The Mercy Circle of Caring

2009

Cancer Program Annual Report
and Outcome Study on

Prostate Cancer

Mercy Hospital Clermont

MERCY℠
Health Partners

2008 Cancer Program Summary

Mercy Hospital Clermont offers the highest quality of cancer care as evidenced by the tri-annual approval of our cancer program by the Commission on Cancer, American College of Surgeons. Under the leadership of the Cancer Committee, our Cancer Program has also received commendations for excellence in key areas of patient care. Achieving and exceeding compliance with the required standards of care set by the CoC assures our patients that they will receive the best of care from diagnosis throughout the treatment period and continuing to end of life care.

In addition to a wide range of diagnostic and treatment services, our hospital offers many programs to provide assistance to both our patients and their families as they cope with a diagnosis of cancer. Our support services include nutritional support, spiritual support, rehabilitation, palliative care, educational programs for our patients and the community, information on access to clinical trials and cancer support groups and programs, many of which are provided through participation with the American Cancer Society.

To meet the growing and changing needs of the patients and the communities we serve, our Cancer Committee continually strives for Cancer Program excellence by annually reviewing our services, performing patient care studies, and by setting annual goals to improve and enhance our services.

Mercy Hospital Clermont in 2008 implemented several patient care improvements, sponsored patient, community and staff educational offerings. 2008 Cancer Program Achievements include:

- Purchased EBUS (Endoscopic Bronchial Ultrasound) to aid in the diagnosis of lung cancer.
- Upgraded Cancer Resource Center with information and new location.
- Implemented weekly rounding with patients and family in radiation oncology to increase patient satisfaction.
- Participated in Community Outreach activities for cancer prevention, early detection and screening including promotion of breast cancer awareness and breast self-exam. Skin cancer and Prostate cancer screenings were offered to the public.

Mercy Clermont Cancer Committee

The Cancer Committee is a multi-disciplinary team of hospital employees, staff physicians and members of the American Cancer Society that meets quarterly to monitor our performance and review our available services and programs.

Our mission is to ensure that our patients, their families and our communities have access to a full-range of medical services, supportive programs and services and community outreach activities that impact the quality of life and survival. Our focus is on prevention, screening and early detection programs and quality of life services.

Mercy Hospital Clermont
2008 Cancer Committee Membership

Foroogh Jazy, MD Chair	Radiation Oncology
Scott Stevens, MD	Radiology
Brian Shiff, MD	Surgery
Peter Sheng, MD	Medical Oncology
Ila Mehta, MD	Pathology
Amul Shulka, MD	Internal Medicine
Debbie Vickers, RN	Cancer Program Administrator
Kay O'Rourke, MEd, BCC	Pastoral Care
Diane Morrision, RN	Inpatient Services
Carole Hains, RN	Quality Director
Roger Leinberger, RT	Radiology
Jeanne Kincaid, RD, LD, CDE	Nutrition
Alice Miller, RHIT, RTT, CTR	Cancer Registry
Rene, Diaz, RTT	Radiation Oncology
Ann, Ewers, RN	Palliative Care
Tom Eichstadt, RPH	Pharmacy
Bill Carroll, RPH	Pharmacy
Julie Behan	American Cancer Society

Cancer Program Coordinators

Brian Shiff, MD	Quality of Registry Data
Peter Sheng, MD	Cancer Conference Coordinator
Debbie Vickers, RN	Community Outreach
Carole Hains, RN	Quality Improvement

Cancer Conferences

Cancer conferences provide a format for multidisciplinary involvement in the planning of care for cancer patients. They are integral to improving the care of cancer patients and provide education to physicians and hospital staff. Consultative services and education are optimal when physician representatives from the disciplines involved in the diagnosis and treatment of cancer participate in the discussions. Patient identities are kept confidential

Mercy Hospital Clermont offers prospective, patient-oriented and multidisciplinary Cancer Conferences, which provide free consultative services to our patients and education to the medical and hospital staff. Medical Oncology, Radiation Oncology, Diagnostic Radiology, Pathology and General Surgery specialties are present to discuss possible treatment options for the types of cancers presented at the conferences. Physicians from all specialties, including urology and gynecology are also invited to attend.

Treatment based on national guidelines and AJCC staging is the focus of discussions. National Comprehensive Cancer Network (NCCN) Practice Guidelines in Oncology, information on open clinical trials, and cancer registry data are provided for the cancer sites presented.

Mercy Hospital Clermont
Cancer Conferences

Cancer Conferences are held at Mercy Hospital Clermont on the first Tuesday of each month at 7:30 a.m. in Minning Hall and are approved by the Ohio State Medical Association for one Category 1 CME credit hour.

Physicians may contact the Cancer Registry (732-8565) or the Medical Staff office (732-3827) for more information or to receive a current meeting schedule. Contact Pathology (732-8233) to schedule a patient to be presented at a Cancer Conference.

Cancer Registry

The Cancer Registry is a vital component of the cancer program, providing data for programmatic and administrative planning, research, and for monitoring patient outcomes. Data are collected according to the current standards of the Commission on Cancer to create a detailed cancer–focused record for all reportable tumors diagnosed and/or treated at our hospital. Each record entered into the database contains information on the diagnosis, extent of disease, treatment received, recurrence of disease and lifetime follow-up for each patient. Aggregate data are analyzed and published without patient identifiers to protect the confidentiality of each patient entered into the cancer database according to Ohio state laws and HIPAA regulations.

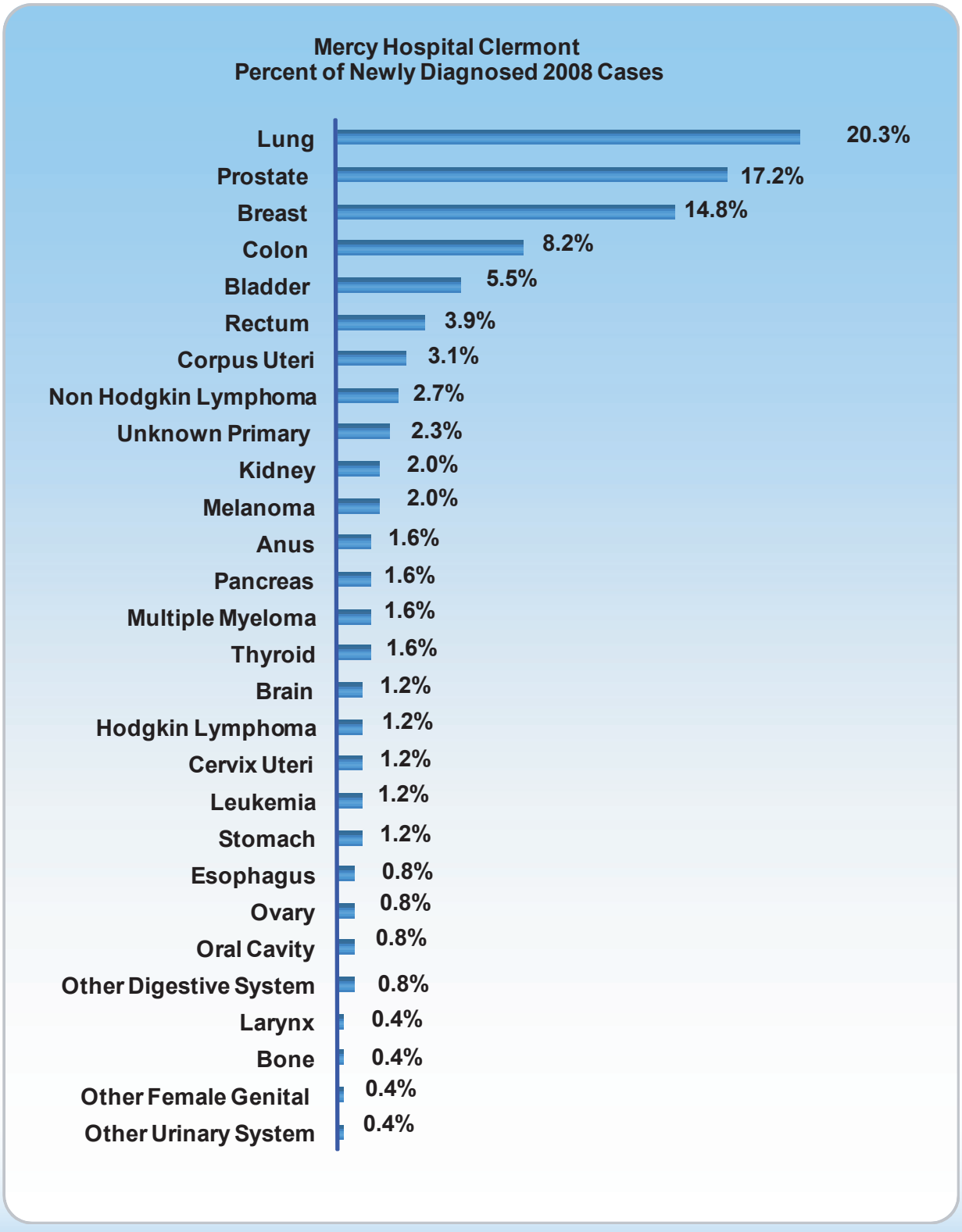
A Cancer Registrar performs the collection, interpretation, analysis and reporting of cancer data. The National Cancer Registrars Association defines Cancer Registrars as data management experts who collect and report cancer statistics for various healthcare agencies. Registrars work closely with physicians, administrators, researchers, and health care planners to provide support for cancer program development, ensure compliance with reporting standards, and serve as a valuable resource for cancer information with the ultimate goal of preventing and controlling cancer. The cancer registrar is involved in managing and analyzing clinical cancer information for the purpose of education, research, and outcome measurement.

Registry data is submitted 100% error free to the National Cancer Data Base (NCDB) annually as a requirement of the Commission on Cancer for all approved cancer programs. Submission of data to the National Cancer Database provides feedback to assess the quality of patient care. This feedback enables cancer programs to compare treatment and outcomes with the regional, state and national patterns. Major differences between the facility data and the national data are reviewed in an effort to identify the reasons for these differences.

Cancer data is also submitted to the Ohio Cancer Incidence Surveillance System (OCISS). All reported data are used to support research, track trends, initiate epidemiologic studies, generate journal articles and provide data for allocation of services. The data are analyzed to identify opportunities for community cancer awareness and screening where higher stages (III-IV) of cancers are seen. This data also provides a means of identifying possible cancer clusters within the state.

2008 Cancer Data Summary and Comparisons

The total number of cases in the Clermont Cancer Registry since the 2003 reference date is 1,393 cases. During 2008, 256 analytic (newly diagnosed) cases were accessioned into the registry database, with an additional 14 non-analytic (recurrent cancer) cases accessioned into the database. The statistics contained in this report represent only analytic cancer cases.



Top Cancer Sites in 2008

The top sites in 2008 were lung (20 percent), prostate (17 percent), breast (15 percent), colorectal (12 percent), bladder (5 percent). Only 2% of our cases were melanomas.

Compared with the estimated 2008 state and national data, our incidence of lung and prostate, are higher than the state and national averages, this may be due to the fact that Mercy Hospital Clermont offers ultrasound guided biopsies for diagnosis of prostate and lung cancer. Breast, colorectal, and bladder incidence were comparable to the national average. Non-Hodgkin lymphoma and melanoma were less than the state and national average.

Top Cancer Sites for 2008			
Primary Site	**US**	**OH**	**MHC**
Lung & Bronchus	15%	17%	20%
Prostate	13%	12%	17%
Breast	13%	12%	15%
Colorectal	10%	11%	12%
Bladder	5%	5%	5%
NHL	5%	5%	3%
Melanoma	4%	4%	2%

Estimated Figures for US/Ohio

American Cancer Society, Facts & Figures 2008

Distribution of our cases by gender revealed that 133 (52 percent) were males and 123 (48 percent) were females. The most frequent cancer sites in women were breast, lung, colorectal, and uterine corpus. Prostate, lung, colorectal and bladder cancers were the most frequently seen cancers in our male patients. Our incidence of prostate, breast, lung, and colon were higher than the national average.

Compared with national data, we saw a higher incidence of patients with breast, lung and prostate cancer. This may be due to offering ultrasound guided biopsy of the prostate and radiation oncology for breast cancer treatment. Our percentage of lung cancer for both genders is higher than is seen nationally. Lung cancer is traditionally high in our state and at our facility. This may be related to our high elderly population, a high number of smokers and former smokers in the area, and to industry in the Greater Cincinnati area.

2008

Top Cancer Sites by Gender

Mercy Clermont

Male		**Female**	
Prostate		**Breast**	
U.S. 25%	**MHC** 33%	**U.S.** 26%	**MHC** 31%
Lung & Bronchus		**Lung & Bronchus**	
U.S. 15%	**MHC** 22%	**U.S.** 14%	**MHC** 19%
Colon & Rectum		**Colon & Rectum**	
U.S. 10%	**MHC** 11%	**U.S.** 10%	**MHC** 13%
Urinary Bladder		**Uterine Corpus**	
U.S. 7%	**MHC** 8%	**U.S.** 6%	**MHC** 7%
Melanoma of the Skin		**Non-Hodgkin lymphoma**	
U.S. 5%	**MHC** 2%	**U.S.** 4%	**MHC** 2%
Non-Hodgkin lymphoma		**Thyroid**	
U.S. 5%	**MHC** 4%	**U.S.** 4%	**MHC** 2%

American Cancer Society, Facts and Figures, 2008

Prostate Cancer Outcome Study

Prostate Incidence and Mortality

Incidence – Prostate cancer is the most common cancer in American men. The American Cancer Society (ACS) estimates 186,320 new cases of prostate cancer in 2008 and 192,280 in 2009, representing an increase in incidence. Studies show that 1 of 6 men will be diagnosed with prostate cancer during their lifetime while 1 in 35 will die of it.

Mortality – Prostate cancer is the second leading cause of cancer deaths in American men. The ACS estimates 28,660 prostate cancer deaths in 2008 and 27,360 in 2009, representing a downward trend in mortality. There are more than 2 million men alive today with a diagnosis of prostate cancer.

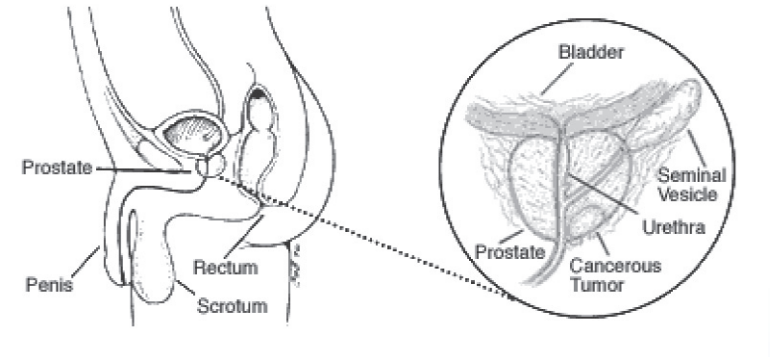
National, Ohio and Hospital Incidence Comparisons

Nationally, it is estimated that prostate cancer will account for about 13% of the cancers diagnosed in 2008. In the state of Ohio it is estimated that nearly 12% of the cancers will be prostate cancers. At Mercy Clermont 17% of our diagnosed cases were prostate cancers. Our prostate caseload is higher than the state and national average. We offer ultrasound guided biopsy of the prostate for diagnosis. Most cases of prostate cancer diagnosed at Mercy Clermont are treated outside of our facility we do not offer the standard forms of treatment.

Anatomy and Physiology of the Prostate

The prostate gland, found only in males, is approximately the size of a walnut and is located beneath the bladder and in front of the rectum. The prostate produces fluid to protect and nourish sperm cells in semen. The seminal vesicles, which produce most of the fluid for semen, are located just behind the prostate gland. The urethra, a tube carrying urine and semen through the penis, runs through the prostate.
The growth of the prostate is regulated by male hormones, called androgens, primarily testosterone which is produced in the testicles.

Fig. A – Anatomy of the Prostate



Prostate Histologies

While there are several types of cells in the prostate, over 99% of prostate cancers originate in the gland cells and are called adenocarcinomas. Other types of prostate cancers include transitional cell carcinomas, small cell carcinomas and sarcomas. All of our prostate cases were adenocarcinomas so our study is based on adenocarcinomas of the prostate.

Risk Factors For American Males

Although the exact cause of prostate cancer is not known, several well-established risk factors have been identified:

- Age - risk increases after age 50, especially after age 65
- Race/Ethnicity - occurs more often in African-American men
- Family history - having a brother or father or several affected relatives increases risk

Prevention

Currently, there is no way to prevent prostate cancer. Drugs such as finasteride (Proscar) and dutasteride (Adovart), 5-alpha-reductase inhibitors which inhibit prostate growth, and are currently used to treat BPH. These drugs may reduce prostate cancer risk according to preliminary clinical trial results. Proscar is also used in a lower dose form, known as Propecia, which is currently used to treat male pattern baldness. However, not all physicians agree on the benefits of these drugs for reducing prostate cancer risk. The results of the clinical trials will become clearer over the next few years.

Signs and Symptoms

Usually there are no signs or symptoms of early prostate cancer. Some men with advanced disease may experience the following:

- More frequent urination
- Loss of bladder control
- Blood in urine
- Urine flow is weak or interrupted
- Inability to start or stop urine flow
- Pain in pelvis, spine, ribs, and/or hips
- Erectile dysfunction
- Numbness or weakness in feet or legs

Screening and Diagnostic Methods

The American Cancer Society does not recommend routine testing for prostate cancer. The ACS supports discussion between the patient and his physician or other health care professional on the potential benefits and limitations of early detection prostate testing. According to the ACS, discussion should include an offer of PSA and DRE annually beginning at age 50 for men at average risk and with a life expectancy of at least 10 years. For men at high risk for prostate cancer, this discussion should take place starting at age 45. Men with several first-degree relatives who had cancer at an early age (younger than 65) are at higher risk and should have this discussion take place starting at age 40.
The most common methods used to diagnose prostate cancer early are the prostate specific antigen (PSA) in the blood and the digital rectal exam (DRE). If either of these tests are abnormal, more testing should be done to determine if cancer is present. Transrectal ultrasound biopsies are done to obtain prostate tissue for diagnostic information.

Prostate-specific antigen (PSA)

PSA, a substance made by both normal and abnormal cancer cells in the prostate gland, is mostly found in semen but is normally present in blood in small amounts. Most men have a PSA level under 4 ng/ml. As the PSA level increases, the chance of having prostate cancer goes up. However, about 15% of men with a PSA under 4 will have prostate cancer on biopsy. About a 25% of the men with a PSA in the borderline range of 4-10 and 50% of the men with a PSA more than 10 will have prostate cancer.

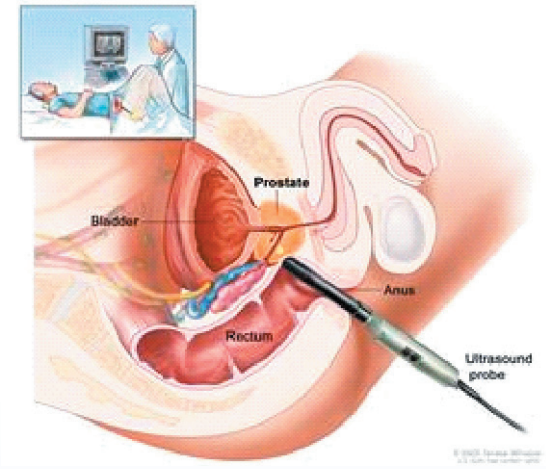
Digital Rectal Exam

Examination of the prostate gland is done by the physician, using a lubricated gloved finger in the rectum, to feel for bumps or hard areas. While it is less effective than the PSA in finding prostate cancer, it can help detect cancers in the presence of a low PSA. The ACS recommends that when prostate cancer screening is done, both the PSA and DRE should be done.

Transrectal Ultrasound (TRUS)

The TRUS uses sound waves from a rectal probe to create a computer-generated image of the prostate. It is not very useful by itself and is most commonly used during diagnostic prostate biopsies. TRUS is also useful in measuring the size of the prostate gland to determine PSA density and in determining treatment options. It may also be used as a guide during cryosurgery.

Fig. B - TRUS



Factors that Determine Treatment and Prognosis

Treatment and prognosis are influenced by the patient's age, stage of the cancer, PSA level, Gleason's score/ grade and other medical conditions that may contraindicate certain types of treatment.

Age – Most patients (66% at Mercy Clermont and 69% nationally) are diagnosed in the 6th and 7th decades of life. Some older patients may not tolerate the rigors of aggressive treatment.

Stage at diagnosis – Prostate cancer staging is based on the amount of tumor and the extent of invasion (T) and the presence or absence of nodal involvement (N) and distant metastasis (M). Most prostate cancers are diagnosed at stage 2 (77% nationally and 88% at Mercy Clermont).

PSA level – According to results of a Radiation Therapy Oncology Group (RTOG) clinical trial study, a pre-treatment PSA of greater than 20 ng/ml predicts a higher risk of prostate cancer death, a greater likelihood of distant failure and a greater need for hormonal therapy. The PSA is also useful during the work-up and treatment planning period. In combination with clinical exam findings and tumor grade from biopsy, PSA level is used in planning the need for further testing such as CT and bone scans.

- A very high PSA usually indicates that cancer has spread outside the prostate gland.
- Monitoring the PSA after surgery or radiation therapy helps determine if the treatment was successful in removing or destroying all of the cancer cells.
- When a "watchful waiting " approach is the chosen course, PSA levels can be used to monitor cancer growth and help determine if active treatment is needed.
- PSA levels during chemotherapy or hormonal therapy can help determine how effectively the treatment is working and whether a different form of treatment may be better.

Gleason's Score – Gleason score is the preferred grading method for prostate cancer and is a determining factor in treatment decisions. It has been shown to be the strongest predictor of death from prostate cancer, higher grades having a poorer prognosis.

Treatment of Prostate Cancer

Unlike most other cancers, after a diagnosis of prostate cancer, patients have many treatment options. Surgery, external beam radiation, radioactive seed implants (brachytherapy), and sometimes hormone therapy may be used for early-stage disease. Hormonal therapy, chemotherapy, radiation, or combinations of these treatments are used for more advanced disease. Hormone treatment may control prostate cancer for long periods by shrinking the size of the tumor, thus relieving pain and other symptoms. The patient and his physicians decide together on the appropriate course of treatment.

Watchful Waiting

Watchful waiting or active surveillance is an option for slow growing tumors or for elderly patients with multiple co-morbidities and health issues and a short life expectancy. This option is offered to older men in poor health to avoid the side effects of treatment. Patients are monitored closely and no treatment is given unless symptoms appear or the cancer shows signs of growing aggressively. PSA blood tests and a digital rectal exam (DRE) are usually completed every six months along with a biopsy of the prostate on a yearly basis.

Surgery

Prostatectomy is the surgical approach of treatment of prostate cancer. Patients with early stage disease are given the treatment option of a radical prostatectomy. This removes the entire prostate gland and some surrounding tissue. There are several methods used to perform a prostatectomy. The most common type is the radical retropubic prostatectomy. An incision is made in the abdomen and the prostate is cut out from the pubic bone. The urethra is sewed directly to the bladder so urine is able to flow. A nerve sparing radical prostatectomy is a modified version of the radical prostatectomy where the nerves that control erections are not removed.

In a laparoscopic prostatectomy, small incisions are made in the abdomen and the laparoscope, connected to a video camera, is inserted into the abdomen to perform the surgery using small instruments. There is less pain, minimal blood loss, and earlier recovery with this procedure.

Robotic assisted surgery, using the daVinci® System is similar to laparoscopic surgery because it allows the surgeon to operate through small ports instead of large incisions. Robotic-assisted surgery uses a computer enhanced surgical system to provide a 3-D view of the surgical field that can magnify the surgical field up to 15 times. Instruments are designed to mimic the movement of the human hands, wrist and fingers. This allows an extensive range of motion and more precision. Master controls allow the surgeon to manipulate the instruments for a more precise movement and maximum preservation of nerves, muscles, organs and other structures surrounding the prostate. The benefits of this procedure are reduced pain, fewer complications, shorter hospital stay and reduced recovery time.

Cryosurgical Ablation

Cryotherapy is another technique for the treatment of prostate cancer. It is a minimally invasive procedure that uses a precise freezing and thawing technique to destroy prostate cancer cells. Small needle shaped probes are inserted into the prostate using “real-time” transrectal ultrasonography imaging. After needle placement, temperature sensing thermocoupler needles are placed in key areas: the tumor, the space between the rectum and prostate and the urinary sphincter. The thermocoupler needles monitor the temperatures in these areas throughout the procedure. A warming catheter is placed through the urethra into the bladder and warm water is continually circulated through the catheter to protect the urethra from freezing. Argon gas is circulated through the needles, producing ice balls on the tips of the needles. The ice encapsulates cancerous tissue. After freezing cycle is complete the physician thaws the ice. The freeze-thaw cycle is completed twice. There is the risk of impotency with this procedure due to the nerve bundles near the prostate being frozen.

Radiation Therapy

Radiation therapy is frequently the choice of treatment for prostate cancer. There are two types of radiation therapy: external beam radiation and brachytherapy. Radiation therapy is local treatment that is aimed directly at the tumor. Unfortunately, healthy cells may be damaged by the radiation along with cancer cells since treatment must often pass through normal tissue. However, normal cells have the ability to repair themselves.

External beam radiation is the most common form of radiation. Tumor localization is crucial in the administration of external beam radiation. A simulation is performed with treatment planning to locate tumor volume. With the use

of scans and treatment planning software the precise location to aim radiation is determined. There are several forms of external beam radiation: stereotactic radiosurgery (Gamma Knife®), high dose three dimensional radiation therapy (HD3D), intensity modulated radiation therapy (IMRT), and intraoperative radiation therapy (IORT). These types of focused- beam therapies minimize damage to nearby tissue and structures. The Calypso® 4D Localization System™ is now available for use in the treatment of prostate cancer. It works like a GPS system to determine the exact location and movement of the prostate during treatment.

Brachytherapy is radiation in the form of radioactive pellets that are implanted into the prostate. In most cases the pellets are placed in the prostate permanently. The pellets contain radioactive iodine or palladium. Treatment is planned to determine placement of the seeds in a manner that will achieve the required dose of radiation.

Hormone Therapy

Hormone therapy is used in the treatment of prostate cancer. This therapy alters the body’s hormone balance to prevent certain cancers from growing. Hormone therapy can be accomplished with the use of drugs or surgery that remove hormone producing organs such as the testes. Drug therapy is the most common form of hormone therapy. Drugs used for prostate cancer are triptoreline (Trelstar), leuprolide (Lupron, Eligard, Vantas), and goserelin (Zoladex). These drugs block testosterone to slow the prostate cancer’s rate of growth. Anti-androgens such as flutamide (Eulexin) bicautamide (Casodex) and nilutamide (Nilandron) work by preventing the body from using testosterone. Hormone therapy does not cure prostate cancer. It is used to delay progression of prostate cancer and to increase survival while maximizing quality of life.

Chemotherapy

Chemotherapy is not generally recommended as first course of treatment for prostate cancer, but it may be used to treat recurrent cases of advanced prostate cancer.

Other Treatment Types

Transurethral Resection of Prostate (TURP)

An incidental finding of cancer may be discovered during a TURP for urinary symptoms believed to be benign. TURP is a type of surgery that is done to treat an enlarged prostate (benign prostatic hyperplasia, or BPH). When the prostate gets bigger than normal, it may put pressure on the urethra and cause problems with urination. Surgery is done to make the prostate smaller by removing some pieces of it, which relieves the blockage. This reduces pressure on the urethra and generally gives relief from urinary symptoms.
The procedure is done by inserting a scope through the urethra into the bladder. The scope is a thin, lighted tube with lenses like a microscope. Fluid is put into the bladder to help the surgeon see the area to be removed and a scope with a heated wire loop is used to remove pieces of prostate tissue. The pieces of tissue are flushed out of the bladder and sent to the lab for tests. Sometimes the tissue examined is found to contain cancerous cells. When this occurs, further testing is needed to determine what treatment, if any, is needed. Sometimes TURP is used as palliative treatment for prostate cancer, which means it is done to relieve symptoms, not as a cure. This surgery may be used if you are having trouble urinating because of the cancer.

Palliative Treatment

When prostate cancer is diagnosed in late stage; the focus of treatment may be palliative. Palliative treatment can include surgery, radiation, hormone therapy, a combination of these, or simply consist of comfort measures alone. Comfort measures may also be appropriate for patients who are not candidates for treatment due to age, comorbidity and high-risk. The Palliative Care programs at Mercy Health Partners provide a wide range of services to our patients that cover the spectrum of physical, emotional, and practical needs.

Clinical Trials

Clinical trials for cancer treatment offer additional treatment options, including new drugs, new surgery or radiation therapy techniques, or even complementary or alternative medicines. Some trials study drugs that are already approved for one type of cancer to see if it works on a different type of cancer or works better when given a certain way or when combined with other treatments. Clinical trials provide access to treatment that is not otherwise available, and might be safer or more effective than current treatment options. When clinical trials show that a new treatment is better than the current treatment, the new treatment may become a standard treatment. All clinical trials are reviewed and approved by scientific panels to make sure they are ethical, safe, and at least as good as, and possibly better than, the standard and currently available treatments.

According to the American Cancer Society, the number one reason people give for not taking part in a clinical trial is that they didn't know the studies were an option for them. Before starting treatment, patients may want to think about taking part in a clinical trial. Ideally, the patient, family, and health care team should be involved in the decision on choosing the most appropriate cancer treatment.

Treatment Comparison to National Cancer Database

Prostate Cancer- Diagnosed 2006

Treatment by Stage Comparison - NCDB vs Mercy Hospital Clermont

Treatment Type	NCDB Stage 1	HOSP Stage 1	NCDB Stage 2	HOSP Stage 2	NCDB Stage 3	HOSP Stage 3	NCDB Stage 4	HOSP Stage 4	NCDB Stage Unknown	HOSP Stage Unknown
Surgery Only	56%	0%	36%	30%	58%	50%	11%	0%	29%	100%
Radiation Only	15%	0%	27%	26%	3%	0%	4%	0%	17%	0%
Radiation and Hormone	7%	0%	21%	14%	14%	0%	17%	0%	11%	0%
Hormone Therapy only	2%	0%	4%	2%	2%	0%	29%	100%	9%	0%
Other Specified Therapy	5%	0%	5%	17%	21%	50%	26%	0%	7%	0%
No 1st Course Rx	14%	0%	9%	11%	2%	0%	13%	0%	26%	0%
% of Cases for Stage Group	2%	0%	77%	88%	7%	4%	6%	4%	9%	4%
Source: National Cancer Database										

At Mercy Hospital Clermont, 88% (46 patients) of our prostate cases were diagnosed at stage 2 and 2 patients each at stage 3 and stage 4. We had no patients diagnosed at stage 1. Nationally, 77% of the patients presented with stage 2 disease, 7% at stage 3 disease and 6% with stage 4 disease.

30% (17) of these stage 2 patients were treated with surgery only, compared to 36% nationally.

26% (12) of the stage 2 patients were treated with radiation only compared to 27% nationally.

14 % (6) of the stage 2 patients were treated with radiation and hormone therapy, compared to 21% nationally.

2% (1) of our stage 2 patients received only hormone therapy, compared to 4% nationally.

17 % (8) of our stage 2 patients received other specified therapy compared to 5 % nationally.

Our stage 3 cases one received surgery only and one received other specified therapy.

Our stage 4 cases both were treated with hormone therapy only.

The treatment received for prostate cancers diagnosed in 2006 at Mercy Hospital Clermont was comparable to the national course of treatment given for the same diagnosis and stage. Most cases were diagnosed at Mercy Clermont and treated elsewhere. Radiation treatments were divided into external beam and implants. 17 patients received external beam radiation and 7 patients were treated with radioactive seed implants.

Prostate Cancer Survival by Stage

National Cancer Database-Diagnosed 1998-2001

	Stage				
	1	2	3	4	Overall
At Diagnosis	100%	100%	100%	100%	100%
Year 1	96%	98%	99%	78%	97%
Year 2	92%	96%	97%	61%	94%
Year 3	89%	94%	94%	51%	91%
Year 4	84%	91%	92%	43%	88%
Year 5	80%	88%	89%	38%	85%

Mercy Hospital Clermont-Diagnosed 1998-2001

	Stage				
	1	2	3	4	Overall
At Diagnosis	100%	100%	100%	100%	100%
Year 1	100%	97%	88%	90%	96%
Year 2	100%	94%	88%	90%	93%
Year 3	100%	91%	75%	79%	87%
Year 4	100%	87%	75%	67%	82%
Year 5	100%	83%	63%	56%	77%

Comparison of Mercy Hospital Clermont to National Survival

The most recent data on relative survival for all men with prostate cancer indicates that five year survival for prostate cancer is almost 100%, 93% may survive 10 years and 79% for 15 years. It should be noted that 5 year survival is based on patients diagnosed and treated over 5 years ago (1998-2001 or 9 to 10 years ago, in this study). Patients recently diagnosed with prostate cancer are likely to have better survival.

Comparison of survival data for our patients diagnosed in 1998 through 2001 shows that our survival is similar to the national experience and that our overall survival closely compares to the nation's survival statistics with the exception of 5 year overall survival being 8% less than the national average. This maybe explained due to the elderly population that was initially treated.

Summary of Findings:

- Prostate cancer is the second highest cancer diagnosed at Mercy Clermont. This is due to our ability to complete ultrasound guided biopsies.
- Nearly all of prostate cancers presented with stage 2 disease. 70% of our Stage 2 prostate cases received surgery, radiation, or combination hormone and radiation. Most of these cases were treated at other facilities by robotic surgery, IMRT radiation, or radioactive seeds.
- Our treatment of prostate cases is similar to the nation.
- Our overall survival closely reflects national survival statistics.

Recommendations:

- Develop process to collect initial PSA and document in medical record to aid in diagnosis process.
- Continue to promote prostate cancer awareness through patient education and community outreach activities.
- Continue to promote and monitor stage-based treatment in accordance with national guidelines.

Community Outreach

Mercy Hospital Clermont and our Cancer Program, led by our Oncology Committee, are committed to making a difference in our community. We do this through several means, including increasing skin cancer awareness through participation in local Health Fairs, conducting Prostate Cancer Awareness Month activities, increasing awareness of clinical trials and participation in or referral to American Cancer Society programs.

American Cancer Society Programs and Screening Guidelines

- For information on American Cancer Society Programs and Screening Guidelines:
  Visit http://www.cancer.org or call 1-800-ACS-2345 (1-800-227-2345)

Informational websites

For information on prostate cancer and other cancers, call or visit:

- National Cancer Institute at 1-800-4-CANCER or www.cancer.gov
- People Living With Cancer: The official patient information website of the American Society of Clinical Oncology at www.cancer.net/portal/site/patient
- National Comprehensive Cancer Network at www.nccn.org/patients
- American Cancer Society - 1-800-ACS-2345 or www.cancer.org
- National Library of Medicine at www.nlm.nih.gov/medlineplus/healthtopics.html
- US TOO! International, Inc at www.ustoo.org)

Clinical Trial Information

For information on access to clinical trials in your area:

- Call the American Cancer Society, Clinical Trials Matching Service (a free, confidential program) at 1-800-303-5691 or visit www.cancer.org
- Visit the National Cancer Institute (NCI) website at: www.cancer.gov/clinicaltrials/search
- Visit the Coalition of Cancer Cooperative Groups at: www.cancertrialshelp.org

Illustrations

Figure A, page 8– Anatomy of the prostate. Source: American Cancer Society – http://www.cancer.org/docroot/CRI/content/CRI_2_4_1X_What_is_prostate_cancer_36.asp?sitearea=

Figure B, page 10 – Transurethral ultrasound biopsy of the prostate. Source: National Cancer Institute – http://www.med.nyu.edu/healthwise/article.html?hwid=ncicdr0000062965