

Robotic-assisted Laparoscopic Prostatectomy in a predominately non-screened population – findings in a single U.K. Institution

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INTRODUCTION

- Robotic-assisted Laparoscopic Prostatectomy (RALP) accounts for the majority of surgical procedures for prostate cancer in the USA
- Clinical practice in the UK is following a similar trend
- However the case mix comprises fewer screen detected, low risk patients
- If RALP is to be adopted by UK surgeons then data sets must be analysed

PATIENTS AND METHODS

- 309 consecutive patients identified from prospective database
- Minimum 6 months follow up
- Pathological T stage, positive margins and biochemical recurrence were reviewed
- Patients completed questionnaires on functional data pre-operatively and post-operatively at 3 monthly intervals

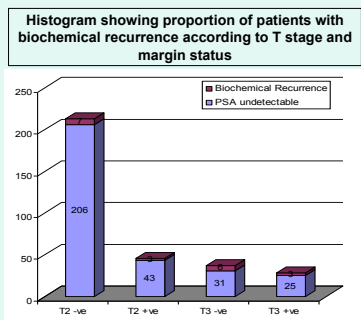
RESULTS

- Median age 61.7 yrs (range 40-74)
- Mean BMI 27.1 kg/m² (range 17-38)
- Mean PSA 8.6 ng/ml (range 1.9-49)
- 58 (18.8%) patients had palpable disease

D'Amico Stratification (including MRI staging)	
Low	65/309 = 29.0%
Intermediate	200/309 = 64.7%
High	44/309 = 14%

Histopathology

- Organ confined disease: 249/309 (80.6%)
- Extra-prostatic T3 disease: 55/309 (17.8%)
- Positive margins in T2: 43/249 (17.3%)
- Positive margins in T3: 31/55 (56.4%)



Operative parameters

- Median operative time: 255min
- Median console time: 145min
- Mean fluid loss 200ml
- Median inpatient stay 2 day
- (20.4% discharged within 24 hours)

Cancer outcomes

Biochemical recurrence:

- 19/309 (6.1%) patients
- median follow-up 22 months

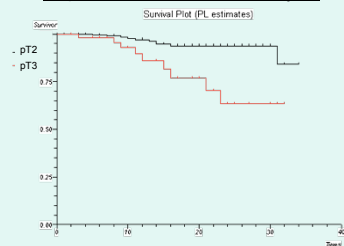
Biochemical recurrence with positive surgical margin:

- T2: 3/43 (7.0%)
- T3: 6/31 (19.1%)

Biochemical recurrence with negative surgical margin:

- T2: 7/206 (3.4%)
- T3: 3/25 (12%)

Kaplan-Meier survival Analysis



- Kaplan Meier curve showing the biochemical disease free survival of pT2 and pT3 patients treated with RALP
- Survival curves constructed using stats direct software
- Survival estimates could not be calculated due to the limited number of biochemical failure events

Functional outcomes

Patient reported pad free rates as follows:

- 23/61 (38%) at 3 months
- 25/50 (50%) at 6 months
- 11/14 (75%) at 9 months
- 28/34 (82%) at 12 months
- 15/20 (75%) at 18 months

Recovery of potency was reported as:

- 9/50 (18%) at 6 months
- 5/14 (36%) at 9 months
- 17/54 (32%) at 12-18 months

CONCLUSION

- In this relatively high risk patient cohort, RALP provides good oncological control
- All patients with Gleason 6 remain biochemically disease free
- T3 disease appears to have a higher incidence of biochemical recurrence as expected
- Functional outcomes need further study
- Lengthy functional questionnaires are unpopular with patients