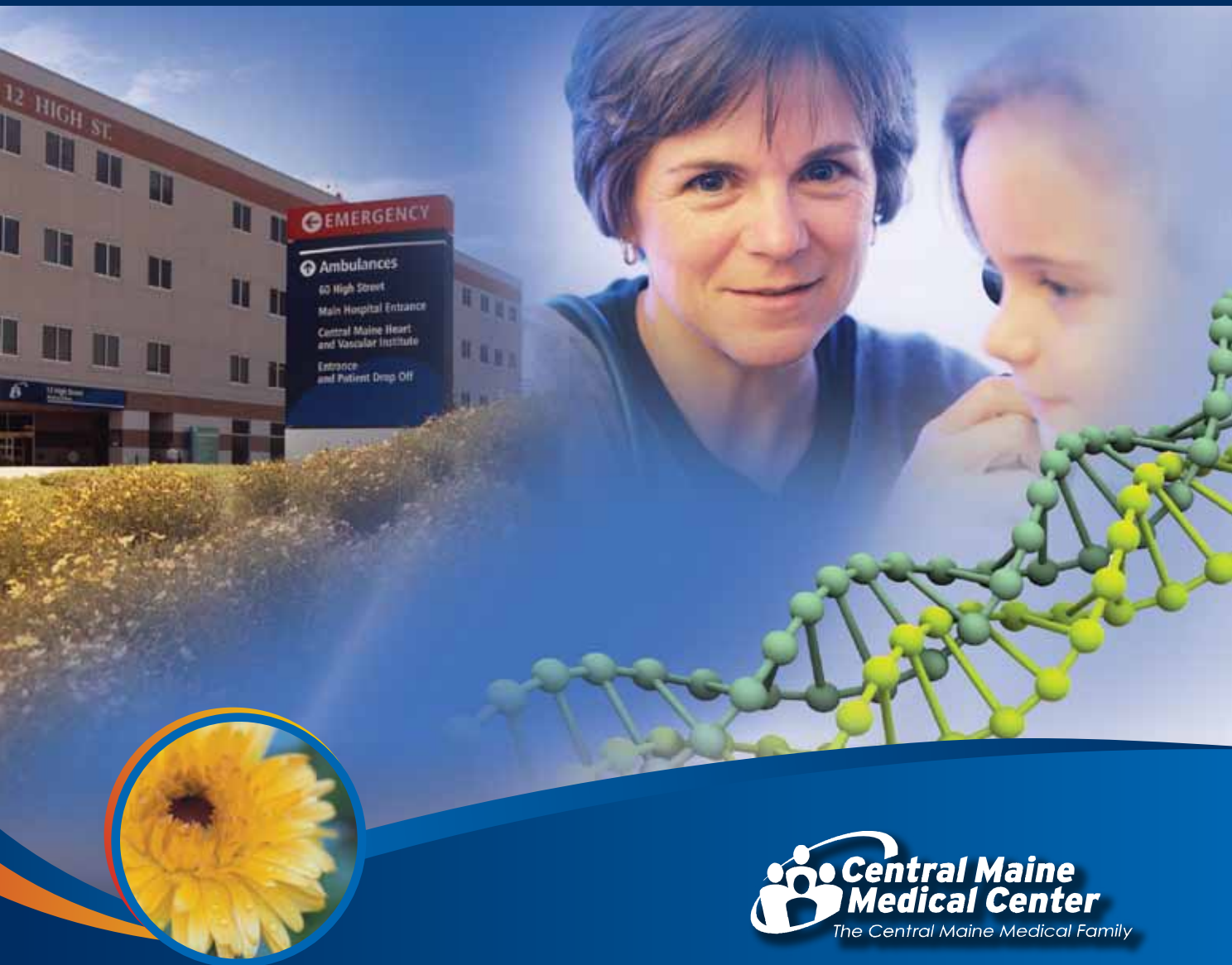

Central Maine Medical Center
The Central Maine Medical Family

Physician Update

Adjuvant radiation after radical prostatectomy benefits men with adverse pathological findings

By Sue Mandell, M.D.

Prostate cancer is the second most common cause of cancer death in American men with 217,730 new cases and 32,050 deaths in 2010.

While radical prostatectomy provides excellent control for clinically localized disease, based on published reports, approximately 33 percent of men undergoing surgery will have positive surgical margins, nine percent will have seminal vesicle invasion and 33 percent will have extracapsular extension. These adverse pathological findings along with Gleason score and initial PSA are independent predictors of biochemical recurrence.

Most patients who have undergone a radical prostatectomy are cured of their prostate cancer. But in those whose PSA fails to fall to undetectable levels or who have a PSA detectable and rising on two or more determinations, the NCCN guidelines recommend adjuvant or salvage radiation therapy. Salvage radiotherapy is defined as treatment given for suspected recurrent disease after a period of observation after surgery. Adjuvant radiotherapy refers to treatment directly after surgery in patients potentially without residual disease and with an undetectable PSA.

After surgery the PSA level should become undetectable within six weeks since the prostate tissue has been removed and the half-life of PSA is about three days. Therefore a detectable serum PSA suggests remaining prostate tissue or residual cancer. A detectable level is therefore suggestive of cancer persistence or recurrence. The American Urological Association defines biochemical recurrence following surgery as an initial serum PSA >/= 0.2ng/ml and a second confirmatory level of >/= 0.2ng/ml. This level has been chosen based on reviews of the risk of further PSA progression. From a radiation standpoint, the lower PSA value is felt to be consistent with a lower tumor burden and decreased likelihood of distant disease. Studies have confirmed the benefit of salvage radiation when a patient's PSA is lowest at the time of its initiation.

The background for offering and selecting candidates for adjuvant postoperative radiation stems from reported prospective trials. Prior to these trials only salvage radiation had been offered. The SWOG 8794 trial enrolled 425 men found to have extraprostatic cancer after radical prostatectomy. These men were randomized to either receive adjuvant radiation or surveillance. The results published after 12.6 years of follow up supported the use of adjuvant radiation to reduce the risk of PSA relapse and disease recurrence. A subset analysis also showed that a

higher risk factor of positive seminal vesicle involvement had an improved 10-year biochemical failure free survival with radiation compared to observation (36 percent to 12 percent). A recent review has demonstrated overall and metastatic free survival with radiation.

A second trial from Europe (EORTC) randomized 1,005 patients to observation versus immediate postoperative radiation with prognostic findings of extraprostatic extension and/or positive margins. At five years their data also supported the use of radiation for positive margins with a biochemical progression free survival of 78 percent versus 49 percent. No benefit was seen with negative margins even if extraprostatic extension was seen.

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A third study from Germany has reported on 268 patients with pT3 disease and undetectable PSA after surgery. Again postoperative radiation was found to improve the five-year biochemical progression free survival at 72 percent versus 54 percent for observation. However, it remains to be seen if there will be an overall survival benefit.

This retrospective review looks at men treated with postoperative radiation between the years 1995 and 2005 and assesses local control and overall survival. Forty-eight patients received postoperative radiation after a radical prostatectomy from 1995 to 2005. This is prior to the published prospective randomized trials noted above; SWOG 8794 (2006), EORTC 22911 (2006) and German ARO 96-02 (2009). However, based on earlier short-term follow up reports we noted a change in referral patterns to now include adjuvant radiation. Two patients were lost to follow up immediately after radiation was completed and were not evaluated. Details of the remaining 46 patients whose records were reviewed form the basis of this report. All these patients had at least five years of follow up.

Thirty patients received salvage radiation for a rising PSA after surgery, and 16 patients were given adjuvant radiation starting four to six months after surgery as planned therapy for an undetectable PSA. These were patients found to have pathologic high risk factors as noted above.

Based on prospective studies it is felt that adjuvant radiation after a radical prostatectomy is most likely beneficial in men with adverse pathological findings: positive margins, seminal vesicle invasion, and/or extracapsular extension.

Volume of radiation treatment included 20 patients to the prostate tumor bed only, 12 patients had the pelvic nodal regions included, and the addition of hormones to the prostate tumor bed in 12 patients. Radiation dosage to the prostate tumor bed ranged from 6480cGy to 6660cGy. Pelvic nodes received 4500cGy when included.

Duration of radiation response in patients alive and well is five years or greater; patients who died of other causes had their prostate cancer controlled from 2.5 to six years; patients alive with disease are controlled with salvage hormonal therapy three to five years; and patients who died of prostate cancer failed quickly after therapy from two months to three years.

Based on prospective studies it is felt that adjuvant radiation after a radical prostatectomy is most likely beneficial in men with adverse pathological findings: positive margins, seminal vesicle invasion, and/or extracapsular extension. The latter factor is a questionable poor prognostic factor when margins are clear. For patients without these adverse prognostic features, reports suggest salvage radiation should be considered before the PSA exceeds 1.5ng/ml. Although the data from CMMC is retrospective, the results compare well to the five-year relapse free survival of other studies whether radiation was given for salvage or adjuvant treatment.

Sue Mandell, M.D., is medical director of radiation oncology at the Central Maine Comprehensive Cancer Center at Central Maine Medical Center in Lewiston.

Five physician specialists join Central Maine Medical Group

Physicians representing five different healthcare specialties have recently joined the Central Maine Medical Center Medical Staff and are practicing with the Central Maine Medical Group (CMMG).

CMMG is a multispecialty group practice that includes some 350 healthcare providers who see patients in more than 75 practice settings in 18 communities throughout central, western, and mid-coast Maine.

Joining the greater Lewiston-Auburn medical community in the past several months were specialists in cardiology, medical oncology, obstetrics-gynecology, plastic surgery, and sports medicine.

Central Maine Heart Associates

Nicholas H. Laffely, M.D., F.A.C.C., an interventional cardiologist, joined Central Maine Heart Associates.

Dr. Laffely recently served as a cardiologist and research fellow at Dartmouth-Hitchcock Medical Center, (DHMC), in Lebanon, N.H. He completed general and interventional cardiology fellowships at DHMC where he had admitting and interventional cardiology privileges prior to joining the Central Maine Heart and Vascular Institute's team.

A graduate of the University of Maine in Orono, Maine, he earned his medical degree at the Medical College of Wisconsin in Milwaukee. He completed a residency in internal medicine at Washington University/Barnes-Jewish Hospital. He also did metabolism and lipid research as a fellow at the Washington University School of Medicine in St. Louis, Mo.

Prior to entering medical school, he worked as a research associate at Genetics Institute in Cambridge, Mass.

He is certified in internal medicine and cardiovascular disease by the American Board of Internal Medicine. He is a fellow of the American College of Cardiology. He has passed the National Board of Echocardiography exam and is a member of the American Society of Echocardiography. He is also certified in nuclear cardiology by the Certification Board of Nuclear Cardiology, and in interventional cardiology by the American Board of Internal Medicine.

Dr. Laffely grew up in Brunswick and is one of nine children, most of which still call the communities of Brunswick, Topsham or Lisbon home. With strong personal and family ties to the area he made a concerted effort to return to Maine to practice cardiology. He now lives in Lisbon with his wife, Mary, and their son, Benjamin.

Central Maine Heart Associates provides patient care from offices at 60 High Street, Lewiston. The practice is also comprised of Robert Bender, D.O., Alan B. Langburd, M.D., Mark E. Lanzieri, M.D., Patrick J. Lawrence, M.D., Michael Lemieux, M.D., William J. Phillips, M.D.,

Brooke S. Ritvo, M.D., Richard S. Shulman, M.D., and Daniel A. Soroff, M.D., as well as physician assistants Jamie J. Dufour, Joseph D. Sala, and Jared Roy. The practice can be reached at 753-3900.

Central Maine Comprehensive Cancer Center

David C. Caldwell, M.D., a medical oncologist, is practicing with Hematology-Oncology Associates in Lewiston.

Prior to joining the Lewiston-Auburn medical community, he practiced for nearly 25 years with Danville Hematology and Oncology, Inc., in Danville, Va. For some 22 years he served as medical director of Danville Cancer Association, a non-profit organization committed to serving cancer patients in the Danville and Pittsylvania County area in Virginia. He was also medical director of Commonwealth Home Nursing and Hospice in Danville, Va., for 16 years.

A graduate of High Point University in High Point, N.C., he earned his medical degree from Wake Forest University School of Medicine in Winston-Salem, N.C.

He completed an internship and residency in internal medicine at University of Alabama Hospitals in Birmingham, Ala. He served a hematology and oncology fellowship at University of Iowa Hospitals, Iowa City, Iowa.

He is certified in both medical oncology and hematology by the American Board of Internal Medicine

He is a member of the American Medical Association, American College of Physicians, American Society of Clinical Oncology, and American Society of Hematology.

Hematology-Oncology Associates serves patients from offices at 12 High Street, Suite 205, in Lewiston, and at clinics in the region. The practice is also comprised of Nicholette L. Erickson, M.D., Trudi A. Chase, M.D., Daniel C. Rausch, M.D., and nurse practitioners Julie-Ann Booker and Gisele M. Castonguay. The practice can be reached at 795-2935.

Central Maine Obstetrics-Gynecology

Anne Merrick, D.O., an obstetrician-gynecologists, has begun her work with Central Maine Obstetrics-Gynecology at 12 High Street, Suite 200, in Lewiston.

Prior to joining the Lewiston-Auburn medical community, Dr. Merrick completed residency training at St. James Hospitals and Health Centers-Midwestern University (MWU) in Chicago. During her last two years of residency training, she served as chief administrative resident.

She was recognized by the MWU Department of Obstetrics and Gynecology for her work as an educator during 2007 and 2008. In 2009 she was presented the MWU College of Osteopathic Medicine's Class of 2010 Gold Foundation Humanism and Excellence in Teaching Award.

A graduate of Kent State University in Kent, Ohio, she earned her doctor of osteopathic medicine degree from Midwestern University-Chicago College of Osteopathic Medicine in Chicago.

She is a member of the American Osteopathic Association, American College of Osteopathic Obstetricians and Gynecologists, American Medical Association, and The Gold Humanism Honor Society.

She is practicing in association with Jonathan P. Commons, M.D., Thomas E Page, D.O., Moira A Shanahan, M.D., and Jennifer L. Weiner-Smith, M.D., certified nurse-midwives Jessie Anderson, Stephanie Larson, Jane Mills, and Cherylann Sarton, and nurse practitioners Barbara Gervais and Megan Dillman. Central Maine Obstetrics-Gynecology can be reached at 795-5770.

Central Maine Plastic Surgery

Charles E. Foley, M.D., a plastic surgeon, has joined Central Maine Plastic Surgery at 287 Main Street, Suite 302, in Lewiston.

Before joining the Lewiston-Auburn medical community, Dr. Foley practiced plastic surgery in Johnson City, Tenn., where he provided general plastic surgery services, including cosmetic, hand and reconstructive surgery. For six years he served as director of Tennessee's Division of Children's Special Services Craniofacial Team. He was also an associate professor of surgery at Quillen College of Medicine, East Tennessee State University, in Johnson City, Tenn. His professional experience includes practice at the University of Massachusetts Medical Center in Worcester, Mass.

Dr. Foley earned a bachelor's degree in mechanical engineering at the University of Connecticut in Storrs, Conn., and worked as an engineer for nearly 10 years. He continued working part-time as a consulting engineer while attending his first two years at the University of Connecticut School of Medicine in Farmington, Conn. As a medical student, he was recognized with a Connecticut Society of American Board Surgeons Award for Excellence in Surgery.

He completed general surgery residency training at the University of Connecticut Integrated Surgical Residency Program. He served a plastic surgery residency at the University of Massachusetts Medical Center. He is certified in general surgery and plastic surgery by the American Board of Surgery.

Central Maine Plastic Surgery's (CMPS) professional staff is also comprised of plastic surgeon Alan S. Harmatz, M.D., and physician assistant Sarah P. Greven. CMPS is a specialty practice of the Central Maine Medical Group and can be reached at 795-6543.

Central Maine Sports Medicine

Timothy B. McAteer, M.D., is now practicing with Central Maine Sports Medicine in Lewiston.

Dr. McAteer completed fellowship training in sports medicine at Maine Medical Center in Portland.

He is a graduate of the University of California in San Diego, where he was named an All-American swimmer. He earned his medical degree, and several academic awards, at the University of Nevada School of Medicine in Reno, Nev. He served a residency in family practice at Maine Medical Center, and in 2009 was named Resident Teacher of the Year.

He has participated in several healthcare-related research projects and drafted a chapter for a sports medicine reference book scheduled for publication later this year.

Dr. McAteer has completed various sports medicine educational programs and is a member of the American Medical Society for Sports Medicine, American College of Sports Medicine, New England American College of Sports Medicine, American Academy of Family Physicians, and American Medical Association.

He is certified by the American Board of Family Medicine.

His experience includes work as a physician for area high school and college sports teams, as well as at various athletic events, including the 2009 Lobsterman Triathlon and the 2008 and 2009 Beach to Beacon Road Race, both in Portland. During the 2008-2009 season he was team physician for the Portland Pirates.

Central Maine Sports Medicine is also comprised of Elizabeth Rothe, M.D., and Peter E. Sedgwick, M.D. The practice is located at Suite 201 in the Trolley Building, 77 Bates Street, Lewiston. The office can be reached at 795-8465.