
COMMENTARY

On finding the type and timing of salvage prostatectomy

John Phillips, MD

Department of Urology, New York Medical College, Valhalla, New York, USA

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Salvage prostatectomy continues to be a challenging approach to the failure of first line therapy. We are bombarded with competing and intense marketing to advertise the benefits of intensity modulated radiation therapy, brachytherapy, cryotherapy, HIFU, Cyberknife, and proton beam. These treatments were presumably attractive to the individual who chose them to avoid surgery and the potential side effects of surgery including incontinence and impotency. Now, the patient faced with salvage prostatectomy must revisit surgery at an older age and do so with the stakes even higher, with incontinence and impotency rates in the classic literature of > 50%.¹ The decision to undergo salvage prostatectomy, therefore, means that the oncologic benefit should be far greater than the risks, individuals should have a > 10 year life expectancy, and a high chance of cure with surgery alone. Clinical staging after radiation or thermal therapy often occurs, however, when PSA values are low and when the ability of demonstrating metastatic disease with standard imaging (e.g. MRI, Prostatecint) is poor. Better imaging modalities, like choline- or 18F-FDG PET, may better demonstrate men who have occult metastatic disease and who may not benefit from surgery.² The number of men who will benefit from salvage prostatectomy is modest and often make up a small proportion of the overall group who are undergoing open or robotic prostatectomy.³

The accompanying article by Kenney et al, is of interest, therefore, in providing data from a large cohort of men at a major cancer institution where both open and robotic salvage prostatectomies are performed. There was substantive bias that the authors acknowledge in selecting thinner men for open versus robotic salvage prostatectomy (28.6 ± 5.0 versus 34 ± 5.6 , respectively, $p = 0.004$) and open prostatectomy cases had on average higher PSA values at the time of surgery ($4.5 \text{ ng/mL} \pm 3.1 \text{ ng/mL}$ versus $2.5 \text{ ng/mL} \pm 2.4 \text{ ng/mL}$, $p = 0.021$).⁴

Address correspondence to Dr. John Phillips, Department of Urology, New York Medical College, 40 Sunshine Cottage Road, 19 Skyline 1S-B48, Valhalla, NY 10595 USA

Patient groups were otherwise comparable with similar preoperative Gleason characteristics and PSA values at initial diagnosis and at the time of salvage surgery. As with traditional robotic prostatectomies, robotic salvage prostatectomy in the series was associated with less bleeding than open surgery but had similar hospital lengths of stay (~3.5 days), positive margin rates (~15%), seminal vesicle involvement (~40%) and lymph node involvement (~12%).

Patients who undergo salvage prostatectomy must be informed of the increased rate of complications compared to those men who have not undergone radiation. Kenney et al reported that any complication < 90 days occurred in > 70% of all men, 40% of whom had anastomotic leaks, and at some point 25% had bladder neck contractures.⁴ Salvage prostatectomy is undertaken in an attempt to cure the patient. At least 10% of men had metastatic disease at the time of salvage prostatectomy when their PSA was on average < 5 ng/mL. Such observations show that when salvage prostatectomy is to occur, it should be performed early, when the PSA is as low as possible, and any potential rate of cure maximized. These studies emphasize that patients should be aware of the lower rates of cure and higher risks of complications when prostatectomy is performed after the failure of radiation. These studies also emphasize that the superiority of robotic or open prostatectomy and their long term results in salvage surgery should be addressed by larger, randomized trials. □

References

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