

UROLOGICAL ONCOLOGY

Perineal salvage prostatectomy for radiation resistant prostate cancer

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Eur Urol. 2007; 51: 1565-71; discussion 1572

Objectives: No data are available on the use of perineal prostatectomy for salvage treatment of local recurrent prostate cancer after radiotherapy. Here we report on the clinical aspects and follow-up of salvage perineal prostatectomy.

Materials and Methods: Twenty-seven patients underwent a perineal salvage prostatectomy from 1997-2005 for biopsy-proven local recurrent prostate cancer after external beam (n = 22) or brachyradiotherapy (n = 5). Staging included physical examination, prostate-specific antigen (PSA), transrectal ultrasound, computed tomography scan, and bone scan.

Results: Mean PSA before surgery was 8.6 ng/mL (± 2.8 ng/mL). **Comparing clinical staging with final pathologic staging** after salvage perineal prostatectomy showed a 67% clinical understaging. Mean blood loss was 677 cc, and perioperative morbidity consisted of prolonged anastomotic leakage (n = 8), urosepsis (n = 3), prolonged hematuria (n = 3), urinary retention (n = 2), and rectal perforation (n = 1). One patient died during the postoperative course because of urosepsis and endocarditis. At an interval of at least 12 mo after surgery, 37% (10 of 27) and 7% (2 of 27) of patients reported normal continence and erectile function, respectively. Five patients died during a mean follow-up of 43 mo; two patients died of prostate cancer. Five-year biochemical recurrence-free survival was 31% (95% CI, 25-42%). In a multivariate Cox regression analysis the serum PSA and PSA doubling time (PSADT) at the time of surgery were the best predictors of biochemical recurrence-free survival. No patient with a PSA > 2 ng/mL and a PSADT < 12 mo was without biochemical recurrence 2 yr after surgery.

Conclusions: Salvage perineal prostatectomy showed functional results that favorably compare with the retro-pubic approach, but considerable morbidity is still frequent. Proper patient selection therefore is mandatory. A serum PSA level of > 2 ng/mL and PSADT < 12 mo independently predict shorter biochemical recurrence-free survival.

Editorial Comment

Data on salvage prostatectomy after previous radiotherapy are sparse. This report focuses on perineal prostatectomy in this patient group. Several interesting features in this report are worthwhile reporting and considering in patients with a similar situation.

First, understaging is a major event. Fifty-eight percent of patients had positive surgical margins. This translates into low long-term cure rates that are given in Figure-1 of the manuscript. After 5 years, only 20% of patients still were free of PSA recurrence. Of further importance is the fact that only patients with a preoperative PSA of < 2 ng/mL remained free of biochemical recurrence.

In fact, radical salvage prostatectomy remains a procedure that should be elected in few highly elected patients.

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A prospective randomized EORTC intergroup phase 3 study comparing the complications of elective nephron-sparing surgery and radical nephrectomy for low-stage renal cell carcinoma

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Eur Urol. 2007; 51: 1606-15

Objectives: This study compared the complications and the cancer control of elective nephron-sparing surgery (NSS) and radical nephrectomy (RN) in patients with a small (< or = 5 cm), solitary, low-stage N0 M0 tumour suspicious for renal cell carcinoma (RCC) and a normal contralateral kidney.

Methods: 541 patients were randomised in a prospective, multicentre, phase 3 trial to undergo NSS (n = 268) or RN (n = 273) together with a limited lymph node dissection.

Results: This publication reports only on the complications reported for both surgical methods. The rate of perioperative blood loss < 0.5l was slightly higher after RN (96.0% vs. 87.2%) and the rate of severe haemorrhage was slightly higher after NSS (3.1% vs. 1.2%). Ten patients (4.4%), all of whom were treated with NSS, developed urinary fistulas. Pleural damage (11.5% for NSS vs. 9.3% for RN) and spleen damage (0.4% for NSS and 0.4% for RN) were observed with similar rates in both groups. Postoperative computed tomography scanning abnormalities were seen in 5.8% of NSS and 2.0% of RN patients. Reoperation for complications was necessary in 4.4% of NSS and 2.4% of RN patients.

Conclusions: NSS for small, easily resectable, incidentally discovered RCC in the presence of a normal contralateral kidney can be performed safely with slightly higher complication rates than after RN. The oncologic results are eagerly awaited to confirm that NSS is an acceptable approach for small asymptomatic RCC.

Editorial Comment

This is the first report of a large randomized phase III trial on renal-sparing surgery (RSS) versus radical nephrectomy (RN) in patients with renal cancer. The trial is large enough to give meaningful results and therefore will be a standard reference in the future. In this paper, only the results of complications that have occurred are given whereas the results on oncological outcome have still to be awaited.

In this trial, only tumors smaller than 5 cm were considered eligible for RSS as, to my opinion, the rate of complications would increase sharply in larger tumors. In this way, RSS was a safe procedure. Still, a higher complication rate (which in fact was doubled in RSS patients) was detectable with a rate of severe hemorrhage of 3.1% in RSS vs. 1.2% in RN and the occurrence of urinary fistulas in 4.4% in RSS.

With these results in mind, we have to await the long-term data on oncological outcomes. As of now, renal-sparing surgery seems a safe procedure in elective patients with tumors < 5 cm.

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