INTRODUCTION

This National Cancer Institute (NCI) booklet contains important information about cancer of the prostate. Prostate cancer is the most common type of cancer in men in the United States (other than skin cancer). Of all the men who are diagnosed with cancer each year, more than one-fourth have prostate cancer.

This booklet mentions some possible causes of prostate cancer. It also describes symptoms, diagnosis, treatment, and follow-up care. It has information to help men with prostate cancer and their families cope with the disease.

Research is increasing our understanding of prostate cancer. Scientists are learning more about the possible causes of prostate cancer and are looking for new ways to prevent, detect, diagnose, and treat this disease. Because of this research, men with prostate cancer now have a lower chance of dying from the disease.

THE PROSTATE

The prostate is a gland in a man’s reproductive system. It makes and stores seminal fluid, a milky fluid that nourishes sperm. This fluid is released to form part of semen.

The prostate is about the size of a walnut. It is located below the bladder and in front of the rectum.
PROACTIVE IDENTIFICATION OF RADIATION THERAPY CASES

OBJECTIVE: The telephone conference provided an update to the freestanding Radiation Therapy centers administrators, registrars, abstractors, and contractors with an overview of the new procedures for identification of radiation therapy cases. The conference covered reporting requirements, details for case identification, details for the data elements required for case submission, details for the data submission via the FCDS IDEA (Internet data transmission protocol), and other related subjects.

Please refer to the PowerPoint slide presentation available on the FCDS Website (https://fcds.med.miami.edu/inc/rt.shtml) for background and additional information.

FDA APPROVES BEXXAR THERAPY

http://www.cancer.med.umich.edu/news/fdaapproval03.htm

FDA Approves BEXXAR therapy developed at U-M Cancer Center for treatment of non-Hodgkin's lymphoma.

The U.S. Food and Drug Administration announced on Monday, August 18, 2003, their approval of the cancer treatment Bexxar (tositumomab and iodine I 131 tositumomab), developed and tested at the University of Michigan Comprehensive Cancer Center.

Bexxar therapy should be coded as a radioisotope.
Survivorship and the Changing Role of Palliative Care

Globally, there are an estimated 22.4 million people living with a history of cancer and approximately 9 million cancer survivors in the United States. Advances achieved in the last part of the 20th century in the way cancer is diagnosed and treated have led to more people being cured of or living long periods of time free of their disease. With the number of cancer survivors on the rise, unique issues emerge. These include new medical, social, and political challenges to determine how to best reduce suffering and promote long-term quality of life-the "science" of living beyond cancer.

"We are beginning to view cancer not only as an acute disease to be eradicated, but as a chronic disease that people live with and don't die from," said Andrew von Eschenbach, M. D., director of the National Cancer Institute. Over the last decade, NCI has supported research by a growing number of doctors and scientists committed to understanding the needs of people with cancer. The NCI Office of Cancer Survivorship conducts and supports research that both examines and addresses the long- and short-term physical, social and economic effects of cancer and its treatment among pediatric and adult survivors of cancer.

Survivorship Research at NCI

The Office of Cancer Survivorship (OCS) was established in 1996 by the National Cancer Institute in recognition of the large number of individuals now surviving cancer for long periods of time. The OCS is dedicated to cancer survivors in the United States and addressing their unique and poorly understood needs. The OCS supports and promotes research that examines and addresses the long- and short-term effects of cancer and its treatment.

Survivorship Facts:

- It is estimated that there are 9.6 million cancer survivors in the United States. This represents approximately 3 percent of the U.S. population.
- 61 percent of survivors are currently over the age 65.
- Breast, Prostate, and Colon/Rectum, are the 3 most prevalent cancer sites.
- Approximately 14 percent (1,368,674) of the 9.6 million estimated cancer survivors were diagnosed over 20 years ago.
- The current average age of male and female cancer survivors are 69 and 64 respectively.
- Get more information on NCI's plans for cancer survivorship research at http://plan.cancer.gov/public/survivor.htm
surrounds the upper part of the urethra, the tube that empties urine from the bladder. If the prostate grows too large, the flow of urine can be slowed or stopped.

To work properly, the prostate needs male hormones (androgens). Male hormones are responsible for male sex characteristics. The main male hormone is testosterone, which is made mainly by the testicles. Some male hormones are produced in small amounts by the adrenal glands.

**PROSTATE CANCER: WHO'S AT RISK**

The causes of prostate cancer are not well understood. Doctors cannot explain why one man gets prostate cancer and another does not.

Researchers are studying factors that may increase the risk of this disease. Studies have found that the following *risk factors* are associated with prostate cancer:

- **Age.** In the United States, prostate cancer is found mainly in men over age 55. The average age of patients at the time of diagnosis is 70.

- **Family history of prostate cancer.** A man's risk for developing prostate cancer is higher if his father or brother has had the disease.

- **Race.** This disease is much more common in African American men than in white men. It is less common in Asian and American Indian men.

- **Diet and dietary factors.** Some evidence suggests that a diet high in animal fat may increase the risk of prostate cancer and a diet high in fruits and vegetables may decrease the risk. Studies are in progress to learn whether men can reduce their risk of prostate cancer by taking certain dietary supplements.

Although a few studies suggested that having a vasectomy might increase a man's risk for prostate cancer, most studies do not support this finding. Scientists have studied whether benign prostatic hyperplasia, obesity, lack of exercise, smoking, radiation exposure, or a sexually transmitted virus might increase the risk for prostate cancer. At this time, there is little evidence that these factors contribute to an increased risk.

**DETECTING PROSTATE CANCER**

A man who has any of the risk factors described in the "Prostate Cancer: Who's at Risk" section may want to ask a doctor whether to begin screening for prostate cancer (even though he does not have any symptoms), what tests to have, and how often to have them. The doctor may suggest either of the tests described below. These tests are used to detect prostate abnormalities, but they cannot show whether abnormalities are cancer or another, less serious condition. The doctor will take the results into account in deciding whether to check the patient further for signs of cancer. The doctor can explain more about each test.

- **Digital rectal exam** -- the doctor inserts a lubricated, gloved finger into the rectum and feels the prostate through the rectal wall to check for hard or lumpy areas.

- **Blood test for prostate-specific antigen (PSA)** -- a lab measures the levels of PSA in a blood sample. The level of PSA may rise in men who have prostate cancer, BPH, or infection in the prostate.

**RECOGNIZING SYMPTOMS**

Early prostate cancer often does not cause symptoms. But prostate cancer can cause any of these problems:

- A need to urinate frequently, especially at night;
- Difficulty starting urination or holding back urine;
- Inability to urinate;
- Weak or interrupted flow of urine;
- Painful or burning urination;
- Difficulty in having an erection;

(Continued on page 5)
• Painful ejaculation;
• Blood in urine or semen; or
• Frequent pain or stiffness in the lower back, hips, or upper thighs.

Any of these symptoms may be caused by cancer or by other, less serious health problems, such as BPH or an infection. A man who has symptoms like these should see his doctor or a urologist (a doctor who specializes in treating diseases of the genitourinary system).

DIAGNOSING PROSTATE CANCER

If a man has symptoms or test results that suggest prostate cancer, his doctor asks about his personal and family medical history, performs a physical exam, and may order laboratory tests. The exams and tests may include a digital rectal exam, a urine test to check for blood or infection, and a blood test to measure PSA. In some cases, the doctor also may check the level of prostatic acid phosphatase (PAP) in the blood, especially if the results of the PSA indicate there might be a problem.

The doctor may order exams to learn more about the cause of the symptoms. These may include:

• Transrectal ultrasonography -- sound waves that cannot be heard by humans (ultrasound) are sent out by a probe inserted into the rectum. The waves bounce off the prostate, and a computer uses the echoes to create a picture called a sonogram.

• Intravenous pyelogram -- a series of x-rays of the organs of the urinary tract.

• Cystoscopy -- a procedure in which a doctor looks into the urethra and bladder through a thin, lighted tube.

Biopsy

If test results suggest that cancer may be present, the man will need to have a biopsy. During a biopsy, the doctor removes tissue samples from the prostate, usually with a needle. A pathologist looks at the tissue under a microscope to check for cancer cells. If cancer is present, the pathologist usually reports the grade of the tumor. The grade tells how much the tumor tissue differs from normal prostate tissue and suggests how fast the tumor is likely to grow. One way of grading prostate cancer, called the Gleason system, uses scores of 2 to 10. Another system uses G1 through G4. Tumors with higher scores or grades are more likely to grow and spread than tumors with lower scores.

If the physical exam and test results do not suggest cancer, the doctor may recommend medicine to reduce the symptoms caused by an enlarged prostate. Surgery is another way to relieve these symptoms. The surgery most often used in such cases is called transurethral resection of the prostate (TURP or TUR). In TURP, an instrument is inserted through the urethra to remove prostate tissue that is pressing against the upper part of the urethra and restricting the flow of urine. (Patients may want to ask whether other procedures might be appropriate.)

STAGES OF PROSTATE CANCER

If cancer is found in the prostate, the doctor needs to know the stage, or extent, of the disease. Staging is a careful attempt to find out whether the cancer has spread and, if so, what parts of the body are affected. The doctor may use various blood and imaging tests to learn the stage of the disease. Treatment decisions depend on these findings.

Prostate cancer staging is a complex process. The doctor may describe the stage using a Roman number (I-IV) or a capital letter (A-D). These are the main features of each stage:

• Stage I or Stage A -- The cancer cannot be felt during a rectal exam. It may be found by accident when surgery is done for another reason, usually for BPH. There is no evidence that the cancer has spread outside the prostate.

• Stage II or Stage B -- The tumor involves more tissue within the prostate, it can be felt during a rectal exam, or it is found with a biopsy that is
done because of a high PSA level. There is no evidence that the cancer has spread outside the prostate.

- Stage III or Stage C -- The cancer has spread outside the prostate to nearby tissues.
- Stage IV or Stage D -- The cancer has spread to lymph nodes or to other parts of the body.

**TREATMENT FOR PROSTATE CANCER**

**Methods of Treatment**

Treatment for prostate cancer may involve watchful waiting, surgery, radiation therapy, or hormonal therapy. Some patients receive a combination of therapies. In addition, doctors are studying other methods of treatment to find out whether they are effective against this disease.

**Watchful waiting** may be suggested for some men who have prostate cancer that is found at an early stage and appears to be slow growing. Also, watchful waiting may be advised for older men or men with other serious medical problems. For these men, the risks and possible side effects of surgery, radiation therapy, or hormonal therapy may outweigh the possible benefits. Men with early stage prostate cancer are taking part in a study to determine when or whether treatment may be necessary and effective.

**Surgery** is a common treatment for early stage prostate cancer. The doctor may remove all of the prostate (a type of surgery called radical prostatectomy) or only part of it. In some cases, the doctor can use a new technique known as nerve-sparing surgery. This type of surgery may save the nerves that control erection. However, men with large tumors or tumors that are very close to the nerves may not be able to have this surgery.

The doctor can describe the types of surgery and can discuss and compare their benefits and risks.

In radical retropubic prostatectomy, the doctor removes the entire prostate and nearby lymph nodes through an incision in the abdomen.

In radical perineal prostatectomy, the doctor removes the entire prostate through an incision between the scrotum and the anus. Nearby lymph nodes are sometimes removed through a separate incision in the abdomen.

In transurethral resection of the prostate (TURP), the doctor removes part of the prostate with an instrument that is inserted through the urethra. The cancer is cut from the prostate by electricity passing through a small wire loop on the end of the instrument. This method is used mainly to remove tissue that blocks urine flow.

If the pathologist finds cancer cells in the lymph nodes, it is likely that the disease has spread to other parts of the body. Sometimes, the doctor removes the lymph nodes before doing a prostatectomy. If the prostate cancer has not spread to the lymph nodes, the doctor then removes the prostate. But if cancer has spread to the nodes, the doctor usually does not remove the prostate, but may suggest other treatment.

**Radiation therapy** (also called radiotherapy) uses high-energy x-rays to kill cancer cells. Like surgery, radiation therapy is local therapy; it can affect cancer cells only in the treated area. In early stage prostate cancer, radiation can be used instead of surgery, or it may be used after surgery to destroy any cancer cells that may remain in the area. In advanced stages, it may be given to relieve pain or other problems.

Radiation may be directed at the body by a machine (external radiation), or it may come from tiny radioactive seeds placed inside or near the tumor (internal or implant radiation, or brachytherapy). Men who receive radioactive seeds alone usually have small tumors. Some men with prostate cancer receive both kinds of radiation therapy.

For external radiation therapy, patients go to the hospital or clinic, usually 5 days a week for several weeks. Patients may stay in the hospital for a short time for implant radiation.

**Hormonal therapy** keeps cancer cells from getting the male hormones they need to grow. It is called systemic therapy because it can affect cancer cells throughout the body. Systemic therapy is used to treat cancer that has spread. Sometimes this type of therapy is used to try to prevent the cancer from coming back after surgery or radiation treatment.

There are several forms of hormonal therapy:
• **Orchiectomy** is surgery to remove the testicles, which are the main source of male hormones.

• Drugs known as **luteinizing hormone-releasing hormone (LH-RH)** agonists can prevent the testicles from producing testosterone. Examples are leuprolide, goserelin, and buserelin.

• Drugs known as **antiandrogens** can block the action of androgens. Two examples are flutamide and bicalutamide.

• Drugs that can prevent the adrenal glands from making androgens include ketoconazole and aminoglutethimide.

After orchiectomy or treatment with an LH-RH agonist, the body no longer gets testosterone from the testicles. However, the adrenal glands still produce small amounts of male hormones. Sometimes, the patient is also given an antiandrogen, which blocks the effect of any remaining male hormones. This combination of treatments is known as total androgen blockade. Doctors do not know for sure whether total androgen blockade is more effective than orchiectomy or LH-RH agonist alone.

Prostate cancer that has spread to other parts of the body usually can be controlled with hormonal therapy for a period of time, often several years. Eventually, however, most prostate cancers are able to grow with very little or no male hormones. When this happens, hormonal therapy is no longer effective, and the doctor may suggest other forms of treatment that are under study.

**THE RISK FACTORS FOR PROSTATE CANCER INCLUDE THE FOLLOWING:**

1. Men over 65.
2. Men who eat a high-fat diet, particularly saturated fats.
3. Men with a family history of prostate cancer (the risk doubles if a man's father had the disease, and if a brother had it, the risk triples); hereditary prostate cancer typically begins among a cluster of relatives before age 55.
4. African-Americans, who have a higher incidence than black men in Africa.
5. Possibly, men exposed to such chemicals as cadmium.
6. Occupation -- rubber industry; cadmium workers.

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(Continued from page 6)
References
SEER Program Code Man, 3rd Ed :pgs 102

Question
Grade, Differentiation--Lymphoma: What code is used to represent this field when the only grade/differentiation given is "low grade", "intermediate grade" or "high grade"?

Answer
Code the Grade, Differentiation field to 9 [cell type not determined, not stated or not applicable]. For lymphomas, do not code the descriptions "high grade," "low grade," and "intermediate grade" in the Grade, Differentiation field. These terms refer to categories in the Working Formulation and not to histologic grade for lymphoma histologies.

Generally, for histologies other than Non-Hodgkin lymphoma, the Grade, Differentiation field is coded to 2 [low grade], 3 [intermediate grade] and 4 [high grade] for most cancers.

References
ICD-O-3 :pgs 31

Question
Histology/Grade, Differentiation--Lymphoma/Leukemia: Do you agree with coding a diagnosis of Nasal NK/T cell lymphoma to 9719/38?

Answer
Yes. Code the Grade, Differentiation field to 8 [NK cell] rather than 5 [T-cell]. Code the Histologic Type to 9719/38 [NK/T-cell lymphoma, nasal and nasal-type with Cell indicator of NK (8)].

References
SEER Program Code Man, 3rd Ed :pgs 102, 104

Question
Grade, Differentiation--Lymphoma/Leukemia: What code is used to represent this field for a lymph node biopsy that reveals "well differentiated lymphocytic lymphoma" and a bone marrow biopsy that reveals "chronic lymphocytic leukemia/well differentiated lymphocytic lymphoma"?

Answer
Code the Grade, Differentiation field to 1 [Grade 1] for both of these cases because there is no mention of T-cell, B-cell, null cell, or NK cell involvement. Both cases have a pathologic description of well differentiated, not the descriptors "high grade," "low grade," or "intermediate grade" which must be ignored when coding grade for lymphomas.

For lymphomas, you cannot code the descriptions "high grade," "low grade," and "intermediate grade" in the Grade, Differentiation field because these terms refer to categories in the Working Formulation and not to histologic grade. However, you can code terms such as "well differentiated", "moderately differentiated" and "poorly differentiated" for lymphoma histologies.

References
SEER Program Code Man, 3rd Ed :pgs 104

Question
Grade, Differentiation--Bone Marrow: Can we use the AJCC Cancer Staging Manual, which lists myeloma as a B cell neoplasm under non-Hodgkin lymphomas, to code Grade, Differentiation field for myeloma to B-cell (code 6)?

Answer
No. Myeloma is a malignancy of plasma cells. Plasma cells are the daughters of B cells. So technically it would be correct to call them B cell, but that is not common usage.

Cell marker (phenotype) should be coded in the Grade, Differentiation field for only leukemias and lymphomas, as classified in the ICD-O-3. In the ICD-O-3, myeloma is listed under Plasma Cell Tumors, not Lymphomas. When a cell marker is coded for a leukemia/lymphoma it

(Continued on page 9)
should be coded only from pathology and/or cytology reports.

References

Question
EOD-Extension--Lymphoma: Would a lymphoma involving mesenteric and retroperitoneal nodes (both site code C77.2) be coded to extension 10 [Involvement of a single lymph node region; Stage I], based on the fact that while more than one "chain" is involved only one "region" is involved?

Answer
Code the EOD-Extension field to 20 [Involvement of two or more lymph node regions on the same side of diaphragm]. The AJCC lists mesenteric as a core nodal region, but does not list retroperitoneal lymph nodes as a part of this region, so retroperitoneal is a separate region.

The EOD staging scheme for lymphoma uses lymph node REGIONS as the criteria for assigning the extension code. Use the AJCC Cancer Staging Manual as the definitive source for classifying lymph node regions, not the ICD-O-3. If it is considered a separate LN region by the AJCC, then it is coded in the EOD as a separate region.

According to the AJCC curator, the nodal regions are defined in Kaplan's book on Hodgkin disease. Bilateral cervical, or axillary, or hilar, or pelvic, oringuinal nodes count as two regions. Mediastinal and para-aortic lymph nodes count as one region regardless of laterality as they are centrally located. A large mediastinal mass constitutes one region involved regardless of the size.

References
SEER EOD-88 3rd Ed ;pgs 180

Question
EOD Fields--Lymphoma: Was MALT Lymphoma [9715/3 (ICD-O-2) and 9699/3 (ICD-O-3)] inadvertently excluded from SEER EOD manual, top of page 180?

Answer
Yes. Use the scheme on page 180 for MALT lymphoma. The ICD-O-2 morphology code 9715 was omitted in error. It should have been added when the EOD was printed in 1998.

References
SEER EOD-88 3rd Ed ;pgs 180 (Note 1)

Question
EOD-Extension--Lymphoma: What code is used to represent this field for a lymphoma that involves the spleen and lymph nodes above the diaphragm (e.g., involvement of only the spleen below the diaphragm and cervical lymph nodes above the diaphragm)?

Answer
Code the EOD-Extension field to 32 [30 + involvement of the spleen; III S]. The spleen is counted twice (once as the spleen and a second time as a lymph node region below the diaphragm). As a result, the EOD-Extension field is coded to reflect involvement of lymph node regions on both sides of the diaphragm plus involvement of the spleen. See Note 1 on the EOD scheme that states "Any lymphatic structure is to be coded the same as a lymph node region."
**FLORIDA CANCER DATA SYSTEM INCIDENCE ABSTRACTING WORKSHOP**

The FCDS Incidence Abstracting Workshop will be held at the Double Tree Hotel in Miami, Florida on October 29-31, 2003.

*Registration fee: $100.00*

*For more information please contact Mayra Alvarez at 305-243-4603.*

15 CEU’s AWARDED BY AHIMA

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**EMORY UNIVERSITY TRAINING PROGRAMS**

**Principles and Practice of Cancer Registration, Surveillance, and Control**

This intensive and comprehensive training program in cancer registration, surveillance, and control will be held at the Holiday Inn Select Hotel and Suites, 2183 North Decatur Road, Decatur, Georgia 30033, located in the Atlanta-Emory University area on November 10-14, 2003.

**Cancer Case Abstracting, Staging, and Coding**

This comprehensive training program will be held at the Holiday Inn Express Hotel and Suites, 2183 North Decatur Road, Decatur, Georgia 30033, located in the Atlanta-Emory University area on November 17-21, 2003.

Complete details on the Emory courses are available on the training web site at [http://cancer.sph.emory.edu](http://cancer.sph.emory.edu) or contact Steven Roffers, PA., CTR at (404)-727-4535.
AMBULATORY CARE CENTERS CANCER REPORTING PROGRAM

On April 22, 2003, FCDS completed the matching of the 2001 outpatient discharges reported by Florida Ambulatory Patient Care Centers’ Finance-Billing/Medical Records Department to the Agency for Health Care Administration (AHCA). All records with principal or secondary diagnoses of cancer were linked to the FCDS database. Only records reported to AHCA but not matched to an FCDS record will appear on the lists titled “AHCA Ambi Unmatched Cancer Records Request.”

On April 28, 2003, FCDS mailed the “AHCA Ambi Unmatched Cancer Records Request” lists for 2001 to the Florida Ambulatory Patient Care Centers. The 2001 listings included patient encounters between January 1, 2001 and December 31, 2001. The centers received notification for cases that were never reported from any other source to FCDS.

Any facility with fewer than 35 cancer cases identified on the “AHCA Ambi Unmatched Cancer Records Request” list need only submit copies of patient records to FCDS for each of the cases on the list. A Batch Transmittal Form must be included with any chart copies submitted. The following reports (if available) from each patient record must be submitted by August 15, 2003: Face sheet, Summary, History & Physical, Operative Reports, Consultation Reports, Pathology Reports, Radiology Reports, Laboratory Reports and all other pertinent reports.

Any facility with greater than 35 cancer cases on the “AHCA Ambi Unmatched Cancer Records Request” list must determine whether or not each of the identified case records must be reported to the FCDS by referring to the FCDS reporting criteria outlined in Section I of the 2003 FCDS Data Acquisition Manual. If the case meets the FCDS reporting criteria, a full case abstract must be submitted to FCDS by August 15, 2003. All data submitted to FCDS must be via the encrypted Internet transmission, FCDS IDEA. For further information, visit the FCDS website at http://fcds.med.miami.edu. If the case does not meet the FCDS reporting criteria, the appropriate Disposition Code must be documented on the “AHCA Ambi Unmatched Cancer Records Request” list and returned to FCDS, the deadline was August 15, 2003.

QUARTERLY ACTIVITY STATUS REPORT

FCDS is not generating the third Quarterly Status Report for the period of July 1, 2003 through September 30, 2003 due to the fact some facilities are experiencing downloading delays that are beyond their control. The delays some facilities are experiencing have resulted from several software vendors not completing the download module in a timely fashion. We understand the data are being abstracted, but until the vendor download software is available, the data cannot be transmitted to FCDS.

FCDS is planning to generate and mail the fourth Quarterly Status Report for the period of October 1, 2003 through December 31, 2003 the first week of January 2004.

If you are still experiencing downloading difficulties, please contact your Field Coordinator immediately.

RADIATION THERAPY CENTERS CANCER CASE IDENTIFICATION PROGRAM

Beginning with the 2003 patient encounters, Radiation Therapy Centers are responsible for identifying and reporting all of their cancer cases to the Florida Cancer Data System using the FCDS-IDEA Single Entry or the File Upload modules. The deadline to submit the cases is June 30, 2004. Please log on to the FCDS website fcds.med.miami.edu or call Megsys Casuso Herna at (305) 243-2625 for additional information.