

an individual patient. These data give us exactly what we need: a graphic representation of relative risk reduction versus months of ADT, and even a nomogram to calculate the risks of biochemical failure given variables including T category, radiation dose, prostate-specific antigen level, Gleason score, and duration of ADT. These data could not come at a more important time. Awareness of the risks of ADT, notably metabolic syndrome [6], has never been higher, and the duration of ADT combined with EBRT has tended to become shorter. In the original European Organisation for Research and Treatment of Cancer study, the duration was 3 yr [2]; in the Radiation Therapy Oncology Group 92-02 study, it was 2 yr [1]; and in the intergroup PR3/PRO7 study, it was lifelong [7]. Here we have evidence that even 2 yr may be unnecessarily long, even in patients with T3 disease, with no added benefit beyond 18 mo and only a few percentage points' reduction in risk in going from 12 to 18 mo. However, this study aligns with evidence from randomised trials that, for high-risk patients, 6 mo of ADT is not enough. The obvious criticism of these data is that they are retrospective and not the result of randomised trials. But a 3666-patient study represents a large number of patients, and even if, at the end of the day, they are hypothesis generating rather than level 1 evidence, these data are extremely important. It seems very unlikely that there will be further randomised trial data to compare 12, 18, and 24 mo of ADT. However, further independent institutional-derived data can and must be analysed to validate these findings. Still lacking, and maybe more difficult to obtain, are similar curves to tell us about the effect of ADT duration on morbidity and mortality, and the end point in this study was biochemical failure and not disease-specific or overall survival. It is one thing to counsel a patient that his nomogram predicts such and such in terms of percentage reduction in risks of biochemical failure. However, without knowing, for example, by how much (or how little) that duration of ADT changes his risks of dying, either of prostate cancer or of something else like cardiovascular disease, he can only have part of the picture. The trend to reduce the duration of ADT in conjunction with EBRT will, rightly, continue, and this study gives further and much needed impetus to do this. A word of caution, though: Cutting back on effective treatment (and ADT unequivocally works, given with EBRT) in an attempt to reduce toxicity is not always straightforward. Older oncologists will well remember the heartache after the attempts to substitute

carboplatin for cisplatin in first-line chemotherapy of germ cell tumours resulted in lower efficacy and more patients dying. The conventional wisdom of today is to avoid overtreating prostate cancer patients, which is laudable. However, in seeking alternatives to long-duration ADT plus EBRT, let us be careful that we do not undertreat them either.

Conflicts of interest: The author has nothing to disclose.

References

- [1] Pilepich MV, Winter K, Lawton CA, et al. Androgen suppression adjuvant to definitive radiotherapy in prostate carcinoma—long-term results of phase III RTOG 85-31. *Int J Radiat Oncol Biol Phys* 2005; 61:1285–90.
- [2] Bolla M, van Tienhoven G, Warde P, et al. External irradiation with or without long-term androgen suppression for prostate cancer with high metastatic risk: 10-year results of an EORTC randomised study. *Lancet Oncol* 2010;11:1066–73.
- [3] D'Amico A, Manola J, Loffredo M, Renshaw A. 6-month androgen suppression plus radiation therapy vs radiation therapy alone for patients with clinically localized prostate cancer: a randomized controlled trial. *JAMA* 2004;292:821–7.
- [4] Hanks GE, Pajak TF, Porter A, et al. Phase III trial of long-term adjuvant androgen deprivation after neoadjuvant hormonal cyoreduction and radiotherapy in locally advanced carcinoma of the prostate: the Radiation Therapy Oncology Group Protocol 92-02. *J Clin Oncol* 2003;21:3972–8.
- [5] Bolla M, de Reijke TM, van Tienhoven G, et al. Duration of androgen suppression in the treatment of prostate cancer. *N Engl J Med* 2009;360:2516–27.
- [6] Keating NL, O'Malley AJ, Smith MR. Diabetes and cardiovascular disease during androgen deprivation therapy for prostate cancer. *J Clin Oncol* 2006;24:4448–56.
- [7] Warde PR, Mason MD, Sydes MR, et al. NCIC CTG PR.3/MRC PRO7/SWOG JPR3 investigators. Intergroup randomized phase 3 study of androgen deprivation therapy (ADT) plus radiation therapy (RT) in locally advanced prostate cancer (CaP) (NCIC-CTG, SWOG, MRC-UK, and INT: T94-0110; NCT00002633) [abstract CRA4504]. *J Clin Oncol* 2010;28(Suppl):18s.

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DOI: 10.1016/j.eururo.2011.04.017

Re: Posterior Rhabdosphincter Reconstruction During Robotic Assisted Radical Prostatectomy: Results from a Phase II Randomized Clinical Trial

Sutherland DE, Linder B, Guzman AM, et al

J Urol 2011;185:1262–7

Experts' summary:

In this randomized controlled trial (RCT), the authors evaluated the influence of posterior reconstruction of the rhabdosphincter (PRR) on early recovery of urinary continence after robot-assisted radical prostatectomy (RARP). A total of 94 patients were randomized into two groups: PRR followed

by vesicourethral anastomosis versus standard running vesicourethral anastomosis only (controls). The study was designed with the intent-to-treat analysis aimed to detect a two-sided difference of 25% in the continence rates between the arms at the 3-mo point after RARP. The continence outcomes were assessed by analysis of the Expanded Prostate Cancer Index Composite questionnaire, International Prostate Symptom Score (IPSS), and 24-h pad weights. Continence was defined as a score of 0 or 1 in question 5 of the Expanded Prostate Cancer Index urinary domain. There was no difference in the continence rates between the groups at 3 mo after RARP (81% for control group vs 63% PRR group; $p = 0.1$). Additionally, there was no significant difference

between arms in 24-h pad weights ($p = 0.14$), IPSS ($p = 0.4$), absence of daily leaks ($p = 0.4$), or perception of urinary function ($p = 0.4$). The authors concluded that PRR does not improve early continence rates after RARP.

Experts' comments:

The benefits of the PRR on early recovery of continence after radical prostatectomy was first reported by Rocco and colleagues [1] in 2001, and this technical modification has since become a common practice during RARP. Nevertheless, multiple variations of the initial technique and conflicting continence outcomes have been frequently reported. We have recently published the largest series (803 consecutive RARPs; 330 without PRR and 473 with PRR) evaluating the influence of PRR on continence outcomes after RARP [2]. Our modified PRR technique resulted in significantly higher continence rates at 1 and 4 wk after RARP and a shorter median interval to recovery of continence when compared with the control group. Although our study was not an RCT, the baseline patients' characteristics, perioperative outcomes, and histopathologic parameters were all similar between the groups. Additionally, another RCT has been recently published [3] confirming the benefits of PRR on early recovery of continence. So why were the results reported by Sutherland and colleagues dissimilar?

First, the technique of PRR performed in their study was not described. The authors merely indicated that "the surgical principles described by Rocco et al were followed." Nevertheless, multiple modifications of the original technique have been reported, and the surgical steps and anatomic landmarks originally described by Rocco were not consistently respected in these technical modifications. In the RCT published by Menon et al [4] in 2008, for example, the authors only performed the first step of reconstruction originally described. After reconstructing Denonvilliers' fascia and the posterior rhabdosphincter, Rocco et al [1] also suture the reconstructed sphincter to the posterior bladder wall, fixing the sphincter 1–2 cm dorsocranially to the posterior edge of the bladder neck; these authors consider this second step of the utmost importance because it increases the functional length of the posterior urethra.

Second, the technique of vesicourethral anastomosis used by Sutherland et al in their control group was not standard. The posterior anastomotic sutures were placed through the posterior urethra and "the underlying thick layer of Denonvilliers' fascia," as previously described by Eastham et al [5]. Nevertheless, what Eastham and colleagues called the "thick layer of Denonvilliers' fascia" is actually indistinguishable (or at least very close anatomically) to the posterior rhabdosphincter described by Rocco and colleagues [1].

Therefore, "a sort of" PRR was also performed in the control group, which could have influenced the early recovery of continence in these patients.

Finally, the sample size in the Sutherland et al study was calculated based on an expected difference of 25% in the continence rates between the groups. Therefore, the study was underpowered for the detection of smaller improvements in the continence rates with PRR. In our study [2], the continence rates were 6% and 9% higher in the PRR group at 1 and 4 wk after catheter removal, respectively. These differences, which were statistically significant ($p = 0.045$ and 0.016), would not have been detected in the study designed by Sutherland and colleagues. Although the impact of PRR on early continence is possibly less accentuated than initially thought, the technique is simple, reproducible, with no increase in operative time and without any potential harm to patient. So why not use it?

Conflicts of interest: The authors have nothing to disclose.

References

- [1] Rocco F, Gadda F, Acquati P, et al. Personal research: reconstruction of the urethral striated sphincter [in Italian]. *Arch Ital Urol Androl* 2001;73:127–37.
- [2] Coelho RF, Chauhan S, Orvieto MA, et al. Influence of modified posterior reconstruction of the rhabdosphincter on early recovery of continence and anastomotic leakage rates after robot-assisted radical prostatectomy. *Eur Urol* 2011;59:72–80.
- [3] Koliakos N, Mottrie A, Buffi N, et al. Posterior and anterior fixation of the urethra during robotic prostatectomy improves early continence rates. *Scand J Urol Nephrol* 2010;44:5–10.
- [4] Menon M, Muhletaler F, Campos M, et al. Assessment of early continence after reconstruction of the periprostatic tissues in patients undergoing computer assisted (robotic) prostatectomy: results of a 2 group parallel randomized controlled trial. *J Urol* 2008;180:1018–23.
- [5] Eastham JA, Kattan MW, Rogers E, et al. Risk factors for urinary incontinence after radical prostatectomy. *J Urol* 1996;156:1707.

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DOI: 10.1016/j.eururo.2011.04.018

Re: Comparison of Cold and Warm Ischemia During Partial Nephrectomy in 660 Solitary Kidneys Reveals Predominant Role of Nonmodifiable Factors in Determining Ultimate Renal Function

Lane BR, Russo P, Uzzo RG, et al

J Urol 2011;185:421–7

Expert's summary:

From 1980 to 2009, 660 partial nephrectomies were performed at four centres for tumours in a solitary functioning kidney under cold ($n = 300$) or warm ($n = 360$) ischaemia. The purpose of the study was to determine the tolerance of the kidney to different periods of warm and cold ischaemia, evaluating postoperative renal function