

OUTCOME AFTER RADICAL PROSTATECTOMY IN YOUNG MEN WITH OR WITHOUT A FAMILY HISTORY OF PROSTATE CANCER

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INTRODUCTION & OBJECTIVES: To establish the cancer control afforded by radical prostatectomy in patients aged 50 or younger, with sporadic, familial, or hereditary prostate cancer.

MATERIAL & METHODS: We collected data on all patients 50 years old or younger among 5880 patients treated for prostate cancer between 1994 and 2004. We recorded age, ethnic origin, clinical presentation, family history of prostate cancer, pre-operative PSA, treatment, Gleason score, TNM stage 2002, surgical margins status, and disease progression. Radical prostatectomy was offered as first-line treatment to all patients with localised prostate cancer (T1/T2, N0, M0) and negative lymph nodes. PSA-free survival was calculated.

RESULTS: We analysed data for 110 patients (1.9%) of whom 37 had familial cancer (33.6%) and 15 hereditary cancer (13.6%). A total of 85 patients (77.3%) had undergone radical prostatectomy, 39 (45.9%) by open retropubic surgery and 46 (54.1%) by a laparoscopic procedure. Surgical margins were positive in 11 patients (12.9%). Mean follow-up after prostatectomy was 39.1±36.8 months (range 4-125). Nine patients (10.6%) experienced biochemical recurrence (PSA>0.2 ng/ml). Longer PSA-free survival after surgery was significantly associated with high- and intermediate-risk patients (p=0.01 and 0.02, respectively) but not with surgical procedure (p=0.6) nor with family history of cancer (p=0.46).

CONCLUSIONS: Radical prostatectomy is an effective treatment of localised cancer in patients under 50 years of age. Nearly half our cases of prostate cancer in younger men were forms of familial cancer. Detecting familial forms is a key objective in early screening and in the timely identification of candidates for prostatectomy.

EUROPEAN STUDY ON RADICAL PROSTATECTOMY (ESRPE)-PART II: FUNCTIONAL RESULTS AND CHANGES 1993-2004

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INTRODUCTION & OBJECTIVES: To evaluate Functional results (Continence, Potency, Quality of Life) of radical retropubic prostatectomy in Western and Eastern Europe from 1993-2004.

MATERIAL & METHODS: In this retrospective evaluations 10,553 men who underwent radical retropubic prostatectomy between 1993 and 2004 were evaluated and functional results, including continence rates, potency rates and quality of life as well as the time kinetics recorded. In those available cases, physician and patient guided questionnaires were compared.

RESULTS: In patients with clinically localised disease and a PSA 2.5-15 ng/mL, 81% underwent radical prostatectomy and 17% opted for radiation therapy and 2% opted for watchful waiting. Overall, continence rate (≤ 1 pad) at 1 year was 93% with a CI 81-97%. Continence-time kinetics: 53-64% at 3 mo, 69-82% at 6 mo, 91-96% at 12 mo and 92-97% at 24 mo. A 14% difference was seen when comparing physician and patient guided questionnaires with respect to continence (physicians judging rates more favourably). A constant relative increase in Nerv-sparing (uni- and bilateral) procedures was observed with highest rates 1998-2000, and reaching a steady state thereafter (at 71.4% of all cases). Thus, Potency (spontaneous/no medical treatment) rates in bilateral nerv sparing procedures were 56-86% at 1 year versus 9-16% at 3 mo. In men < 60 years of age potency rates increased to 12-21%, 33-39% and 71-86%, at 3, 6 and 12 mo, respectively.

	Continence *	Potency
3 mo	53-64%	9-16%
6 mo	69-82%	21-29%
12 mo	91-96%	56-86%

* ≤ 1 pad per day

CONCLUSIONS: Functional results of radical retropubic prostatectomy has significantly evolved over the past 12 years. Highest rates in continence (92-97%) and potency (56-86%) were observed at 1 year. Both significantly correlated with patient age (< or > 60y) and the ability to mperform a bilateral nerv sparing procedure. These numbers mimic large US data collections and underline the excellent results obtained with radical prostatectomy today.

EUROPEAN STUDY ON RADICAL PROSTATECTOMY (ESRPE)-PART I: SURGICAL AND ONCOLOGICAL RESULTS AND CHANGES 1993-2004

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INTRODUCTION & OBJECTIVES: To evaluate Oncological results of radical retropubic prostatectomy in Western and Eastern Europe from 1993-2004.

MATERIAL & METHODS: In these retrospective evaluations 10,553 men who underwent radical retropubic prostatectomy between 1993 and 2004 were evaluated and onco-pathological data and features collected. Besides Pathological features, margin status at various stages, PSA recurrence rates were evaluated.

RESULTS: In patients with clinically localised disease and a PSA 2.5-15 ng/mL, 81% underwent radical prostatectomy and 17% opted for radiation therapy and 2% opted for watchful waiting. Overall, Positive margin rates decreased from 38% to 18%, from 1993-2004. The biggest fall in the margin rate was observed between 1996 and 1999. Margin rates for pT2 cancers were 7.4-21.9%. The positive margin rate significantly correlated with the number of surgeons involved per service and the total number of cases performed. (p=0.004). PSA recurrence rates at 3 and 7 years were 3.7-7.9% and 28.4-35.8%, respectively. The lowest rates in positive margins and PSA recurrence were seen in those centres performing > 200 cases per year. A constant relative increase in Nerv-sparing (uni- and bilateral) procedures was observed with highest rates 1998-2000, and reaching a plateau thereafter (at 71.4% of all cases). Distribution of positive margins did not differ significantly over time despite changes in stage: 44.8% of + margins were located at the apex, 39.7% at the posterolateral aspect and 15.5% at the bladder neck. Immediate and long term Surgical complications (7 ESOU defined complications) decreased significantly over time from 28.6% (1993-1995) to 13.2% (1996-2004) of all cases. Equally, medical complications (non-surgical) decreased from 9.4% (1993-1995) to 4.2% (1996-2004) Complication rates remained unchanged (plateau) from 1999 to 2004. OR time decreased from 281 min (125-640) to 188 min (64-355) in the periods 1993-1995 to 2001-2004, respectively. Transfusion rates, although highly variable due to different local practices, decreased from 21.6% (1993-1994) to 8.6% (2001-2004).

	1993	2004
+ Margins	38%	18%
T1c cancers	16%	74%
pT2 cancers	28%	82%
Nerv sparing procedures	4%	71%

CONCLUSIONS: Radical retropubic prostatectomy has significantly evolved over the past 12 years. A favourable trend was observed in OR time, transfusion rate, surgical and medical complication rates, margin status and biochemical recurrence rates. This favourable trend reached a steady state (plateau) between 2000-2004 and continues as such. Best outcomes were seen in those centres performing > 200 cases per year and in those with the lowest surgen/case ratio.

ANTEROGRADE RADICAL RETROPUBLIC PROSTATECTOMY FOR CURE CLINICALLY LOCALISED PROSTATE CANCER: ONCOLOGICAL OUTCOME IN A 17-YEAR SERIES

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INTRODUCTION & OBJECTIVES: Nowadays, it is estimated that RP is performed in approximately 45% of all patients with a newly diagnosed prostate cancer. The most frequently performed operation is open retropubic approach as described by Walsh and coworkers in the early 80's. The objective of this study is to analyze the oncological outcome of more than 800 patients treated using a modified technique of antero-grade open radical prostatectomy over a 17 years period.

MATERIAL & METHODS: We retrospectively reviewed the clinical and pathological data of 845 patients who underwent radical prostatectomy for clinically localised prostate cancer between 1988 and 2004 (in 803 of these with concomitant pelvic linfoadenectomy). The entire prostate was examined, all specimens were restaged according to the 1997 American Joint Committee on Cancer (AJCC) staging system. The follow-up schedule included serum PSA assay every 3 months for the first year, then every 6 months for the following two years and yearly thereafter. Patients with pathologically involved lymph nodes received early adjuvant hormonal therapy. Kaplan Meier method and Cox proportional hazard model were used for statistical analysis. A total of 107 were excluded from the survival analysis.

RESULTS: Overall, positive surgical margins were detected in 108 patients (12.7%), 71 (65.7%) without a concurrent lymph-nodes involvement, including 2.1% (7/326) with pathologically organ confined prostate cancer, and 16.3% (64/393) with extraprostatic disease. The mean (median, range) follow-up of the 753 patients included in the survival analysis was 46.2 (40.5, 6-168) months. The 5- and 8-year actuarial biochemical recurrence-free survival rate for nodes negative patients was 75.3% and 69.8%. The 122 patients with positive lymph nodes, treated with early adjuvant hormonal therapy, had a 5- and 8- year progression-free survival of 59.3% and 34.7%, respectively. Tumour stage, Gleason score, preoperative PSA and surgical margins status were all significant independent predictors of biochemical-free survival at multivariate Cox model analysis.

CONCLUSIONS: Anterograde radical retropubic prostatectomy provides a good cancer control and a low incidence of positive surgical margins even in presence of extracapsular tumour spread. These series represent the first reported on oncological outcome of antero-grade open prostatectomy and should be considered when results of laparoscopic and open prostatectomy are compared.