Editorial Comment: Despite the encouraging results reported in this paper, things are not looking up for the GVAX® vaccine. GVAX is an active form of immunotherapy in which whole tumor cells derived from prostate cancer cell lines (LNCaP and PC-3) are genetically modified to secrete GM-CSF, an immune stimulant. Unfortunately the company that makes this vaccine, Cell Genesys, has shut down 2 promising phase III trials. One trial (Vital-2) compared GVAX plus docetaxel versus docetaxel plus placebo. That study was closed when 20 more deaths were reported in patients on the drug versus those on placebo. In the second trial (Vital-1) men with asymptomatic, metastatic, hormone refractory prostate cancer were randomized to single agent GVAX versus docetaxel chemotherapy. The company terminated that trial prematurely when an unplanned analysis indicated that the trial had less than a 30% chance of meeting its predefined primary end point of an overall improvement in survival. I asked Charles Drake, assistant professor of oncology at Johns Hopkins, for his take on these studies. He felt that Vital-1 suffered from 2 flaws: 1) it is unlikely that any single agent immunotherapy will be effective in metastatic disease because it is immunologically difficult to break tolerance in patients with metastatic disease burden; and 2) docetaxel chemotherapy, which has a survival benefit of approximately 20%, was delayed in the patients randomized to GVAX. If GVAX is dropped from further evaluation by Cell Genesys, there are very few other vaccine trials remaining: PROSTVAC®-VF and Provenge®. The other immunotherapy approach that is moving into phase III trials for advanced prostate cancer is ipilimumab, an anti-CTLA-4 monoclonal antibody.

Patrick C. Walsh, M.D.

Laparoscopy/New Technology

Satisfaction and Regret After Open Retropubic or Robot-Assisted Laparoscopic Radical Prostatectomy


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Background: To counsel patients adequately, it is important to understand the variables influencing satisfaction and regret following prostatectomy. Objective: To identify independent predictors for satisfaction and regret after radical prostatectomy. Design, Setting, and Participants: Patients who had undergone retropubic radical prostatectomy (RRP) or robot-assisted laparoscopic radical prostatectomy (RALP) between 2000 and 2007 were mailed cross-sectional surveys composed of sociodemographic information, the Expanded Prostate Cancer Index Composite (EPIC), and questions regarding satisfaction and regret. Measurements: Sociodemographic variables, perioperative complications, type of procedure, length of follow-up, and EPIC scores were evaluated as independent predictors of satisfaction and regret in multivariate logistic regression analysis. Results and Limitations: A total of 400 patients responded (response rate 61%) of whom 84% were satisfied and 19% regretted their treatment choice. In multivariate analysis, lower income (odds ratio [OR], 0.08; 95% confidence interval [CI], 0.03–0.23), shorter follow-up (OR, 0.63; 95% CI, 0.41–0.98), having undergone RRP versus RALP (OR, 4.45; 95% CI, 1.90–10.4), urinary domain scores (OR, 2.70; 95% CI, 1.60–4.54), and hormonal domain scores (OR, 2.01; 95% CI, 1.30–3.12) were independently associated with satisfaction (p < 0.039). In terms of regret, RALP versus RRP (OR, 3.02; 95% CI, 1.50–6.07), lower urinary domain scores (OR, 0.58; 95% CI, 0.37–0.91) and hormonal domain scores (OR, 0.67; 95% CI, 0.45–0.98), and years since surgery (OR, 1.63; 95% CI, 1.13–2.36) were again predictive (p < 0.041). African American race (OR, 3.58; 95% CI, 1.52–8.43) and lower bowel domain scores (OR, 0.73; 95% CI, 0.55–0.97) were also
independently associated with regret (p< or =0.028). Conclusions: Sociodemographic variables and quality of life were important variables associated with satisfaction and regret. Patients who underwent RALP were more likely to be regretful and dissatisfied, possibly because of higher expectation of an “innovative” procedure. We suggest that urologists carefully portray the risks and benefits of new technologies during preoperative counseling to minimize regret and maximize satisfaction.

Editorial Comment: This article and the accompanying editorial are a must read for all urologists and residents. Together they are a wake-up call to minimize the hype of RALP. We have all seen patients armed with Internet “educational” data seeking only robotic surgery for prostate cancer who, when prompted, state that the surgery “is better” because they read testimonials and claims on the Internet. This article reminds us that we must not abrogate our responsibility to manage expectations and provide appropriate informed consent, or we risk a lot of unhappy patients.

Jeffrey A. Cadeddu, M.D.


Laparoscopic Retroperitoneal Lymph Node Dissection Combined With Adjuvant Chemotherapy for Pathological Stage II Disease in Nonseminomatous Germ Cell Tumours: A 15-Year Experience

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Objective: To present our 15-year experience of laparoscopic retroperitoneal lymph node dissection (LRPLND) combined with adjuvant chemotherapy (after RPLND) for patients with nonseminomatous germ cell tumour and positive nodes (pN+), evaluating the morbidity and long-term oncological outcome. Patients and Methods: Data for 87 patients with clinical stage I GCT were collected prospectively from 1992 to 2007. Primary diagnostic LRPLND was performed for pathological staging using a modified-template dissection. Patients with lymph node involvement had adjuvant chemotherapy, with two cycles of bleomycin, etoposide and cisplatin. Results: The mean (range) operative duration was 177 (68–360) min, and the hospital stay 6 (4–18) days. Positive nodes were identified in 24% of patients, who subsequently had adjuvant chemotherapy. After a mean (range) follow-up of 84 (1–186) months, distant relapse occurred in 9% of patients with pathological stage I (no adjuvant chemotherapy), including three patients with pulmonary metastases, two with retroperitoneal recurrence (outside the template field), two biochemical recurrences (alpha-fetoprotein elevated) and one port-site metastasis. No patients with pN+ disease relapsed. There were complications after surgery in 9% of patients, i.e. one pulmonary embolus, one lymphocele, temporary ureteric stenting in two, ureteric stenosis requiring surgical repair in three and retrograde ejaculation in one patient. All patients remain disease-free. Conclusions: After gaining experience, LRPLND has comparable operative times to contemporary open series, and low morbidity. The two retroperitoneal recurrences (2.5%) were outside the template field. No patients with pN+ had a recurrence, showing the efficacy of adjuvant chemotherapy. Our approach provides excellent oncological outcomes, avoiding intensive surveillance.

Editorial Comment: This article with excellent followup (the first with a mean greater than 5 years) adds to the growing body of literature documenting that for patients with clinical stage I nonseminomatous germ cell tumor LRPLND provides a comparable dissection to open RPLND with similar rates of positive node identification, recurrences and complications. As with all major laparoscopic procedures in urology, the accumulating experience is slowly demonstrating equivalent efficacy for the open and laparoscopic approaches. For patients with clinical stage I disease considering RPLND the
laparoscopic approach should be included in every consultation. The criticism that patients with pathological stage II disease underwent adjuvant chemotherapy rather than observation is an unresolved issue that, I believe, revolves around institutional treatment biases and not surgical technique.

Jeffrey A. Cadeddu, M.D.

Urological Oncology: Testis Cancer and Advances in Oncological Therapy

Tallness is Associated With Risk of Testicular Cancer: Evidence for the Nutrition Hypothesis


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The pathogenesis of testicular germ cell tumours (GCTs) is potentially influenced by high-energy nutrition during infancy. As adult height is a proxy for childhood nutrition, we investigated the role of nutrition in GCT pathogenesis by comparing stature of patients with healthy men. In a matched case-control study, 6415 patients with GCT were compared with healthy army conscripts (1:6 matching modus) with regard to height (cm) and body mass index (BMI; kg/m(2)). Statistical analysis involved tabulation of descriptive height measures and BMI. Conditional logistic regression models were used to quantify the association of GCT with height, with odds ratios (OR) adjusted for BMI. The literature was searched for studies on stature in GCT patients. Body size is significantly associated with risk of GCT, very tall men (>195 cm) having a GCT risk of OR = 3.35 (95% confidence intervals (CI): 2.88–3.90; adjusted). Short stature is protective (OR = 0.798; 95% CI: 0.68–0.93). Both histologic subgroups are associated with tallness. Of 16 previous reports, 7 were confirmative, 5 had null and 4 equivocal results. The association of stature with GCT risk accords with the nutrition hypothesis of GCT. This study expands the current view of GCT tumorigenesis by suggesting that high-calorie intake in childhood promotes GCT precursors originating in utero.

Editorial Comment: Testicular germ cell tumors are thought to originate via precursors in utero. These precursors may be promoted by factors during early childhood, such as higher caloric nutrition. Because adult height is a proxy for childhood nutrition, the authors have investigated the role of nutrition in germ cell tumors by comparing the stature of patients with testicular cancer and healthy men in a matched case-control study. Using army conscripts from all regions across Germany, the authors have found a strongly significant association between adult height and the risk of testicular germ cell tumor, either seminoma or nonseminoma. This well-done study used traditional logistic regression models with and without adjustment for body mass index. These results are in keeping with 7 previous studies encompassing more than 3,000 patients. However, other studies have failed to demonstrate a significant correlation of body size/height with germ cell tumor risk. The association of tallness with testicular cancer risk lends support to the nutrition hypothesis of germ cell tumor pathogenesis.

Jerome P. Richie, M.D.