Comparative Analysis of the First 100 Cases of Robotic Prostatectomy

01. Introduction

Robotic-assisted laparoscopic prostatectomy (RALP) has revolutionized the surgical management of localized prostate cancer, offering advantages such as reduced blood loss, shorter hospital stays, and quicker recovery compared to traditional open surgery.

02. Objective

Robotic-assisted laparoscopic prostatectomy (RALP) has revolutionized localized prostate cancer management. This study compares outcomes between the first 50 and subsequent 51 RALP cases by a Consultant Robotic Urologist.

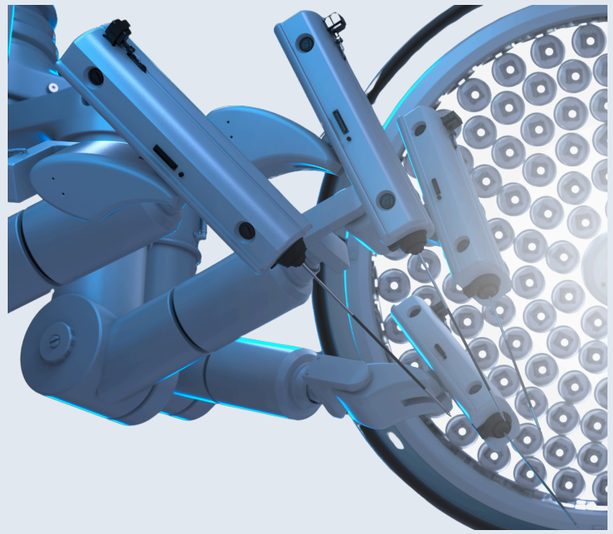
Key outcomes of interest include perioperative parameters such as operative time, estimated blood loss, and length of hospital stay, as well as oncologic outcomes such as positive surgical margins and biochemical recurrence-free survival.

03. Methodology

Retrospective analysis was conducted on RALP data since March 2022. Key outcomes include operative time, blood loss, length of stay, positive margins, and biochemical recurrence-free survival. Subgroup analysis compared the initial 50 cases with the subsequent 51.

04. Results/Findings

101 patients were analysed with a mean age of 64 years with a range of 46 to 79. The mortality rate of 1% which was unrelated to the procedure. 92% of patients had no complications with 7% requiring re-admissions. 85% of patients were discharged day 1 post operatively. Only 3% required a follow-up outpatient cystogram 52% of the procedures were R0 with a biochemical recurrence-free survival rate of at least 90% at 6 months. 5% necessitated salvage radiotherapy.



05. Compartive Analysis of the First 50 cases Vs Subsequent 50 cases

When performing the sub-group analysis, the operating time and the console time significantly reduced from 153 to 126 and then 136 to 114 minutes respectively. Complication rates reamined aat 8% in both groups which suggests the surgical speed directly corresponded to increased surgical efficacy. This is reflected in that both groups 96% of patients were discharged on eitjer day 1 or 2 of surgery.

Other outcomes did not demonstrate any significant differences; such as ressection margins or biochemical failure (non-reduction in PSA levels).

06. Conclusion

This study illuminates the progressive refinement in outcomes observed in robotic-assisted laparoscopic prostatectomy cases. Notably, significant reductions in operating and console times indicate tangible enhancement in surgical efficiency over time. These findings underscore the importance of meticulous training and skill development for robotic urologists. Through continued education, robotic urologists can navigate the complexities of RALP with confidence, ultimately enhancing patient outcomes and advancing the field of robotic surgery.

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