

Re: Abramowitz et al. "Virtue male sling outcomes and application to a contemporary nomogram"

Nabeel A. Shakir, MD

Department of Urology, Vattikuti Urology Institute, Henry Ford Hospital, Detroit, Michigan, USA
Referring to article published in *Can J Urol* 2021;28(2):10625-10630.

SHAKIR NA. Re: Abramowitz et al. "Virtue male sling outcomes and application to a contemporary nomogram". *Can J Urol* 2021;28(3):10657.

Abramowitz et al evaluated the ability of the Male Stress Incontinence Grading Scale (MSIGS) to predict success in men undergoing Virtue sling placement.¹ The encouraging rate of reported postoperative continence in this population is evidence of the authors' careful selection of ideal sling candidates, a process towards which this research contributes. However, the authors also conclude that as compared to the ability to stop the urinary stream, MSIGS was not as predictive of sling success, to which I would like to raise several points:

1. Nomograms can simplify clinical decision making because they leverage multiple variables for prediction, rather than relying on the performance of any one of their constituent parameters. Specifically, the combination of MSIGS, pads per day (PPD) and history of radiation has been demonstrated to be more predictive of sling success than any of these variables individually; in addition, the MSIGS-based nomogram has optimal discriminative ability above a predicted failure threshold of 30%.² The authors report predicted probabilities of the 10 surgical failures in Table 3, all of which are 70% or greater. This indicates that the nomogram (which was developed in patients undergoing AdvAnce sling) does identify patients who failed Virtue sling. The proportion of patients in this study who had predicted failure probability above 30%, but who were surgical successes, would provide more context to the performance of the nomogram in this novel population.

2. In contrast, half of the patients presented in Table 3 had the ability to stop the stream, which was nevertheless one of two predictors remaining significant on multivariable analysis. There could be two reasons for this finding: a low number of failure events overall (hence the high odds ratio and wide confidence intervals for the analysis), and/or that the ability to stop the urinary stream consolidates the effect of several other covariates. In either case, the data seem to demonstrate that slings work best in men who have some residual sphincteric function, but with the caveat that multivariable analysis must be considered exploratory in this small population.
3. The method by which the standing cough test was graded in this study (i.e., after filling the bladder cystoscopically) differs from the original MSIGS description, which may explain the relatively high median overall score of 3. In addition, features intrinsic to specific sling platforms, coupled with factors such as surgeon experience and learning curve, may also account for the high degree of surgical success reported by the authors. Further investigation of these parameters in particular may provide more insight into prediction of sling success. □

References

1. Abramowitz D, Sam AP, Pachorek M, Shen J, Ruel N, Warner JN. Virtue male sling outcomes and application to a contemporary nomogram. *Can J Urol* 2021;28(2):10625-10630.
2. Shakir NA, Fuchs JS, McKibben MJ et al. Refined nomogram incorporating standing cough test improves prediction of male transobturator sling success. *Neurourol Urodyn* 2018;37(8): 2632-2637.

Address correspondence to Dr. Nabeel A. Shakir, Department of Urology, Henry Ford Hospital, 2799 W Grand Blvd., Urology - K-9, Detroit, MI 48202 USA