

2016 Uterine Cancer Annual Report



## Overview

At Carolinas HealthCare System's Levine Cancer Institute, we offer comprehensive care focused on using the latest technology and innovative techniques in the treatment of uterine cancer. With approximately 60,000 American women diagnosed annually, uterine cancer is the most common gynecologic malignancy in the United States and the second most common cause of death among gynecologic cancers.

The vast majority of uterine cancers are classified as endometrioid adenocarcinoma, which begins in the lining of the uterus. This type of cancer frequently leads to uterine bleeding, making detection easier before the disease can become advanced. Vaginal bleeding for a woman who has already progressed through menopause will commonly prompt an evaluation for undiagnosed uterine cancer. This evaluation typically includes a uterine biopsy, which has a high sensitivity for detecting uterine cancer.

Uterine cancers are primarily managed by gynecologic oncologists, who also typically make the diagnosis. The vast majority of patients will proceed from diagnosis to the operating room for surgical removal of the uterus – a procedure referred to as a hysterectomy. Hysterectomies are both therapeutic and diagnostic, meaning they benefit patients by both removing the cancer and by providing detailed information for the patient and her doctors about the stage of the disease. The surgical stage is defined by how deep the cancer is found to invade into the uterus and whether it has traveled elsewhere in the pelvis or abdomen, most often by spreading to lymph nodes in the area.

Since most uterine cancers are diagnosed at an early stage, a large fraction of women will be cured with surgery alone and not require any additional treatment following a hysterectomy. However, for those found at surgery to have more advanced disease, there is a defined role for so-called "adjuvant" therapy, which may include radiation therapy and/or chemotherapy.

To assess our current practices in the diagnosis and treatment of uterine cancer, we used Levine Cancer Institute's tumor registry to collect and analyze data from 2015, the most recently available year.

# Stages of Uterine Cancer Treated at Levine Cancer Institute

Figure 1 displays the American Joint Committee on Cancer (AJCC) stage distribution for patients who were diagnosed with and/or treated for uterine cancer at Levine Cancer Institute in 2015. It follows the expected distribution, as outlined below, with stage I disease being the most common by far.

Figure 1 Stage Distribution

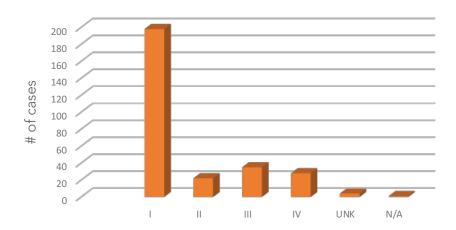
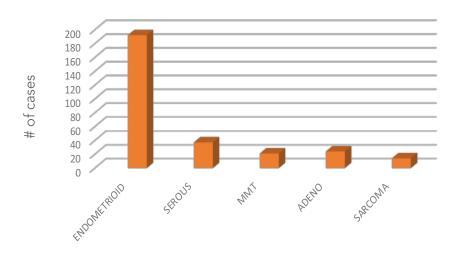


Figure 2 demonstrates the distribution of histology for these same patients, again demonstrating what would be expected, with endometrioid cancers being by far the most common. It is noteworthy that there is a slight increase in the percentage of some of the more typically aggressive uterine cancer histological types diagnosed and treated at Levine Cancer Institute, as compared to national numbers, which may reflect Levine Cancer Institute's role as a referral center for these diseases.

Figure 2 Histology Distribution



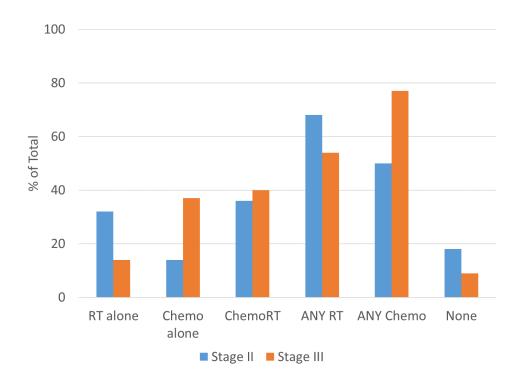
#### Uterine Cancer Treatment at Levine Cancer Institute

As noted earlier, the initial treatment for most patients is to undergo surgical removal of the uterus. Recent data has shown that minimally-invasive surgery, such as laparoscopic, is just as effective at treating and diagnosing uterine cancer as more traditional "open" hysterectomies, but is significantly better for patients in terms of pain and recovery time.

Levine Cancer Institute has been a rapid adopter of minimally-invasive surgical approaches to uterine cancer. In 2015, 82 percent of the 263 hysterectomies performed in our network were done laparoscopically. This compares favorably to national trends.

Additionally, we explored the use of chemotherapy and radiation therapy for uterine cancer patients diagnosed with stage II or stage III disease. This analysis indicates that over half of all women with stages II/III disease undergo adjuvant therapy. Given that this disease very often impacts the elderly – a patient population that is not always healthy enough to receive these types of treatment – these numbers are also favorable.

Figure 3 Chemotherapy and Radiation Therapy for Stage II and III



Levine Cancer Institute treats a proportionately high number of aggressive uterine cancer histological types and has a special interest in the care for these women. Therefore, we also looked at the use of lymph node dissection (LND) and adjuvant chemotherapy treatments for patients with serious uterine cancer. We found that Levine Cancer Institute is providing appropriately aggressive treatment to the women most in need – namely, those with stage II or stage III uterine cancers.

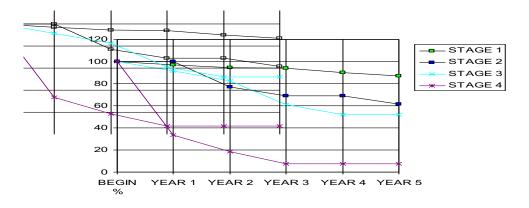
Table 1 Lymph Node Dissection and Adjuvant Chemotherapy by Disease Stage

	LND		СНЕМО	
	NO	YES	NO	YES
STAGE I	5	10	4	11
STAGE II	0	6	0	6
STAGE III	1	7	1	7
STAGE IV	6	2	2	6

### Uterine Cancer Survival Outcomes

Even when diagnosed at later stages, uterine cancer typically has a long natural history. Therefore, for this analysis, we used data from 2010 rather than 2015. These numbers track what would be expected from national averages.

Figure 4 Overview of Survival Outcomes With All Histological Types of Uterine Cancer



## Summary

Carolinas HealthCare System will continue to support research and healthcare initiatives to improve outcomes for these patients with a commitment to lessen the impact of uterine cancer on our community. Advances in surgical and adjuvant therapy techniques offer a greater quality of life for patients during and after treatment while improving the likelihood for a cure.

