

## A new standard for radical prostatectomy in Ireland?

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Radical prostatectomy has been shown to provide enduring cancer control for men with localized prostate cancer with 15-year cancer-specific survival rates of 93% [1] and a 38% reduction in mortality when compared to observation alone [2]. However, open radical prostatectomy remains a major procedure with considerable peri-operative and long-term functional morbidity. Conventional laparoscopic radical prostatectomy has not been popularized due to its technical difficulties and concerns about the almost insurmountable learning curve of over 700 cases [3]. Therefore there has been much interest in advanced techniques to facilitate minimally invasive radical prostatectomy such as the use of the da Vinci© surgical robot (Intuitive Surgical Ltd, CA, USA) which now accounts for over 80% of all radical prostatectomies in the USA.

This report of the first 125 cases of robotic-assisted laparoscopic radical prostatectomy (RARP) from Ireland is noteworthy indeed [4, this issue]. It is the only published series of radical prostatectomy from Ireland in recent memory and represents a pioneering series of robotic surgery from this country. By all accounts, the results reported in this series are very good indeed. Even within the limitations of a retrospective, non-comparative, single-centre

study, it is clear that the peri-operative, oncological and short-term functional outcomes reported here are on a par with high-volume radical prostatectomy centres elsewhere [5, 6]. The overall morbidity is low, hospital stay is short, positive surgical rates are very low and early functional outcomes are satisfactory. The authors are to be congratulated for their achievements.

However, RARP has not been without controversy since it stormed onto the scene 10 years ago. A lack of randomized evidence to establish superiority over open surgery, contention over outcomes, and concerns about costs have continued to surface, while the procedure has quickly become the standard in many regions. It has, however, been established that RARP offers lower morbidity, lower risk of blood transfusion and much shorter hospital stay when compared to open surgery, and has at least equivalent outcomes for oncological and functional outcomes such as continence and potency. High initial and recurrent costs and the lack of any competitors in this marketplace have remained the principal barriers to more widespread adoption [7].

Regardless of this, it is clear that robotic-assisted surgery for complex laparoscopic procedures is here to stay—the da Vinci© surgical system will continue to evolve; hopefully we will have more competitors in this marketplace; it will become standard of care for radical prostatectomy in many countries; it will be of increasing interest to other specialties also. So what therefore is the future for da Vinci© robotic surgery within Ireland? At the time of writing, there are two successful robotic surgery programs running in private hospitals (the Galway Clinic and the Mater Private Hospital) providing high-quality RARP programs, and one public robot providing gynaecology-only robotic surgery at Cork University Maternity Hospital. A Health Technology Assessment has been undertaken by the Health Information and Quality Authority and is due for release in late 2010 and

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future policy makers will look to this report for guidance on the development of robotic surgery in Ireland, particularly within the public hospital sector. There is certainly a risk that RARP will quickly become the standard for private patients while public patients will not have this option without the introduction of robotic technology in one or two large teaching hospitals.

In the meantime, and in the absence of contemporary published data from other centres, this series from Bouchier-Hayes et al. [4] sets the benchmark for radical prostatectomy within Ireland today, regardless of surgical approach.

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