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Commentary: Go with the flow

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Postoperative urinary retention (POUR) is common, causes patient distress, results in bladder instrumentation with its attendant infection risks, and can prolong length of stay. Understanding who is at highest risk and intervening to reduce those risks should improve patient satisfaction and reduce catheter-associated urinary tract infections. I am sure that all the networks that you practice in have these as goals. Wei and colleagues¹ have created a nomogram to predict POUR after major thoracic surgical procedures. They noted a particularly high rate of POUR leading to bladder catheterization—19%—and utilized their institutional Society of Thoracic Surgeons General Thoracic Surgery Database data to create a nomogram to predict who was at highest risk for POUR. Not surprisingly, male sex and advancing age were predictive of POUR. Other significant factors in the multivariable model included patient controlled anesthesia use, creatinine level, and procedure type. This prediction model had a c-statistic of 0.77. They then tested the predictive value of their nomogram with a separate validation cohort of their patients and noted good modeling with a C-statistic of 0.72.

The author's institutional 19% rate of POUR may seem higher than you see in your Society of Thoracic Surgery General Thoracic Surgery Database report that shows a rate of 2.5% to 6.5% for most major thoracic procedures. This 19% rate is largely driven by their inclusion criteria and protocol that called for Foley placement 6 hours postoperatively if the patient had not voided. Foley insertion rates could potentially be reduced if a POUR protocol was in place that allowed for some intermittent catheterizations. The limitations of this study are predominantly related to its retrospective nature and the fact that some variables

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CENTRAL MESSAGE

Postoperative urinary retention is common. Knowing who is at highest risk may allow interventions to prevent it.

that may be predictive of POUR were not collected and therefore could not be part of the model (eg, history of POUR).

The value of knowing who is at highest risk for POUR is that it may lead to an intervention that could reduce its incidence. There are good data from other surgical specialties that transient alpha-blocker use can significantly reduce POUR.² A nice clinical trial would see our high-risk patients being randomized to get several days of tamsulosin preoperatively and postoperatively versus placebo to see if we can make a real difference.

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