obstruction. Of the 47 patients, 18 (38.3%) underwent surgical urinary diversion. Stenting was done in 6 cases, 12 cases had percutaneous nephrostomy. Hemodialysis was required in 3 cases. 5 patients (10.6%) died before or during intervention. 3 patients underwent surgery only, 21 cases required CCRT, 8 cases RT only, 7 received NACT followed by CCRT/RT, 6 cases received palliative chemotherapy, and 1 patient for palliative and best supportive care.

Conclusions Advanced cancer of the cervix leads on to obstructive uropathy, presenting as uraemia. Various urinary diversion procedures are useful in improving renal function, followed by definitive treatment options.