
BACKGROUND: Most studies of treatment outcomes in men with localized prostate carcinoma have emphasized sexual, urinary, and bowel symptoms with the assumption that they have an impact on quality of life. However, very few studies have directly examined and compared the impact of these symptoms on overall and cancer specific quality of life. METHODS: The authors examined 783 incident cases of localized prostate carcinoma, diagnosed from 1993 to 1998, and 1928 age-matched healthy controls from the Health Professionals Follow-Up Study cohort. Information on frequency of ejaculation and urinary symptoms were collected before cancer diagnosis. After cancer diagnosis, the authors mailed a questionnaire including the Medical Outcomes Study Short Form-36 Health Status Survey (SF-36), the Cancer Rehabilitation Evaluation System-Short Form (CARES-SF), and the University of California at Los Angeles Prostate Cancer Index in 1998. RESULTS: Cases had slightly lower scores on most of the SF-36 scales and reported much more bother from sexual, urinary, and bowel symptoms compared with healthy controls. Among prostate carcinoma patients, bowel symptoms had the greatest negative impact on quality of life, followed by sexual and urinary symptoms. As expected, treatment-related symptoms were associated with the physical domains of quality of life, but psychosocial domains were just as strongly affected. CONCLUSIONS: Patients and health care providers need to consider the potential mental quality-of-life impacts associated with prostate carcinoma treatment symptoms when making treatment decisions. Even after patients have completed cancer treatment, significant health impairments may remain. Health care providers should continue to address the mental and physical well-being of prostate carcinoma patients in follow-up care.


PURPOSE: We evaluated the impact of localized prostate cancer treatment on general, cancer specific and symptom domains of quality of life for up to 5 years after diagnosis. MATERIALS AND METHODS: A total of 842 men from the Health Professionals Followup Study, diagnosed between 1993 and 1998, were included in cross-sectional analyses of quality of life associated with prostate cancer treatment. A subset of 146 men diagnosed after 1995 were followed prospectively. Quality of life was assessed with the Medical Outcomes Study Short-Form 36 Health Status Survey, Cancer Rehabilitation Evaluation System Short Form and University of California Los Angeles Prostate Cancer Index by mailed questionnaires. Primary treatment modality was taken from medical records and patient self-report. RESULTS: Significant treatment differences were observed in all quality of life measures, with the largest occurring in sexual, urinary and bowel symptoms. Bowel function was significantly worse in patients who received external radiation and brachytherapy compared with prostatectomy (p <0.05). Although they had better or equivalent urinary and sexual function (p <0.05), patients treated with external radiation, hormones or watchful waiting had lower generic quality of life scores in multiple domains compared with those who underwent prostatectomy. Patients who had brachytherapy had similar generic quality of life outcomes compared with prostatectomy in all domains. CONCLUSIONS: Our findings suggest that important differences in quality of life go beyond known physical symptoms associated with various prostate cancer treatment options, many of which involve making a trade-off. It is important for patients with prostate cancer and health care providers to consider these differences while making treatment decisions.


PURPOSE: We compare general and disease specific health related quality of life in men undergoing brachytherapy for early stage prostate cancer to those undergoing radical
prostatectomy and age matched healthy controls. MATERIALS AND METHODS: Cohorts consisted of 48 men treated with brachytherapy with and without pretreatment external beam radiation therapy (brachytherapy group), 74 who underwent radical prostatectomy (prostatectomy group) and age matched healthy controls from the literature. The RAND 36-item general health survey, University of California Los Angeles Prostate Cancer Index, American Urological Association symptom index, validated Cancer Interference with Life and Family Scales, and sociodemographic and co-morbidity questionnaires were completed 3 to 17 months after treatment. RESULTS: General health related quality of life did not differ greatly among the 3 groups. Urinary function (leakage) was worse in the brachytherapy group than in controls but better than in the prostatectomy group. Brachytherapy group patients had more irritative urinary symptoms and worse bowel function than controls. Sexual function and bother were worse in prostatectomy and brachytherapy groups than in healthy controls. Physical function, bodily pain, urinary function, and bother and American Urological Association symptom index scores improved with time after brachytherapy. Patients who underwent brachytherapy after external beam radiation performed worse in all general and disease specific health related quality of life domains compared to those who did not undergo pretreatment radiation therapy. CONCLUSIONS: At an average of 7.5 months after treatment the general health related quality of life of patients undergoing brachytherapy with and without pretreatment external beam radiation was similar to age matched controls, although urinary, bowel and sexual problems were reported. These problems appeared to improve during the first year after treatment. Much of the impairment in disease specific health related quality of life among patients undergoing brachytherapy may be attributed to pretreatment radiation.


PURPOSE: We describe the clinical and pathological outcomes of intraoperative frozen sections performed on the posterolateral prostate margins during nerve sparing radical prostatectomy.

MATERIALS AND METHODS: We developed a technique of bilateral nerve sparing, inking the posterolateral prostate margins and obtaining frozen sections. When tumor was seen on frozen section, the fascia and neurovascular bundle were widely excised before completing the vesicourethral anastomosis. We reviewed 142 radical retropubic prostatectomies performed by a single surgeon between 1992 and 1997. Patients were divided into group 1--nerve sparing procedure using our technique (48 patients), 2-- planned unilateral nerve sparing without frozen sections (46) and 3-- planned bilateral nerve sparing without frozen sections (48). Potency was measured implicitly by physician assessment and explicitly with the UCLA Prostate Cancer Index. Group comparisons were made for positive margins, biochemical recurrence and potency. Mean followup was 24.5, 43.8 and 39.4 months for groups 1, 2 and 3, respectively. RESULTS: Of the 48 group 1 patients 9 (18%) had adenocarcinoma in the frozen section specimen, prompting wide excision of the bundles. None of these patients had biochemical recurrence during a mean followup of 20.5 months. Both bundles were spared in the remaining 39 patients (82%). There was no difference in survival or time to biochemical recurrence between groups 1 and 2. Potency was significantly different between groups 1 and 2 (36 versus 13%, p = 0.001), even after age adjustment (p = 0.05). In contrast, potency did not differ between groups 1 and 3 (38 versus 40%). Preoperative stage, grade and prostate specific antigen level were similar among the 3 groups. CONCLUSIONS: We found a significant difference in potency rates adjusted for age between patients with and without frozen sections. Our results indicate that this technique can enhance the ability of the surgeon to monitor the nerve sparing procedure without compromising cancer control.

PURPOSE: This is a report of a prospective study of the male sling for treating stress urinary incontinence. MATERIALS AND METHODS: A total of 21 men underwent sling surgery. There were 2 titanium screws loaded with polypropylene suture placed in each descending pubic ramus through a 3.5 cm. perineal incision at the level of the bulbar urethra. A polypropylene mesh was placed over the urethra and tied to the bone anchors, adjusting sling tension to a compression pressure of 60 cm. water. Followup was done with the incontinence section of the University of California, Los Angeles/RAND Prostate Cancer Index. RESULTS: Mean followup was 12 months (range 5 to 21). Overall, incontinence was cured in 16 (76%) patients, substantially improved (stress urinary incontinence very small or small problem, 1 pad daily) in 3 (14%), somewhat improved (moderate problem-2 pads) in 1 and procedure failed (no improvement) in 1 (5%). The patients with stress urinary incontinence after undergoing transurethral prostatectomy were cured, as was the individual with myelomeningocele. Of the 18 patients with stress urinary incontinence after radical prostatectomy 13 were cured, including 1 of 2 who underwent previous artificial urinary sphincter placement and 2 of 3 adjuvant radiation. There was significant improvement in each survey question, and the total score improved from a mean plus or minus standard deviation of 65 +/- 11 preoperatively to 397 +/- 29 postoperatively (p <0.001). There was no retention, infection, erosion or de novo voiding dysfunction. CONCLUSIONS: This minimally invasive sling surgery has not been associated with any significant complication, and early results compare favorably with artificial urinary sphincter. By compressing only the ventral urethra the risk of urethral erosion and atrophy is reduced. Prior radiation or artificial urinary sphincter does not appear to be a contraindication to sling surgery.


BACKGROUND: Voiding and sexual function after treatment are major determinants of quality of life in prostate carcinoma patients. Erectile dysfunction, incontinence, and urinary symptoms, both obstructive and irritative, have a significant negative impact on patient quality of life. This prospective study was undertaken to evaluate voiding, sexual function, and their impact on patients with localized prostate carcinoma who were treated with radical retropubic prostatectomy (RP) and to compare these patients with patients who were undergoing hormonobrachytherapy with external beam radiotherapy (HBTC) and patients who were undergoing hormonobrachytherapy without external beam radiotherapy (HBT). METHODS: Patients treated for localized prostate carcinoma with either RP or interstitial palladium-103 (103Pd) HBTC or HBT were prospectively administered a voiding and sexual function questionnaire before any treatment was initiated and at posttreatment visits. Questionnaire components included the American Urological Association Symptom Score (AUASS) and specific items that addressed urinary control and sexual function from the University of California at Los Angeles Prostate Cancer Index. Questionnaire results were compiled, and differences among treatment groups were assessed over time. RESULTS: From January 1997 to November 1999, 127 consecutive patients were treated with either unilateral or bilateral nerve-sparing RP (42 patients), HBTC (40 patients) or HBT (45 patients) by 2 surgeons proficient in all procedures. Using the overall score and the obstructive subscale (OAUA) of the AUASS, the RP group showed a posttreatment decrease in scores compared with both HBTC and HBT groups. OAUA scores of HBTC and HBT groups were significantly greater than scores in RP patients over the course of the study. HBTC patients had increased irritative symptoms initially when compared with RP patients, and, although not statistically significant, the magnitude of the difference persisted over the course of the study. Total AUASS and subscale scores for the RP group returned to near baseline levels within 12 months. The use of incontinence pads was a criterion for urinary incontinence, and the proportion of patients returning to baseline continence was lower in RP patients over the course of the study. No notable differences in Voiding Bother (VB) scores were found. Initially RP
patients experienced worse Sexual Function (SF) scores; however, scores for RP patients changed over time and approached the levels seen in HBTC patients at 18 months. The Sexual Function Bother (SFB) scores also were higher initially in the RP group but then decreased to similar levels observed for HBTC patients by 18 months. None of the treatment groups returned to near baseline SF or SFB scores during the course of this study. CONCLUSIONS: Comparison of voiding function indicated that HBTC and HBT patients initially have more obstructive voiding symptoms, whereas urinary incontinence is initially worse in RP patients. Initially RP patients demonstrated worse SF and SFB scores, but RP patients returned to HBTC levels within 18 months.


PURPOSE: We determine the impact of nerve sparing techniques on quality of life after radical retropubic prostatectomy for prostate cancer. MATERIALS AND METHODS: The RAND/UCLA Prostate Cancer Index and several questions about surgical outcomes, including sexual function, were sent to 170 consecutive patients at least 1 year after radical retropubic prostatectomy. Statistical analysis was performed on data for the entire group as well as subgroups of patients after nerve sparing and nonnerve sparing surgery. RESULTS: Nonnerve sparing surgery was performed in 83 of 129 responders (nonnerve sparing group) and the remaining 46 were treated with unilateral nerve sparing surgery (nerve sparing group). Scores for sexual function, sexual bother, physical function and physical limitation domains were significantly better in the nerve sparing group. Spontaneous erectile activity was reported by 50% of nerve sparing group patients. Nerve sparing status did not affect urinary function, bowel function or disease outcome. CONCLUSIONS: Nerve sparing techniques have positive effects on quality of life and sexual function for patients undergoing radical retropubic prostatectomy.


PURPOSE: To describe patient-reported quality of life using a validated survey in a cohort of patients who are long-term survivors of definitive radiotherapy for T1-3N0 prostate cancer. METHODS AND MATERIALS: Survivors of a previously reported cohort of prostate cancer patients treated with staging pelvic lymphadenectomy and definitive radiotherapy between November 1974 and August 1988 were queried using a questionnaire incorporating the RAND 36-Item Health Survey and the University of California, Los Angeles Prostate Cancer Index. Responses were reviewed and analyzed. Of the 146 N0 patients, 88 have survived for 10 years postdiagnosis. Fifty-six (64%) of these patients were still alive with valid addresses and were mailed copies of the questionnaires, of which 46 (82%) responded. Median potential follow-up from date of diagnosis was 13.9 years, with a median age of responders of 80 years. RESULTS: The mean sexual function score was 15.4, with a bother score of 42. The mean urinary function score was 65, with a bother score of 61. The mean bowel function score was 72.6, with a bother score of 64.8. The amount of patient bother reported in the sexual category is similar to that previously reported for cohorts of prostate cancer patients undergoing radiotherapy or observation. This is despite the fact that sexual function was similar to that previously reported for patients postprostatectomy. Patient-reported function and bother scores in urinary and bowel categories were somewhat more severe than a previously reported radiotherapy cohort with shorter follow-up. CONCLUSIONS: With long follow-up, most patients who underwent radiotherapy for prostate cancer in the era described exhibit somewhat worse bladder, bowel, and erectile function than recently published controls without prostate cancer. In this cohort of older men with long follow-up, erectile function is similar to reported prostatectomy series. However, patient bother related to erectile function is similar to that of controls in earlier published
radiotherapy series. Worse urinary and bowel function may be due to progressive symptoms with aging and longer follow-up, or to the radiotherapy techniques performed during the era in question.


PURPOSE: Quality of life research in prostate cancer involves the use of many questionnaires and specific items that may be partly redundant. We examine dimensions of quality of life in prostate cancer in the hope of somewhat simplifying communication of basic information.

MATERIALS AND METHODS: We analyzed cross-sectional survey data on quality of life in patients with prostate cancer belonging to a Southern California HMO. Quality of life was assessed with the University of California, Los Angeles prostate cancer index. Scree plot and parallel analysis were used to identify factors for extraction and orthogonal (varimax) rotation to examine scale loadings. RESULTS: Four extracted factors explained a cumulative variance of 86%. The 8 physical and emotional scales loaded on 1 general factor explained 41% of the cumulative variance. Urinary function and bother, sexual function and bother, and bowel function and bother scales loaded on factors explained 16, 15 and 14% of the cumulative variance, respectively. CONCLUSIONS: The observation of only 1 general quality of life factor diverges from consistent previous observations of distinct physical and emotional factors in other types of patients, and the tight interaction of emotional and physical scales supports the vulnerability hypothesis, "with age the increasing interactions across dimensions of health leave a patient vulnerable in all when any is affected." The tight interaction of physical and emotional scales in these but not other patients opens the door theoretically to better evaluation of and targeting of health services for patients with prostate cancer.


PURPOSE: Many patients with urological disease do not speak English. In medical studies restricting patients to those who speak only English undermines efforts to understand disease because restrictions decrease efficiency of patient recruitment, and because language and culture are associated with variable outcomes. In Spanish speaking locations, such as South Florida, studies would suffer severe selection bias if patients were required to speak English. To allow grouping in future studies of English and Spanish speaking patients we examined the English-Spanish reliability of select instruments that measure health related quality of life in patients with urological disease. MATERIALS AND METHODS: We assembled available Spanish versions and translated English versions of questions regarding satisfaction, the American Urological Association symptom index, the University of California, Los Angeles Prostate Cancer Index and a pain inventory. We then examined English-Spanish reliability by asking bilingual men 50 years old or older to complete English and Spanish versions at the same sitting. A convenience sample was recruited from outpatients and volunteers at the Miami Veterans Affairs Medical Center and population based subjects living in largely Hispanic Hialeah, Florida. Reliability estimates were calculated with kappa coefficients for categorical data and intraclass correlation coefficients for quantitative data. RESULTS: A total of 100 subjects a median of 59 years old completed the questionnaire, including 55 born in Puerto Rico or Cuba, while the remainder were born at various sites throughout the Americas and Spain. Reliability estimates showed that kappa = > 0.81 for almost all items. For 2 items relating to health and social interactions reliability was poor, and stratification showed that poor reliability was primarily a feature of subjects in good health who are theoretically socially active. CONCLUSIONS: Almost all items tested have excellent English-Spanish reliability in a mixed sample of bilingual men. Nonreliability of 2 items relating to health and social interactions probably originates from the effect of language on perception, and invalidates English and Spanish grouping of these items. Because the sample
represents many dialects of Spanish, the translations tested may be transported to other cities. In studies that use these instruments investigators can reasonably group answers from English and Spanish speaking study subjects or study the effects of acculturation on quality of life.


PURPOSE: We measured health related quality of life in a population of normal older men for use as controls in studies of older men treated for prostate cancer. MATERIALS AND METHODS: A statistically valid, population based sample of older men without prostate cancer completed a validated quality of life questionnaire that addressed impairment in the physical, mental, urinary, bowel and sexual domains. General and disease targeted health related quality of life was measured by the RAND 36-Item Health Survey and University of California, Los Angeles Prostate Cancer Index, respectively. RESULTS: Overall approximately a third of normal older men reported some degree of urinary leakage, while a third claimed some degree of rectal dysfunction and almost two-thirds acknowledged significant difficulty with erection. CONCLUSIONS: Older men in a randomly selected, population based sample do not have perfectly normal urinary continence, bowel function or sexual potency. By collecting data before treatment and following subjects longitudinally investigators may ensure that health related quality of life changes are analyzed in the context of any impairment that may have been present at baseline. If a longitudinal study is not feasible, a control group of men who are similar in age and other demographic variables must be used.


OBJECTIVES: To measure the effect of treatment choice (pelvic irradiation [XRT] versus radical prostatectomy [RP] with or without nerve sparing) on sexual function and sexual bother during the first 2 years after treatment. METHODS: We studied sexual function and sexual bother in 438 men recently diagnosed with early-stage prostate cancer and treated with XRT or RP with or without nerve sparing. Outcomes were assessed with the University of California, Los Angeles Prostate Cancer Index, a validated health-related quality-of-life instrument that includes these two domains. To minimize the influence of other factors, we adjusted for age, comorbidity, general health, and previous treatment for erectile dysfunction. All subjects were drawn from CaPSURE, a national, longitudinal data base. RESULTS: Sexual function improved over time during the first year in all treatment groups; however, during the second year, sexual function began to decline in the XRT group. Older patients who received XRT showed substantial declines in sexual function throughout the 2 years, and older patients who underwent RP experienced a return of very low baseline sexual function. Sexual function was improved by the use of nerve-sparing procedures or erectile aids. Alterations in sexual bother were ameliorated by many factors, including age, general health perceptions, and sexual function. CONCLUSIONS: Patients undergoing XRT or RP with or without nerve sparing all showed comparable declines in sexual function during the first year after treatment for early-stage prostate cancer. However, in the second year after treatment, patients treated with XRT began to show declining sexual function; patients treated with RP did not.


OBJECTIVES: The need for accurate measures of health-related quality of life (HRQOL) in men treated for prostate cancer is of paramount importance because patients may survive for many years after their diagnosis. Hence, interest has increased in choosing treatments that optimize both the quality and quantity of life in patients with this disease. This study sought to develop and
evaluate a self-administered, multi-item, disease-specific instrument to capture the health concerns central to the quality of life of men treated for early stage prostate cancer. METHODS: After focus group analysis and pilot testing, the instrument was tested with a large retrospective, cross-sectional survey. Exploratory factor analysis and multitrait scaling analysis were used to facilitate the formation of six scales containing 20 disease-targeted items that address impairment in the urinary, bowel, and sexual domains. The psychometric properties of the new scales were assessed by measuring test-retest reliability, internal consistency reliability, and construct validity. Performance on the new scales was compared with scores on other established cancer-related health-related quality of life instruments. Two hundred fifty-five long-term survivors of prostate cancer treatment and 273 age-matched and ZIP code-matched comparison subjects without prostate cancer from a large managed care population in California were studied. Mean age was 72.7 years. In addition to the new scales, the RAND 36-Item Health Survey (SF-36) was used as a generic core measure, and a cancer-related health-related quality of life instrument (the Cancer Rehabilitation System-Short Form) was used to provide construct validity. RESULTS: For the new scales, test-retest reliability ranged from 0.66 to 0.93, and internal consistency ranged from 0.65 to 0.93. Disease-targeted measures of function and bother in the three domains correlated substantially with one another. Scale scores correlated well with related, established scales. Men undergoing prostatectomy or pelvic irradiation demonstrated the expected differences in performance on the disease-specific health-related quality of life scales when compared with each other or with comparison subjects. Age was inversely related to sexual and bowel function. CONCLUSIONS: The UCLA Prostate Cancer Index performed well in this population of older men with and without prostate cancer. It demonstrated good psychometric properties and appeared to be well understood and easily completed. The high response among patients suggests that these men especially are interested in addressing both the general and disease-specific concerns that impact their daily quality of life.


PURPOSE: We determine whether urologists caring for men with prostate cancer accurately captured the nuances of quality of life, as disclosed by patients in validated, self-administered health related quality of life instruments. MATERIALS AND METHODS: We analyzed information on 2,252 patients 42 to 95 years old enrolled in CaPSURE, a large, observational cancer of the prostate strategic urological research endeavor database, in which men with all stages of prostate cancer are followed quarterly with standardized validated written surveys to assess clinical parameters, symptoms and health related quality of life. At each visit urologists recorded Karnofsky performance status rating and the presence or absence of various symptoms, such as fatigue, pain and dysfunction in the sexual, urinary and bowel domains. Within 30 days of the visit patients independently completed self-administered health related quality of life instruments, including the RAND 36-Item Health Survey and University of California, Los Angeles Prostate Cancer Index, in which scores of 80 to 100 and 0 to 79 were interpreted as absence of impairment and moderate to severe impairment, respectively. Using chi-square analysis we compared symptoms, as recorded by the urologist, with health related quality of life impairment in relevant domains, as reported by the patient. RESULTS: Significant differences (p < or = 0.002) were noted between physician and patient assessment of clinical domains, such as physical, sexual, urinary and bowel function, fatigue and bone pain. In all domains urologists underestimated patient symptoms, causing health related quality of life impairment. CONCLUSIONS: In men with early stage and advanced prostate cancer physician ratings of patient symptoms do not correlate well with patient self-assessments of health related quality of life. Hence, urologists should attempt to elucidate more completely the components of patient quality of life after the diagnosis and treatment of prostate cancer.

PURPOSE: To determine the accuracy of patient recall of health-related quality of life (HRQOL) in men who have undergone radical prostatectomy for early-stage prostate cancer. PATIENTS AND METHODS: Patients enrolled onto a longitudinal, observational cohort study of HRQOL after radical prostatectomy for early-stage prostate cancer were asked to assess their baseline HRQOL before surgery. They were later asked to recall their baseline HRQOL at intervals of 7 to 37 months after surgery. The two views of baseline HRQOL (actual and recall) were compared. HRQOL was measured with established instruments (the RAND 12-Item Short-Form Health Survey and a validated short form of the University of California Los Angeles Prostate Cancer Index) that addressed impairment in the physical, mental, urinary, bowel, and sexual domains. RESULTS: Overall, recall was poor. Patients tended to remember their baseline HRQOL as being better than it actually was. This effect was particularly striking for urinary and sexual function. Greater education and younger age diminished this effect in some domains. The effect did not vary with time since surgery. CONCLUSION: Men undergoing radical prostatectomy for early-stage prostate cancer do not accurately recall their pretreatment HRQOL when asked several months or years later. This recall bias is constant throughout a period of 6 months to 3 years after surgery. By collecting data before treatment and observing subjects longitudinally, investigators can ensure that HRQOL changes are analyzed in the context of any impairment that may have been present at baseline. If a longitudinal study is not feasible, then great caution must be used if patients are asked to recall their pretreatment HRQOL.


PURPOSE: We determined the temporal course of patient return to baseline quality of life after treatment with radical prostatectomy for early stage prostate cancer. MATERIALS AND METHODS: After establishing a longitudinal observational database of men undergoing radical retropubic prostatectomy we used established, validated quality of life questionnaires (RAND 36-Item Health Survey and University of California, Los Angeles Prostate Cancer Index) to document changes in general and disease specific health related quality of life (HRQOL). We assessed 90 patients at baseline before surgery and then at 3-month intervals for 1 year postoperatively. Logistic regression was used to explore predictors of the return to baseline. RESULTS: After prostatectomy patients had a significant decrease in all domains of HRQOL. Return to baseline was rapid in the general and bowel domains with at least two-thirds to three-fourths of patients reaching pretreatment levels within 6 months of surgery. Return to baseline was slower in the urinary and sexual function domains with 61 and 31% of the men, respectively, reaching pretreatment levels by 1 year after surgery. Of those who reached baseline the average intervals for the bowel, sexual and urinary domains were 5, 6 and 7 months, respectively. Married and white patients were more likely to achieve a return to baseline HRQOL during year 1 postoperatively. However, education level was inversely associated with the likelihood of returning to baseline. CONCLUSIONS: During the year after radical prostatectomy for early stage prostate cancer patient quality of life steadily improved. By 3 months postoperatively 30 to 40% of the patients had already recovered baseline levels of physical, mental and social functioning, and by 6 months more than 70% had reached baseline in the general HRQOL domains. By 12 months after surgery 86 to 97% of the patients had returned to baseline levels in each domain. Each domain continued to improve throughout the year. For the patients who reached baseline general HRQOL during followup average recovery time was 5 to 6 months.

PURPOSE: We investigate the longitudinal recovery of quality of life after radical prostatectomy in men with localized prostate cancer. MATERIALS AND METHODS: We assessed the self-reported health related quality of life in 247 men undergoing radical prostatectomy for prostate cancer. Patients were assessed at baseline before surgery and postoperatively every 3 months for 1 year and then every 6 months for up to 48 months (median 30). We measured general and prostate specific health related quality of life with the RAND 36-Item Health Survey 1.0 SF-36 and University of California, Los Angeles Prostate Cancer Index. The Cox proportional hazards regression model was used to determine whether some patients were more likely than others to have a successful return to baseline functioning after treatment. RESULTS: In the SF-36 60% of patients reached baseline in all domains by 3 months. By 12 months, greater than 90% of patients reached baseline in all domains. Mean recovery time for these domains was about 4(1/2) months. The recovery of urinary function to baseline was 21% at 3, 56% at 12 and 63% at 30 months, respectively. About 80% of patients recovered to baseline urinary bother. In the urinary domains patients who recovered did so at an average of 7 to 8 months, and there was little additional recovery after 18 months. By 1 year postoperatively, approximately a third of patients reached baseline sexual function and about half recovered to baseline sexual bother. At 2 years postoperatively, sexual function and bother returned to baseline in 40% and 60% of patients, respectively. Mean recovery time was about 11 months for sexual function and about 9 months for sexual bother. There was little additional recovery in the sexual domains after 18 to 24 months. In the bowel domains more than two thirds of patients returned to baseline by 3 months, and greater than 90% recovered by 12 months, with a mean recovery of 4.8 months. Unmarried men were more likely than those married to regain baseline sexual function (p = 0.03) and urinary function (p = 0.07). Patients who were 65 years and older were more likely than those younger to return to baseline sexual bother (p = 0.03). There were trends that showed patients with higher incomes as well as those who were white were more likely to recover baseline scores for urinary function and the physical component summary. Another trend suggested that men with a higher education were less likely to regain urinary function (p = 0.08). CONCLUSIONS: Most quality of life recovery occurs early after radical prostatectomy, except in several domains, including urinary and sexual, which continue to improve even beyond 2 years postoperatively. Patients should be encouraged that recovery may continue for months or years after surgery.


OBJECTIVE: To assess health-related quality of life (HRQOL) in men with erectile dysfunction. DESIGN: Descriptive survey with general and disease-specific measures. The instrument contained three established, validated HRQOL measures, a validated comorbidity checklist, and sociodemographics. The RAND 36-Item Health Survey 1.0 (SF-36) was used to assess general HRQOL. Sexual function and sexual bother were assessed using the UCLA Prostate Cancer Index. The marital interaction scale from the Cancer Rehabilitation Evaluation System Short Form (CARES-SF) was used to assess each patient's relationship with his sexual partner. SETTING: Urology clinics at a university medical center and the affiliated Veterans Affairs (VA) Medical Center. PARTICIPANTS: Thirty-five (67%) of 54 consecutive university patients presenting for erectile dysfunction and 22 (42%) of 52 VA patients who were awaiting a previously prescribed vacuum erection device participated. MAIN RESULTS: The university respondents scored slightly lower than population normals in social function, role limitations due to emotional problems, and emotional well-being. The VA respondents scored lower than expected in all eight domains. Scores for the VA population were significantly lower than those for the university population in physical function, role limitations due to physical problems, bodily pain, and social function. A significant correlation was seen between marital interaction and sexual function (r = .33, p = .01) but not between marital interaction and sexual bother (r = -.15, p = .26) in the total sample. Sexual function also correlated significantly with general health
perceptions ($r = .34, p = .01$), role limitations due to physical problems ($r = .29, p = .03$), and role limitations due to emotional problems ($r = .30, p = .03$). Sexual bother did not correlate with any of the general HRQOL domains. Affluent men reported better sexual function ($p = .03$).

CONCLUSIONS: The emotional domains of the SF-36 are associated with more profound impairment than are the physical domains in men with erectile dysfunction. Erectile dysfunction and the bother it causes are discrete domains of HRQOL and distinct from each other in these patients. With increased attention to patient-centered medical outcomes, greater emphasis has been placed on such variables as HRQOL. This should be particularly true for a patient-driven symptom, such as erectile dysfunction.


PURPOSE: We measure the effect of time on urinary function and bother during the first 2 years following treatment for early stage prostate cancer. MATERIALS AND METHODS: We studied urinary function and bother in 564 men recently diagnosed with early stage prostate cancer and treated with radiotherapy or radical prostatectomy with or without nerve sparing. Outcomes were assessed with the UCLA Prostate Cancer Index, which is a validated, health related quality of life instrument that includes these 2 domains. To minimize the influence of other factors we adjusted for age, co-morbidity, general health, pad use, anticholinergics or procedures for urethral stricture. All subjects were drawn from the Cancer of the Prostate Strategic Urologic Research Endeavor (CaPSURE), which is a national longitudinal database. RESULTS: Urinary function improved with time during the first year after surgery but remained fairly constant during year 2. Urinary function remained stable throughout the 2 years after radiation. Urinary bother was worse after radiation throughout the 2 years, although it improved markedly by the end of year 1. Age, ethnicity and co-morbidity did not impact urinary function or bother but being married did have an advantage. CONCLUSIONS: Patients undergoing surgery or radiation showed different longitudinal profiles of urinary function and bother during the first 2 years after treatment.


The authors evaluate the temporal progression of health-related quality of life (HRQOL) in men treated hormonally with surgical or medical castration, as well as to see if either treatment would be associated with a greater impact on patients' quality of life. The authors assessed general and prostate-targeted HRQOL with two self-administered, validated instruments (the RAND 36-Item Health Survey and the UCLA Prostate Cancer Index) in a longitudinal, observational study of 63 men newly diagnosed with metastatic prostate cancer and treated with bilateral orchiectomy or combined androgen blockade with leuprolide and flutamide. Patients completed the two HRQOL instruments by mail at baseline and at 3- and 6-month intervals after initiation of treatment. Significant improvements were demonstrated in 10 of 14 HRQOL domains for all men during the first 12 months. These include all eight of the general HRQOL domains and the disease-specific domains that address bowel function. The authors identified no differences in any of the general or prostate-targeted HRQOL domains when comparing men who underwent orchiectomy versus combined androgen blockade. Patients with metastatic prostate cancer can be informed that general and prostate-specific HRQOL will be similar, regardless of whether they choose medical or surgical castration, and that health status will likely remain stable or improve during the initial months of treatment. Physicians must make patients aware of both the quantity and quality of life they can expect with advanced prostate cancer, and must actively involve them in their treatment decisions.

Treatment for prostate cancer has a significant impact on health-related quality of life (HRQOL). We examined HRQOL in a cohort of men receiving androgen deprivation therapy (ADT) and a cohort who opted for surveillance. The cohort consisted of 1178 newly diagnosed patients from the Cancer of the Prostate Strategic Urologic Research Endeavor (CaPSURE) database (a national longitudinal registry of patients with prostate cancer). General and disease-specific HRQOL outcomes were measured with validated instruments (the SF-36 and University of California at Los Angeles [UCLA] Prostate Cancer Index) at study entry and quarterly thereafter. Individuals were grouped by initial treatment: ADT, surveillance, radical prostatectomy, or radiation therapy. There were 106 men who selected surveillance, 167 men receiving ADT, 351 men treated by radical prostatectomy, and 75 men receiving radiation therapy in the first year after diagnosis. Mean age at diagnosis was 73 years of age, with surveillance patients the oldest and radical prostatectomy patients the youngest. Men receiving ADT reported poorer urinary and sexual function and a higher rate of urinary and sexual bother than patients selecting surveillance. ADT and surveillance HRQOL scores remained low (ie, poorer function) in the year after treatment, whereas men undergoing radical prostatectomy showed improvement in these scales. Patients who received ADT had reduced energy, poorer sexual and urinary function, and were more bothered by their urine and sexual function than patients undergoing other treatments, except surveillance. Longer follow-up time after start of ADT and surveillance is needed to discern the impact of comorbidities on HRQOL.


This paper reviews the reliability and validity of an instrument for assessing health-related quality of life (HRQOL) in CaPSURE (Cancer of the Prostate Strategic Urologic Research Endeavor), an observational database of men with biopsy-confirmed prostate cancer. The questionnaire includes the RAND 36 item Health Survey 1.0, the UCLA Prostate Cancer Index and items measuring self-esteem and the impact of prostate cancer in general and on the family. The reliability and validity of this instrument are reported for a group of 2,382 men enrolled in CaPSURE. Individuals complete HRQOL questionnaires at enrollment and quarterly thereafter. The subscales of the instrument resulted in a high internal-consistency reliability across all subscales (range = 0.75-0.94). The test-retest reliability was good with the exception of the comparative health item (intraclass correlation coefficient (ICC) = 0.55). The concurrent validity data included moderately strong associations with subscales of similar concepts and the ability to distinguish between patients who are known to be different--newly diagnosed (within 6 months) and patients diagnosed and treated an average of 3 years ago. Overall, this instrument demonstrated good reliability and validity and supported the need for incorporating HRQOL as a component of outcomes assessment in the management of patients with prostate cancer.


OBJECTIVES: Treatment for prostate cancer has a significant impact on health-related quality of life (HRQOL). We examined HRQOL immediately after diagnosis and treatment and 1 and 2 years after treatment for a cohort of men with early and late-stage prostate cancer. METHODS: We studied 692 men enrolled in CaPSURE, a large national observational data base of patients with prostate cancer. General and disease-specific HRQOL were measured with validated instruments at study entry and quarterly thereafter. Individuals were grouped by initial treatment: radical prostatectomy, radiotherapy, hormonal therapy, and observation (ie, no treatment in first year). Trends in HRQOL scores were evaluated immediately after treatment through 2 years, adjusting for age and length of follow-up. RESULTS: Patients who underwent radical
prostatectomy demonstrated statistically significant increases in functioning in general and in disease-specific components during the year after treatment when compared with scores immediately after treatment. Patients receiving radiotherapy and hormonal therapy had significant improvements in patient reports of health change during the year. CONCLUSIONS: Patients undergoing radical prostatectomy have low HRQOL scores just after treatment in almost all general and disease- specific areas, but at 1 year there is a sharp improvement. Patients undergoing observation, radiotherapy, or hormonal therapy remain stable over time. All treatment groups continue to have decrements in sexual function.


PURPOSE: The current study was undertaken within the framework of a screening trial to compare the health-related quality-of-life (HRQOL) outcomes of two primary treatment modalities for localized prostate cancer: radical prostatectomy and external-beam radiotherapy. PATIENTS AND METHODS: We conducted a prospective longitudinal cohort study among 278 patients with early screen-detected (59%) or clinically diagnosed (41%) prostate cancer using both generic and disease-specific HRQOL measures (SF-36, UCLA Prostate Cancer Index [urinary and bowel modules] and items relating to sexual functioning) at three points in time: t1 (baseline), t2 (6 months later), and t3 (12 months after t1). RESULTS: Questionnaires were completed by 88% to 93% of all initially enrolled patients. Patients referred for primary radiotherapy were significantly older than prostatectomy patients (63 v 68 years, P <.01). Analyses (adjusted for age and pretreatment level of functioning) revealed poorer levels of generic HRQOL after radiotherapy. Prostatectomy patients reported significantly higher (P <.01) posttreatment incidences of urinary incontinence (39% to 49%) and erectile dysfunction (80% to 91%) than radiotherapy patients (respectively, 6% to 7% and 41% to 55%). Bowel problems (urgency) affected 30% to 35% of the radiotherapy group versus 6% to 7% of the prostatectomy group (P <.01). Patients with screen-detected and clinically diagnosed cancer reported similar posttreatment HRQOL. CONCLUSION: Prostatectomy and radiotherapy differed in the type of HRQOL impairment. Because the HRQOL effects may be valued differently at the individual level, patients should be made fully aware of the potential benefits and adverse consequences of therapies for early prostate cancer. Differences in posttreatment HRQOL were not related to the method of cancer detection.


The objective of this study was to examine the effect of socioeconomic status and insurance status on health-related quality of life (HRQOL) outcomes in men with prostate cancer. The design was a retrospective cohort study using multiple sites, including both academic and private practice settings. A cohort of 860 men with newly diagnosed, biopsy- proven prostate cancer of any stage was identified within CaPSURE, a longitudinal disease registry of prostate cancer patients. HRQOL was assessed with validated instruments, including the RAND 36-item Health Survey (SF-36) and the UCLA Prostate Cancer Index. Covariates included insurance status, education level, annual income, age, stage, comorbidity, Gleason grade, baseline PSA, marital status, ethnicity and primary treatment. HRQOL measurements were taken at 3-6-month intervals. Analysis of covariance was used to determine the effect of SES and insurance status on the HRQOL domains at baseline and over time. Patients with lower annual income had significantly lower baseline HRQOL scores in the all of the domains of the SF-36 and four of eight disease-specific HRQOL domains. No relationship was seen between annual income and HRQOL outcomes over time. Conversely, health insurance status was associated with HRQOL over time, but not at baseline. Health insurance status appears to have a unique effect on general
HRQOL outcomes in men after treatment for prostate cancer. This study confirms the commonly held belief that patients of lower SES tend to have worse quality of life at baseline and following treatment for their disease. These findings have important ramifications for clinicians, researchers and policy makers.


PURPOSE: Cryotherapy has emerged as a promising salvage therapy option for treatment of locally recurrent prostate cancer after initial therapy. In this retrospective study we evaluate patient quality of life after salvage cryotherapy and correlate complications impairing quality of life with specific cryotherapy treatment parameters. MATERIALS AND METHODS: A modified UCLA Prostate Cancer Index measuring health related quality of life was sent to 150 patients who underwent salvage cryotherapy between July 1992 and April 1995. We evaluated the relationships among incontinence, pain, impotence, sloughing of tissue and problematic voiding symptoms, and cryotherapy treatment parameters, including use of a urethral warming catheter, number of cryotherapy probes and number of freeze-thaw cycles. We also evaluated patient overall degree of satisfaction with the procedure. RESULTS: Of 150 surveys 112 (74%) were returned. Mean followup was 16.7 months (range 0.5 to 31.5). Treatment without an effective urethral warming catheter was highly associated with urinary incontinence (p<0.003), perineal pain (p<0.001), tissue sloughing (p<0.003) and American Urological Association symptom score greater than 20 (p<0.004). Impotence was higher in the double freeze-thaw cycle group (p<0.05). Overall satisfaction with cryotherapy was 33%. CONCLUSIONS: Quality of life may be compromised by urinary incontinence, impotence, tissue sloughing, problematic voiding symptoms and/or perineal pain in a substantial number of patients following salvage cryotherapy. Effective urethral warming is essential in reducing complications and maximizing quality of life. Salvage cryotherapy does not appear to offer any quality of life advantages compared to salvage prostatectomy.


PURPOSE: The health related quality of life assessment is becoming increasingly important among patients with prostate cancer. Meanwhile, treatment of patients with increasing prostate specific antigen (PSA) after radical retropubic prostatectomy remains controversial. We attempt to define the impact of PSA recurrence on the health related quality of life of patients after radical retropubic prostatectomy. MATERIALS AND METHODS: Of 604 consecutive patients who underwent radical retropubic prostatectomy between March 1991 and September 1998, 510 (84%) were available for followup. Each patient was mailed the RAND 36-Item Health Survey and University of California, Los Angeles, Prostate Cancer Index questionnaire. A total of 348 (70%) questionnaires were returned. Health related quality of life scores were then compared between patients with and without PSA recurrence. A multivariate analysis was also performed to elucidate further the cause of differences between the groups. RESULTS: Overall, 88 (25%) patients had PSA recurrence. In regard to health related quality of life there were small (less than 10%) but statistically significant differences in 2 of 4 physical health domains (RAND 36-Item Health Survey). There was a significant decrease in only 1 category of the mental health domain for patients with PSA recurrence. Only sexual function was statistically lower on the University of California, Los Angeles, Prostate Cancer Index. This result reflects the lower incidence of nerve sparing in these patients, as confirmed by the multivariate analysis. Overall patient satisfaction was similar between those with and without PSA recurrence (76% and 79%, respectively). CONCLUSIONS: Our study demonstrates small health related quality of life differences in patients with biochemical PSA recurrence versus those without. These findings provide a baseline assessment of general and disease specific health related quality of life.
domains among these patients. Future studies should focus on differences in the measure of cancer anxiety before and after administration of adjuvant therapy in these asymptomatic patients.


OBJECTIVE: To investigate the prevalence of erectile dysfunction (ED) in the South Australian community, and the influence of demographic and other risk factors. DESIGN: Survey by mailed questionnaire (based on the University of California, Los Angeles prostate cancer index) of a subset (men who agreed to participate) of a probability sample of the South Australian community who completed a multiuser interview survey. PARTICIPANTS AND SETTING: Men over the age of 40 in South Australia. MAIN OUTCOME MEASURES: Sexual desire, orgasm, ability to have an erection, adequacy (firmness) of erections for intercourse, frequency of erections when wanted, frequency of intercourse, nocturnal or morning erections, and history of prostate surgery; total sexual function score based on these. RESULTS: 612 men (86.7%) agreed to answer the sexual function survey; 427 (69.8%) returned questionnaires. ED was strongly correlated with age in all seven domains of sexual function. Erections inadequate for intercourse affected 3% of 40-49-year-olds, increasing to 64% of 70-79-year-olds. The frequency of intercourse considered normal for age by men 50-69 years was 1-6 times weekly; the disparity between this and reported frequency increased in men over 60 years, as did the difference between sexual desire and potency. A history of vigorous exercise was protective across all ages. High triglyceride levels, blood pressure medication and non-cancer surgery for prostate disease were independent predictors of poor sexual function at older ages. High cholesterol level was an independent predictor of impotence. CONCLUSIONS: We found similar or higher levels of ED than in comparable overseas studies. Disparity between potency and desire was greatest, and hence the age group in whom demand for treatment may be highest, in those 60 years and older. Cardiovascular risk factors were predictors of ED in these older men, suggesting that prevention may benefit sexual function. Non-cancer prostate surgery may be a greater contributor to ED than previously realised.


Few studies have evaluated erectile function after interstitial radiation therapy for localized prostate cancer. Using a validated quality of life questionnaire, we assessed post-treatment erectile function and its relationship to treatment satisfaction and quality of life. We retrospectively reviewed the records of 171 consecutive patients who underwent Pd-103 or I-125 brachytherapy for prostate cancer between December 1992 and June 1998. Seventy percent of patients received neoadjuvant androgen deprivation therapy. All patients were mailed a validated questionnaire assessing sexual function and overall quality of life (UCLA Prostate Cancer Index and SF-36). Sixty-seven percent of all questionnaires were available for evaluation (114/171). The mean age was 69.1 y with a mean follow-up of 23 months (range 4-72, median 24). Seventy-one percent of patients (81/114) had pre-treatment erections sufficient for sustained vaginal penetration. Of these patients, potency was maintained in 49% of men (40/81). An additional 26% had erections firm enough for foreplay but not penetration (21/81). Erectile dysfunction rates were significantly lower in younger patients (48%) vs older patients (55%). There was no difference in post-treatment potency between men who received neoadjuvant hormonal therapy and those who did not (P>0.05). In addition, there were no differences in physical function (86, scale 0-100), general health perception (78), emotional well-being (83), energy/fatigue (74), and overall satisfaction (84) between men with erectile dysfunction and those without. In summary, two years following brachytherapy 25% of patients complained of complete (20/81) or partial (26%, 21/81) erectile dysfunction, for an overall rate of 51% (41/81). Short-term neoadjuvant hormonal therapy (<3-6 months) did not increase the likelihood of post-treatment erectile
dysfunction. Interestingly, overall satisfaction rates among brachytherapy patients were high (84/100) and surprisingly did not correlate with post-treatment sexual function.


**BACKGROUND:** There is limited information on outcomes of prostate carcinoma treatments given to screened patient populations for whom cancer is usually detected at an earlier stage.

**METHODS:** The authors conducted a cross-sectional evaluation of quality-of-life outcomes for men with prostate carcinoma detected in screening studies at a university center. Of 2234 men diagnosed with prostate carcinoma between 1989 and 1997, 74% responded to the questionnaire. Primary management included radical prostatectomy (76%), radiotherapy (11%), observation (7%), hormonal therapy (4%), and cryoablation (2%). Main outcome measures included validated measurements of quality of life, urinary and sexual functioning, and bother (36-item RAND Health Survey, UCLA Prostate Cancer Index). **RESULTS:** After controlling for demographic factors, differences among treatment groups were found for all general quality-of-life outcomes, with increased impairment in men who underwent hormonal therapy (all P values <0.05). Urinary and sexual function and bother were also significantly related to treatment. However, among men followed for > or =12 months, only 9% reported a moderate or major problem with urinary control. Sexual functioning was a moderate or major problem following treatment for 58% treated with prostatectomy, 48% treated with radiotherapy, 64% treated with hormonal therapy, 45% treated with cryoablation, and 30% managed with observation. Approximately one-third of the men younger than 70 years who underwent radical prostatectomy maintained adequate sexual functioning posttreatment. **CONCLUSIONS:** Up to 6 years after diagnosis, the majority of men with prostate carcinoma detected by screening were bothered by their current sexual function, regardless of treatment. In contrast, most men were not bothered by their current urinary function.


**OBJECTIVES:** Health-related quality of life (HRQOL) is an increasingly important endpoint in prostate cancer care. However, pivotal issues that are not fully assessed in existing HRQOL instruments include irritative urinary symptoms, hormonal symptoms, and multi-item scores quantifying bother between urinary, sexual, bowel, and hormonal domains. We sought to develop a novel instrument to facilitate more comprehensive assessment of prostate cancer-related HRQOL. **METHODS:** Instrument development was based on advice from an expert panel and prostate cancer patients, which led to expanding the 20-item University of California-Los Angeles Prostate Cancer Index (UCLA-PCI) to the 50- item Expanded Prostate Index Composite (EPIC). Summary and subscale scores were derived by content and factor analyses. Reliability and validity were assessed by test-retest correlation, Cronbach's alpha coefficient, interscale correlation, and EPIC correlation with other validated instruments. **RESULTS:** Test-retest reliability and internal consistency were high for EPIC urinary, bowel, sexual, and hormonal domain summary scores (each r >/=0.80 and Cronbach's alpha >/=0.82) and for most domain-specific subscales. Correlations between function and bother subscales within domains were high (r >0.60). Correlations between different primary domains were consistently lower, indicating that these domains assess distinct HRQOL components. EPIC domains had weak to modest correlations with the Medical Outcomes Study 12-item Short-Form Health Survey (SF-12), indicating rationale for their concurrent use. Moderate agreement was observed between EPIC domains relevant to the Functional Assessment of Cancer Therapy Prostate module (FACT-P) and the American Urological Association Symptom Index (AUA- SI), providing criterion validity without excessive overlap. **CONCLUSIONS:** EPIC is a robust prostate cancer HRQOL instrument that complements prior instruments by measuring a broad spectrum of urinary, bowel,
sexual, and hormonal symptoms, thereby providing a unique tool for comprehensive assessment of HRQOL issues important in contemporary prostate cancer management.


PURPOSE/OBJECTIVES: To compare the quality-of-life (QOL) perceptions of men treated for prostate cancer with surgery to those of men treated for prostate cancer with radiation therapy.

DESIGN: A two-group descriptive study.

SETTING: Midwestern community cancer center and teaching hospital.

SAMPLE: The study group consisted of 121 men: 68 treated by radical prostatectomy and 53 treated with radiation therapy.

METHODS: Mailed survey using the Quality of Life Index (QLI) Cancer Version and the University of California at Los Angeles Prostate Cancer Index.

MAIN RESEARCH VARIABLES: QOL; level of urinary, bowel, and sexual function; impact of dysfunction on patients' lives.

FINDINGS: No significant differences were found between the groups in QLI scores, but significant differences were found in urinary, bowel, and sexual function. Urinary function was superior in the radiation therapy group (p = 0.0002). Patients who had undergone surgery were more likely to leak urine every day (p < 0.001). Only 6% of patients who had undergone radiation therapy needed to use pads or diapers as compared to 32% of patients who had undergone surgery. Bowel function was better in the surgery group (p = 0.05). Both groups reported poor sexual function, although it was worse in the surgery group (p = 0.009).

CONCLUSIONS: The patients who were treated with surgery had significantly worse urinary and sexual function and better bowel function than those treated with radiation therapy. QOL scores were consistent with these findings, although they did not differ significantly between groups.

IMPLICATIONS FOR NURSING PRACTICE: This information on the problems of survivors of prostate cancer after surgery and radiation therapy and the effects of therapy on QOL will assist nurses in providing patient education, emotional support, and rehabilitative interventions.