Thyroid Cancer Care
Better Testing. Faster Treatment.

CAYUGA CANCER CENTER

Medical Oncology
(607) 272-5414

Radiation Oncology
(607) 274-4060

cayugahealthsystem.org

WITH CLINICAL SUPPORT FROM

CAYUGA CANCER CENTER
ANNUAL REPORT 2016
2016 CAYUGA MEDICAL CENTER CANCER COMMITTEE

Ties to other community agencies, such as the American Cancer Society, Hospicare and Palliative Care Services of Tompkins and Cortland Counties, Cancer Resource Center of the Finger Lakes, and the Cancer Services Program of Cortland and Tompkins Counties, strengthen cancer services provided by Cayuga Medical Center.

American Cancer Society (ACS)

In partnership with Cayuga Medical Center's cancer program, provides diagnosis-specific information, referrals to community and cancer resource centers, and critical peer and professional support to all those facing a cancer diagnosis. ACS offers a number of educational and supportive programs for people living with a cancer diagnosis and their families. Among those programs is Look Good, Feel Better; a hands-on workshop to help patients learn how to camouflage areas of concern and improve their appearance during cancer treatment. (cancer.org)

80% by 2018 Campaign of the American Cancer Society

Targets an 80 percent colorectal cancer-screening rate by 2018. While colorectal cancer incidence rates have dropped 30 percent in the US over the past decade, it remains the second leading cause of cancer death. Approximately 30 percent of people between the ages of 50 and 75 are still not getting appropriately screened. In an organized effort to change these numbers we are reaching out to local physicians to encourage screening referrals, and our nurse navigators are meeting with physician office staff members to help facilitate increased appropriate screening. (cancer.org)

Hospice and Palliative Care Services of Tompkins and Cortland Counties

Provides inpatient and outpatient hospice and palliative services to patients' homes, at the hospital, in nursing homes, and at the Nina K. Miller Center for Hospicare and Palliative Care. (hospicare.org)

Cancer Resource Center of the Finger Lakes (CRLF)

Offers personalized support and information to area residents affected by cancer. Services include one-to-one assistance and many support groups, including the Women’s Noon Group, Men’s Breakfast Club, Young Adult Group, New to Cancer Group, Living with Cancer as a Chronic Disease, Prostate Support Group, and the Cancer Education Series. CRLF also offers a well-stocked lending library; a boutique with free wigs, hats, and other items; wellness programs such as yoga and water aerobics; resource guides; numerous programs, and a newsletter. These volunteers connect with patients and loved ones in the chemotherapy and radiation therapy areas, providing comforting snacks, guidance to resources, and an empathetic ear. CRLF recruits, trains, and supervises these volunteers. In addition, CRLF staff regularly visit the hospital to communicate with patients, family members, and hospital employees. The on-going collaboration between these two organizations improves the quality of care while preventing the duplication of efforts. (crlf.net)

Cancer Resource Room

The Cancer Resource Room is located at Cayuga Medical Center on the first floor of the adjacent medical office building. The room is operated by Cayuga Medical Center through an affiliation with the Cancer Resource Center of the Finger Lakes, which serves as the lead agency for this service. The room is open daily to provide support, information, and respite to people with cancer and their loved ones.

Cancer Services Program of Cortland and Tompkins Counties

Helps those with little or no health insurance gain access to services to reduce the risk of breast, cervical, prostate, and colorectal cancers. For more information please call (607) 758-5523.

GLOSSARY

AJCC Staging

American Joint Committee on Cancer (AJCC). Classification of malignant disease to denote how far the cancer has advanced. Malignancy is categorized by (T) Tumor, (N) Nodes, and (M) Metastasis.

Analytic

Patients diagnosed and/or any of their first course of treatment administered at CMC.

Non-Analytic

Patients diagnosed and first course treatment administered elsewhere. Patients with pathology or lab specimens only.

First Course of Treatment

Initial cancer-directed treatment or series of treatments planned and usually initiated within four months of diagnosis; or as determined by the physician.

NCNN

National Comprehensive Cancer Network

References

2. National Cancer Data Base (NCDB)
3. American Joint Committee on Cancer Staging Manual

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- Certification: American Board of Internal Medicine, Medical Oncology
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- Residency: Highland Hospital of Rochester - Family Practice (Rochester, NY)
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- Oncology Nurse Navigator

Ellen Dugan, MBA
- Vice President, Service Lines

Jennifer Fuller, RN, OCN
- Manager, Oncology Nursing; Quality Improvement Coordinator

James Goetsz, MBA
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Betty McEver, RN, BSN, OCN, ONN-CG, CRN
- Oncology Nurse Navigator; Outreach Coordinator

Lori Toolan, MHA
- Practice Administrator, Cayuga Hematology Oncology Associates

Deb Traunstein, LMSW, MBA, ACHP-SW
- Licensed Master Social Worker; Psychosocial Service Coordinator

Sally Vantidinne, CTR
- Certified Tumor Registrar, Cancer Registry; Quality Coordinator, Cancer Registry

Jason Warchal
- Account Representative, Hospitals, American Cancer Society

ON THE COVER:
Adam Law, MD, who leads the Thyroid Nodule Diagnostic Clinic at Cayuga Medical Center, and Marguerite Sterling, RN, reviewing patient progress.
### Reason for evaluation

Strong chemotherapy can reduce white blood cell counts, weakening the immune system. A weakened immune system increases the risk of infection. Neulasta is a prescription medication used to help reduce the chance of infection due to a low white blood cell count. It does this by boosting the number of infection-fighting white blood cells called neutrophils, which help to strengthen the immune system.

Primary prophylaxis with a colony stimulating factor (CSF) starting in the first cycle and continuing through subsequent cycles of chemotherapy is recommended in patients who have approximately 20% or higher risk for febrile neutropenia (fever with low white cell counts) on the basis of patient disease and treatment-related factors. However, per the American Society of Clinical Oncology, QOPI 2015 measures (Core 25e: GCSF administered to patients who received chemotherapy for metastatic cancer), in the palliative care setting of metastatic cancer, its use is inconsistent with guidelines and should not be routinely used. It has not been shown to improve outcomes or length of life. Per this guideline, the lowest possible use of Neulasta in this setting should be the goal.

### Summary

Analysis of 2014 and 2015 stage IV CHOAs solid tumor patients showed thirty-nine patients received Neulasta.

In 2014, twenty-five patients in the metastatic setting received ninety-four doses of Neulasta and in 2015 some of these patients continued receiving Neulasta and fourteen additional patients started Neulasta. Ninety-five doses were given in this setting in 2015. Patients treated in 2016 will be analyzed to see if there is a decrease in usage.

### Recommendations:

After review of ASCO and NCCN guidelines, the following corrective action plan was instituted:

- Neulasta was taken out of the pharmacy chemotherapy regimen, unless given for curative intent.
- Physicians will consult with pharmacists for stage IV patients before prescribing Neulasta in the metastatic setting.
- Cases will be discussed at weekly chemotherapy meetings.

### Follow-up:

Monitor effectiveness of corrective action plan. Analyze 2016 Stage IV patients.

### Reference:

The American Society of Clinical Oncology (ASCO), NCCN Clinical Practice Guidelines in Oncology (NCCN Guidelines), and Quality Oncology Practice Initiative (QOPI).

### Doses of Neulasta in Stage IV Patients

<table>
<thead>
<tr>
<th>Year</th>
<th>Number of Doses</th>
</tr>
</thead>
<tbody>
<tr>
<td>2014</td>
<td>94</td>
</tr>
<tr>
<td>2015</td>
<td>95</td>
</tr>
</tbody>
</table>

### Lung cancer detection

Our program to improve the detection and early treatment of lung cancer in our community continued a rapid expansion in 2016. When the program took off in March 2015, we expected to serve about 100 patients in the first year. During the first 18 months of the program, over 400 people were screened for lung cancer. Much of the program’s success can be credited to our community’s primary care physicians. They have taken the lead in asking patients about their tobacco use and urging current and former smokers to have a low-dose computer tomography screening for lung cancer.

### Improving survivorship care

When cancer treatment ends, patients may need help moving on to the next phase of their lives. Our nurse navigators are doing exceptional work in assisting patients through this transition by providing a survivorship care plan. It gives patients an oncologic record of their cancer history, treatments, a plan for cancer surveillance recommended tests, possible long-term effects of the treatment, and suggestions for staying healthy.

The plan also identifies which healthcare providers are responsible for a patient’s continuing care. In addition, information is provided on local, state and national resources to assist with emotional or mental health, parenting, work/employment, financial issues, and insurance. Our partnerships with the Cancer Resource Center of the Finger Lakes and the American Cancer Society have done an outstanding job of assisting patients with finding support groups and information during and after their cancer treatments.

Charles Garbo, MD
Chairman, Cancer Committee; Cancer Liaison Physician to the Commission on Cancer

### Expanded cancer care in Cortland

In 2016, our award-winning cancer program opened a new office at 6 Euclid Avenue in Cortland where patients have been obtaining cancer care since July 11th. The new office joins our network of community cancer care in ithaca at Cayuga Medical Center, Cayuga Cancer Center East Campus off Warren Road in Ithaca, and in Montour Falls.

For patients requiring complex cancer diagnostic work and treatment, the Cayuga Cancer Center’s collaboration with the Roswell Park Cancer Institute provides seamless access to advanced levels of care.
The time between a patient’s cancer screening and getting the test results can be stressful, but patients evaluated at Cayuga Medical Center for thyroid cancer are getting their results on the same day as their diagnostic testing.

For nearly 90 percent of the patients tested at Cayuga Medical Center’s Thyroid Nodule Diagnostic Clinic, the same-day test results come with relief. “Of the 1,101 patients tested since 2008 at the clinic, 10.2 percent required surgery to treat their cancer. Fewer than 1 percent of those tested had an indeterminate result that would require a retest,” says Ithaca Endocrinologist Adam Law, MD, who leads the Thyroid Nodule Diagnostic Clinic.

**Thyroid Cancer**

- **Faster and Better**

- **Improving thyroid cancer detection and treatment**

**Thyroid Cancer Facts**

1. Thyroid cancers occur about three times more often in women than in men for reasons that are unclear. The cancer can occur at any age, but women are more often diagnosed in their 40’s or 50’s and men in their 60’s or 70’s. The disease is a less common form of cancer with men and women having a 1.2 percent risk of being diagnosed with thyroid cancer at some point during their lifetimes.

2. Diagnoses of thyroid cancer in both women and men are rising and are now the most rapidly increasing cancer diagnosis in the U.S. This may be due in part to better diagnostic testing.

3. The most common thyroid cancers are highly treatable when detected early and have survival rates approaching 100 percent.

4. Family history and several inherited conditions have been linked to different types of thyroid cancer, but most people who develop the disease do not have an inherited condition or a family history of the cancers.

5. Having had head or neck radiation treatments in childhood is a risk factor for developing thyroid cancer. Risk depends on how much radiation is given and the age of the child. In general, the risk increases with larger doses and with younger age at treatment. Radiation exposure as an adult carries a much lower risk for developing thyroid cancer.

6. Most thyroid cancers are now found earlier than in the past and are often found when patients notice neck lumps or nodules and are proactive in seeing their doctors.

7. Thyroid cancer can cause these symptoms:
   - A lump or swelling in the neck, sometimes growing quickly.
   - Pain in the front of the neck, sometimes going up to the ears.
   - Hoarseness or other voice changes that do not go away.
   - Difficulties in swallowing or breathing.
   - A constant cough that is not due to a cold.

8. Routine screening for thyroid cancer is not recommended unless a person is at increased risk, such as having a family history of the disease.

**Stage at Initial Diagnosis**

<table>
<thead>
<tr>
<th>Stage</th>
<th>CMC 2011-2015 Analytic Cases</th>
<th>NCDB 2010-2014 Analytic Cases</th>
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</thead>
<tbody>
<tr>
<td>Stage I</td>
<td>52%</td>
<td>63%</td>
</tr>
<tr>
<td>Stage II</td>
<td>12%</td>
<td>8%</td>
</tr>
<tr>
<td>Stage III</td>
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<td>13%</td>
</tr>
<tr>
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<td>6%</td>
<td>7%</td>
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<tr>
<td>Unknown</td>
<td>12%</td>
<td>8%</td>
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<table>
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<th>First Course of Therapy</th>
<th>2010-2015 Analytic Cases (CMC)</th>
<th>2010-2014 Analytic Cases (NCDB)</th>
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</thead>
<tbody>
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<td>Surgery Only/Radiation/Hormone</td>
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<td>61%</td>
</tr>
<tr>
<td>Surgery Only/Radiation</td>
<td>13%</td>
<td>11%</td>
</tr>
<tr>
<td>Surgery Only/Hormone or Surgery/Radiation</td>
<td>22%</td>
<td>21%</td>
</tr>
<tr>
<td>No Treatment</td>
<td>2%</td>
<td>3%</td>
</tr>
<tr>
<td>Other CMC</td>
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<td>4%</td>
</tr>
</tbody>
</table>

**Summary**

Thyroid cancer data was analyzed and compared to the National Cancer Database. Of our sixty three patients with follicular or papillary cancers, all had either surgery or were offered appropriate surgeries. Survival was 100% for these cases. This is similar to or better than the survival of these thyroid cancers compared to American Cancer Society statistics. The only deaths were in our patients with rare types of thyroid cancer such as anaplastic or medullary.

Charles Garbo, MD
Chairman, Cancer Committee

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8. Routine screening for thyroid cancer is not recommended unless a person is at increased risk, such as having a family history of the disease.
According to the American Cancer Society, an estimated 64,300 new cases of thyroid cancer in the U.S. are expected to be diagnosed in 2016, with 3 out of 4 cases occurring in women. Thyroid cancer has been increasing worldwide over the past few decades and is the most rapidly increasing cancer in the U.S. The rise is thought to be partly due to increased detection because of more sensitive diagnostic procedures. In the US, rates increased by 5.1% per year from 2003 to 2012.

**CMC Thyroid Cancer Incidence Trend**

2011-2015 Analytic Cases

A study of analytic thyroid cancer cases at Cayuga Medical Center was carried out covering 63 patients from 2011-2015.

**Age at Initial Diagnosis**

2011-2015 Analytic Cases (CMC) 2010-2014 Analytic Cases (NCDB)

Getting a rapid diagnosis at the clinic provides quick answers to anxious patients who once waited weeks for their test results. The clinic’s diagnostic precision with a near 100 percent accuracy also reduces the need for additional testing. Patients with suspicious, but non-cancerous cells, get a recommendation for periodic follow-up examinations.

"For patients diagnosed with thyroid cancer, treatment begins more quickly with most having their surgeries within two weeks of diagnosis. The Thyroid Nodule Diagnostic Clinic has set a new standard for patient care." Dr. Law explains.

"Thyroid cancer is highly treatable when detected early. Women are more frequently diagnosed with thyroid cancer than men, and cancerous nodules found in older patients of either gender are usually more aggressive than those found in younger patients," Dr. Law says.

"The incidence rates of thyroid cancer in both women and men have been rising. In the United States, thyroid cancer diagnoses are growing at the fastest rate of all types of cancer. It is unclear if the disease is increasing or if more nodules are being found incidentally by imaging of the neck for other reasons. Meanwhile, as thyroid cancer diagnoses have rapidly increased, death rates from the disease have increased slightly since 2003. However, during the same time period, the incidence and death rates from most other forms of cancer have declined," Dr. Law notes.

The thyroid gland is located in the throat under the Adam’s apple and regulates growth and development through the rate of metabolism. The first indication a patient may have of thyroid cancer usually appears as a nodule or lump. Thyroid nodules are common and most often benign. About a third of adults have detectable thyroid nodules that may be found during a physical exam or when patients notice a lump in their necks. In some cases, a nodule is found during an ultrasound or CT scan done, for reasons completely unrelated to the thyroid gland.

The risk for thyroid nodules is higher in women than men, and the incidence increases with age. By age 60, about half of all people have a thyroid nodule that can be found either through examination or with imaging. The vast majority of those nodules are 4mm or less in size and would not usually prompt additional testing for cancer. Even though about 90 percent of all nodules are benign, a careful evaluation of all suspicious nodules to determine which may be malignant is extremely important.

**A team approach to thyroid cancer care**

At Cayuga Medical Center’s Thyroid Nodule Diagnostic Clinic, patients are examined and treated by a team of physicians and diagnosticians. The clinic began in 2007, and is thought to have been the first one in the nation outside of a teaching hospital environment to develop a team for thyroid cancer treatment. The team approach dramatically changed the pace for testing and diagnosing patients with thyroid nodules.

**Faster test results for patients**

The methodical process from testing to diagnosis can take weeks to complete and leave a patient waiting awhile for an answer on a serious health risk. The team approach at the Thyroid Nodule Diagnostic Clinic reduces the wait time by bringing together the patient, physician, surgeon, radiologist, and cytopathologist. The test begins with Interventional Radiologist Roman Politi, MD, using ultrasound imaging to guide a fine needle to a nodule in order to withdraw some cells. Those cells are placed on a slide and examined under a microscope by Dr. Sudilovsky or Dr. Plocharczyk. The test results are usually ready within two hours.

"Many teaching hospitals do not have a program like we started at Cayuga Medical Center, and larger hospitals did not start similar programs until a few
years after it began here in Ithaca. The clinic significantly improves patient care, and the hospital saw it had an ethical responsibility to start one and gave their full support,” Dr. Law says.

He gives credit for the concept of the thyroid nodule clinic to Daniel Sudilovsky, MD, a board-certified Pathologist, Chairman of the Department of Pathology, and Medical Director of the Laboratory at Cayuga Medical Center. He published two research papers in 2006 on improving procedures to reduce diagnostic errors and improve thyroid biopsy results at the University of Pittsburgh Medical Center where he was Director of Cytology. When Dr. Sudilovsky came to Cayuga Medical Center in 2007, his research played a major role in developing the thyroid nodule clinic. Dr. Sudilovsky along with Adam Law, MD, General Surgeon Cora Foster, MD, Head and Neck Surgeon Jon Cryer, MD, and Marguerite Sterling, RN were part of the clinic’s development team and still remain with the program. For patients diagnosed with thyroid cancer, the clinic’s team approach also includes patient education, counseling, surgical consultation, and follow-up care.

“When a diagnosis of cancer is made, we have the Cancer Resource Center of the Finger Lakes right there to provide patients with counseling and education about their cancer. Surgeons are available that day to discuss treatment, and I’m there so patients will know who will be handling their care,” Dr. Law explains.

“When patients are seen at the clinic, they have a team of specialists with years of expertise on thyroid cancer testing and diagnosis. We’ve streamlined the process so patients know the day they get tested if they need treatment, and if they do, they have rapid access to surgeons and support.” ADAM LAW, MD

Cayuga Cancer Center opens Cortland office

Cayuga Medical Center opened a Cortland office for the Cayuga Cancer Center in July, providing patients with high-level cancer care from board certified cancer physicians. The office is located at 6 Euclid Avenue where Julie Campbell, MD and Timothy Bael, MD see patients on alternating weeks.

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Timothy Bael, MD was named medical director of the Cayuga Cancer Center in October. Dr. Bael joined the medical staff at Cayuga Medical Center in 2005. He is in practice at Cayuga Hematology Oncology Associates in Ithaca and a member of the medical staff at Roswell Park Cancer Institute in Buffalo.

150 attend Celebration of Life Reunion

The annual Celebration of Life Reunion for cancer survivors and their guests was held in September and provided an afternoon of delicious food, uplifting speakers, and helpful information about local cancer care resources. The 5th annual luncheon event was held at the Ithaca Yacht Club where attendees heard from Eunice Wang, MD, chief of the leukemia service at Roswell Park Cancer Institute. The celebration included 150 guests, the largest in the event’s history, who also heard from Hannah Potts, a nurse practitioner at Cayuga Hematology Oncology Associates and a cancer survivor, as well as, James Goetz, Director of Oncology Services at Cayuga Medical Center.

Surgical Associates joins Cayuga Medical Associates

Surgical Associates of Ithaca joined Cayuga Medical Associates in October 2016. The group includes five board-certified surgeons, a nurse practitioner and a physician assistant who both hold board certifications. Surgical Associates sees patients at its offices in Ithaca, Cortland, and Montour Falls and works closely with the Cayuga Cancer Center.

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Cancer program links to network for improved treatment

Physicians at the Cayuga Cancer Center were linked in 2016 to a comprehensive cancer information platform developed at Roswell Park Cancer Institute in Buffalo. The OmniSeq™ Precision Medicine Technology system provides physicians with tools to analyze medical and genomic research so optimal treatment plans can be developed for their patients.

As researchers learned more about the changes in cells that cause cancer, they have developed drugs to target those changes. New chemotherapies called “targeted therapies” help keep cancer from growing and spreading by targeting specific changes in tumors. Profiling the molecular profile of a tumor can help identify the therapy that is most likely to improve a patient’s outcome.

The OmniSeq Genomic Network is expected to enhance the opportunities for Cayuga Medical Center physicians to collaborate with other cancer specialist to develop personalized cancer treatment for patients. The network includes cancer specialists at hospitals, university research centers and federal health programs.

Charles Garbo, MD and Marguerite Sterling, RN win Munchmeyer Award

Charles Garbo, MD and Marguerite Sterling, RN were the 2016 recipients of the Louis Munchmeyer Award for Excellence at Cayuga Medical Center. Dr. Garbo has been on the medical staff at Cayuga Medical Center in the Department of Medicine since 1992 and is certified in medical oncology by the American Board of Internal Medicine. He is the Cancer Committee Chairman and the Cancer Liaison Physician to the Commission on Cancer. Marguerite has been a Registered Nurse at the medical center for 35 years. In 2005, she joined Radiation Oncology and played a major role in developing the Thyroid Nodule Clinic. The annual award is named in honor of Louis Munchmeyer, MD. He based his medical practice on the principles of excellence of care for patients, concern for patient quality of life, and community involvement.

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Age at Initial Diagnosis
2011-2015 Analytic Cases (CMC) 2010-2014 Analytic Cases (NCDB)

Getting a rapid diagnosis at the clinic provides quick answers to anxious patients who once waited weeks for their test results. The clinic’s diagnostic precision with a near 100 percent accuracy also reduces the need for additional testing. Patients with suspicious, but non-cancerous cells, get a recommendation for periodic follow-up examinations.

“For patients diagnosed with thyroid cancer, treatment begins more quickly with most having their surgeries within two weeks of diagnosis. The Thyroid Nodule Diagnostic Clinic has set a new standard for patient care.” Dr. Law explains.

“Thyroid cancer is highly treatable when detected early. Women are more frequently diagnosed with thyroid cancer than men, and cancerous nodules found in older patients of either gender are usually more aggressive than those found in younger patients,” Dr. Law says.

“The incidence rates of thyroid cancer in both women and men have been rising. In the United States, thyroid cancer diagnoses are growing at the fastest rate of all types of cancer. It is unclear if the disease is increasing or if more nodules are being found incidentally by imaging of the neck for other reasons. Meanwhile, as thyroid cancer diagnoses have rapidly increased, death rates from the disease have increased slightly since 2003. However, during the same time period, the incidence and death rates from most other forms of cancer have declined,” Dr. Law notes.

The thyroid gland is located in the throat under the Adam’s apple and regulates growth and development through the rate of metabolism. The first indication a patient may have of thyroid cancer usually appears as a nodule or lump. Thyroid nodules are common and most often benign. About a third of adults have detectable thyroid nodules that may be found during a physical exam or when patients notice a lump in their necks. In some cases, a nodule is found during an ultrasound or CT scan done, for reasons completely unrelated to the thyroid gland.

The risk for thyroid nodules is higher in women than men, and the incidence increases with age. By age 60, about half of all people have a thyroid nodule that can be found either through examination or with imaging. The vast majority of those nodules are 4mm or less in size and would not usually prompt additional testing for cancer. Even though about 90 percent of all nodules are benign, a careful evaluation of all suspicious nodules to determine which may be malignant is extremely important.

A team approach to thyroid cancer care
At Cayuga Medical Center’s Thyroid Nodule Diagnostic Clinic, patients are examined and treated by a team of physicians and diagnosticians. The clinic began in 2007, and is thought to have been the first one in the nation outside of a teaching hospital environment to develop a team for thyroid cancer treatment. The team approach dramatically changed the pace for testing and diagnosing patients with thyroid nodules.

Faster test results for patients
The methodical process from testing to diagnosis can take weeks to complete and leave a patient waiting awhile for an answer on a serious health risk. The team approach at the Thyroid Nodule Diagnostic Clinic reduces the wait time by bringing together the patient, physician, surgeon, radiologist, and cytopathologist. The test begins with Interventional Radiologist Roman Politi, MD, using ultrasound imaging to guide a fine needle to a nodule in order to withdraw some cells. Those cells are placed on a slide and examined under a microscope by Dr. Sudilovsky or Dr. Plocharczyk. The test results are usually ready within two hours.

“Many teaching hospitals do not have a program like we started at Cayuga Medical Center, and larger hospitals did not start similar programs until a few
The time between a patient’s cancer screening and getting the test results can be stressful, but patients evaluated at Cayuga Medical Center for thyroid cancer are getting their results on the same day as their diagnostic testing.

For nearly 90 percent of the patients tested at Cayuga Medical Center’s Thyroid Nodule Diagnostic Clinic, the same-day test results come with relief. “Of the 1,101 patients tested since 2008 at the clinic, 10.2 percent required surgery to treat their cancer. Fewer than 1 percent of those tested had an indeterminate result that would require a retest,” says Ithaca Endocrinologist Adam Law, MD, who leads the Thyroid Nodule Diagnostic Clinic.

**Thyroid Cancer Facts**

1. Thyroid cancers occur about three times more often in women than in men for reasons that are unclear. The cancer can occur at any age, but women are more often diagnosed in their 40’s or 50’s and men in their 60’s or 70’s. The disease is a less common form of cancer with men and women having a 1.2 percent risk of being diagnosed with thyroid cancer at some point during their lifetimes.

2. Diagnoses of thyroid cancer in both women and men are rising and are now the most rapidly increasing cancer diagnosis in the U.S. This may be due in part to better diagnostic testing.

3. The most common thyroid cancers are highly treatable when detected early and have survival rates approaching 100 percent.

4. Family history and several inherited conditions have been linked to different types of thyroid cancer, but most people who develop the disease do not have an inherited condition or a family history of the cancers.

5. Having had head or neck radiation treatments in childhood is a risk factor for developing thyroid cancer. Risk depends on how much radiation is given and the age of the child. In general, the risk increases with larger doses and with younger age at treatment. Radiation exposure as an adult carries a much lower risk for developing thyroid cancer.

6. Most thyroid cancers are now found earlier than in the past and are often found when patients notice neck lumps or nodules and are proactive in seeing their doctors.

7. Thyroid cancer can cause these symptoms:
   - A lump or swelling in the neck, sometimes growing quickly.
   - Pain in the front of the neck, sometimes going up to the ears.
   - Hoarseness or other voice changes that do not go away.
   - Difficulties in swallowing or breathing.
   - A constant cough that is not due to a cold.

8. Routine screening for thyroid cancer is not recommended unless a person is at increased risk, such as having a family history of the disease.
Reason for evaluation

Strong chemotherapy can reduce white blood cell counts, weakening the immune system. A weakened immune system increases the risk of infection. Neulasta is a prescription medication used to help reduce the chance of infection due to a low white blood cell count. It does this by boosting the number of infection fighting white blood cells called neutrophils, which help to strengthen the immune system.

Primary prophylaxis with a colony stimulating factor (CSF) starting in the first cycle and continuing through subsequent cycles of chemotherapy is recommended in patients who have approximately 20% or higher risk for febrile neutropenia (fever with low white cell counts) on the basis of patient disease and treatment-related factors. However, per the American Society of Clinical Oncology, QOPI 2015 measures (Core 25e: GCSF administered to patients who received chemotherapy for metastatic cancer), in the palliative care setting of metastatic cancer, its use is inconsistent with guidelines and should not be routinely used. It has not been shown to improve outcomes or length of life. Per this guideline, the lowest possible use of Neulasta in this setting should be the goal.

There is significant safety and financial concerns regarding overuse of Neulasta. In addition to average wholesale cost of over $4,000 per dose, there can be cases of splenic rupture and significant bone pain leading to decreased quality of life. There have been other retrospective analyses of the use of Neulasta in this and other settings. In a study at Virginia Commonwealth University Hospital, more than a third of patients who received it did so in a palliative care setting (Journal of Oncology Practice: 203, 72013. Waters et al). Recommendation was that there is a significant opportunity to improve the use of Neulasta, and that this may improve patient care and decrease the financial burden on patients and on the medical system.

Summary

Analysis of 2014 and 2015 stage IV CHOA solid tumor patients showed thirty-nine patients received Neulasta.

In 2014, twenty-five patients in the metastatic setting received ninety-four doses of Neulasta and in 2015 some of these patients continued receiving Neulasta and fourteen additional patients started Neulasta. Ninety-five doses were given in this setting in 2015. Patients treated in 2016 will be analyzed to see if there is a decrease in usage.

Recommendations:

After review of ASCO and NCCN guidelines, the following corrective action plan was instituted:

- Neulasta was taken out of the pharmacy chemotherapy regimen, unless given for curative intent.
- Physicians will consult with pharmacists for stage IV patients before prescribing Neulasta in the metastatic setting.
- Cases will be discussed at weekly chemotherapy meetings.

Follow-up:

Monitor effectiveness of corrective action plan. Analyze 2016 Stage IV patients.

Reference(s): The American Society of Clinical Oncology (ASCO), NCCN Clinical Practice Guidelines in Oncology (NCCN Guidelines), and Quality Oncology Practice Initiative (QOPI).

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**Doses of Neulasta in Stage IV Patients**

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<th>Year</th>
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<tr>
<td>2015</td>
<td>95</td>
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**Lung cancer detection**

Our program to improve the detection and early treatment of lung cancer in our community continued a rapid expansion in 2016. When the program took off in March 2015, we expected to serve about 100 patients in the first year. During the first 18 months of the program, over 400 people were screened for lung cancer. Much of the program’s success can be credited to our community’s primary care physicians. They have taken the lead in asking patients about their tobacco use and urging current and former smokers to have a low-dose computer tomography screening for lung cancer.

**Improving survivorship care**

When cancer treatment ends, patients may need help moving on to the next phase of their lives. Our nurse navigators are doing exceptional work in assisting patients through this transition by providing a survivorship care plan. It gives patients an oncologic record of their cancer history, treatments, a plan for cancer surveillance recommended tests, possible long-term effects of the treatment, and suggestions for staying healthy.

The plan also identifies which healthcare providers are responsible for a patient’s continuing care. In addition, information is provided on local, state and national resources to assist with emotional or mental health, parenting, work/employment, financial issues, and insurance. Our partnerships with the Cancer Resource Center of the Finger Lakes and the American Cancer Society have done an outstanding job of assisting patients with finding support groups and information during and after their cancer treatments.

Charles Garbo, MD
Chairman, Cancer Committee; Cancer Liaison Physician to the Commission on Cancer
ON THE COVER: Adam Law, MD, who leads the Thyroid Nodule Diagnostic Clinic at Cayuga Medical Center; and Margarette Sterling, RN, reviewing patient progress.