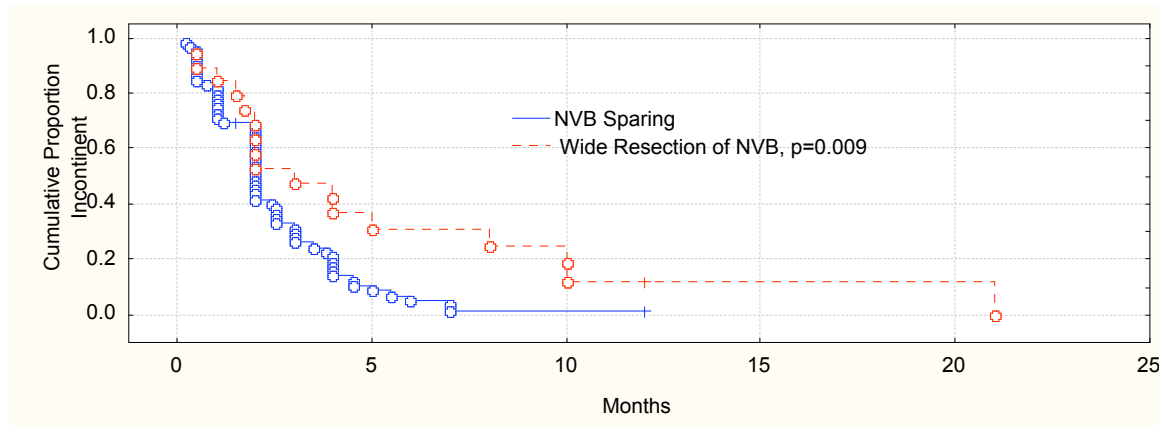


PROSPECTIVE PREDICTORS OF URINARY CONTINENCE AFTER ANATOMICAL RADICAL RETROPUBIC PROSTATECTOMY (RRP): A MULTI-VARIATE ANALYSIS. Michael G. Oefelein, MD, FACS. Spokane Urology.

Purpose: Reported rates of urinary incontinence after RRP widely vary (2-47%). Numerous variables have been identified that correlate with post-prostatectomy incontinence (PPI). The primary outcome of interest in this report is time to urinary continence, as defined as zero-pads in a 24-hr period, and the novel clinical factors which influence this time-dependent variable.

Materials and Methods: The study included 88 consecutive prostate cancer patients who underwent open ARP by one surgeon. Pad-free urinary continence was prospectively determined by patient interviews and confirmed on physical examination and by the urinary domain of the Extended Prostate Inventory Composite (EPIC) Health Related Quality of Life questionnaire. The analysis of bivariate categorical variables and the association with continence was performed by the method of Kaplan-Meier with significance assessed by the log-rank statistic. To control for multiple variables and avoid/minimize selection bias, a multivariate Cox proportional hazards model was performed to determine which variables significantly correlates with time to pad-free urinary continence. Variables included in this model were surgical technique (nerve sparing vs. non-NS), patient age, prostate volume (cm³), prostate urethral length (cm), post-operative anastomotic stricture, body mass index, and estimated blood loss. No patient was lost to follow-up.

Results: The median time to continence was 8 weeks post-operatively. At 21 months post-RRP, 5.3% of the study participants were classified as incontinent either because they required a secondary procedure to achieve pad-free urinary continence or they continue to wear/use pads. Of the variables assessed, only increasing prostate size (p=0.001), and surgical technique (wide excision of the neuro-vascular bundle, p=0.01) correlated with prolonged time to achieve pad-free urinary continence. A weak but significant correlation was observed between higher pre-RRP IPSS and increasing prostate volume (p=0.04). The pre-RRP IPSS did not significantly correlate with time to continence (p=0.11).



Conclusions: The major conclusion of this study is that prostate size and surgical technique were significantly associated with time to pad-free urinary control. Postoperatively, urinary continence was achieved at a median of 8 weeks. At 21 months post-RRP, 5% of these patients continued to either wear pads or had undergone a secondary procedure for PPI. These clinical variables are valuable in counseling patients regarding the expected duration of incontinence after ARP.