

Disclosures: none

Sling outcomes in diabetic and non-diabetic women: Do differences exist?

A secondary analysis of the TOMUS data

Doreen Chung¹, Husam Abed², **Heidi Brown**³, Danielle Antosh⁴, Sallie Oliphant⁵,
Cara Grimes¹ for the Collaborative Research in Pelvic Surgery Consortium

1 – Columbia University Medical Center; 2 – Michigan State University; 3 –
University of Wisconsin-Madison School of Medicine & Public Health; 4 –
Methodist Center for Restorative Pelvic Medicine; 5 – University of Arkansas for
Medical Sciences



Background

- Urinary retention is a known risk following mid-urethral sling (MUS) surgery
- Diabetes mellitus (DM) can be associated with cystopathy

Hypothesis: Women with DM will have higher post-void residual (PVR) following MUS than women without DM

Methods

- Secondary analysis of data from the Trial of Mid-Urethral Slings (TOMUS)
- Multicenter equivalence trial of 597 women randomized to retropubic vs transobturator
- DM: treated with diet, oral meds, or insulin
- Compared women with & without DM
 - PVR (absolute & change) 2 & 6 weeks post-op
 - Subjective & objective treatment success
 - Voiding symptoms

TOMUS: Richter HE, Albo ME, Zyczynski HM, et al. Retropubic versus transobturator midurethral slings for stress incontinence. NEJM, 2010; 362(22):2066-76.

Results: Sample Description

- 57/597 (9.5%) had DM: 4 on insulin, 22 on oral medication; 31 diet-controlled.
- Women with and without DM did not differ significantly in terms of:
 - Age
 - BMI
 - Parity
 - Sling type

Results: Post-operative Differences

	PVR 2 weeks	PVR 6 weeks
DM	42.8 ± 77.3 mL	42.3 ± 52.4 mL
No DM	35.0 ± 52.6 mL	39.0 ± 45.2 mL
p-value	0.321	0.662

Objective success:

- (-) stress test
- (-) 24-h pad test
- No SUI retreatment

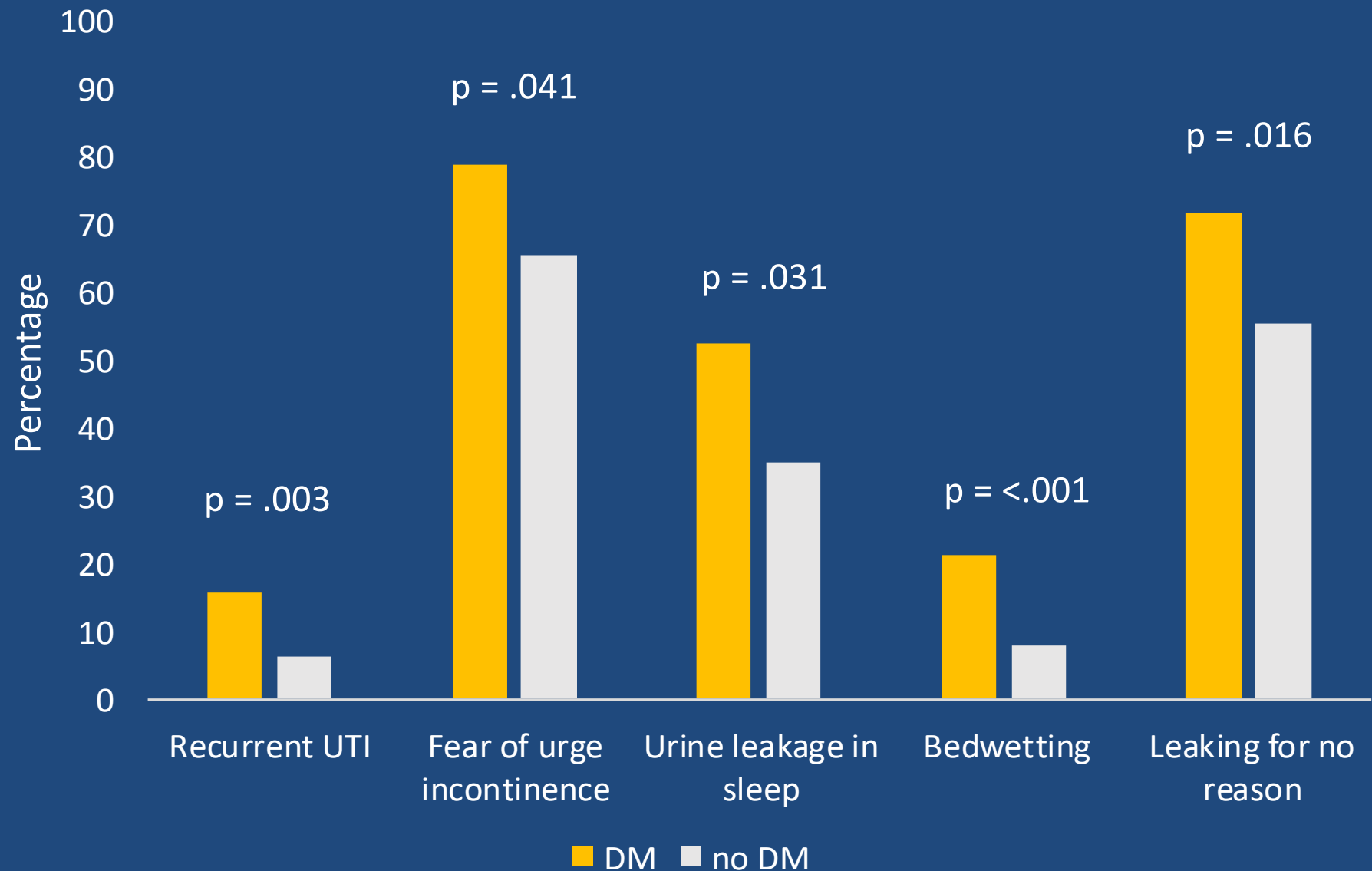
Subjective success:

- No leakage on 3 d diary
- No self-reported SUI sx
- No SUI retreatment

Results: Post-operative Symptoms

- Women with DM more likely to report leakage w/ physical activity? ($p=.054$)
- **Women without DM more likely to report no urine leakage 1 year post-op ($p=.009$)**
- Women with DM more likely to complain of pain when urinating, standing, or physically exerting ($p=0.054$)

Results: Voiding Symptoms Pre-op



Conclusions

- No significant increase in post-op PVR in women with DM following MUS.
- Women with DM planning MUS should be counseled re: higher risk of leakage with activity, pain, and pelvic discomfort following MUS surgery.
- Differences in voiding symptoms pre-op may be related to DM.