

NORTHWESTERN UNIVERSITY



RECENT EVIDENCE FOR URINARY INCONTINENCE TREATMENTS & OUTCOMES

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Facts

- Urinary Incontinence
 - >75% of post-menopausal women
 - >30% young women
- Only 45% with weekly UI sought care
- One in 5
 - With UI report FI
 - Undergo surgery for PFD
- 2010 ≈260,00 US women had SUI surgery

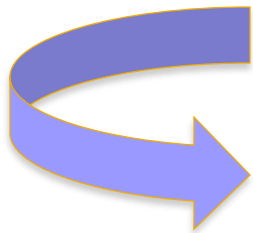


Incontinence Subtypes

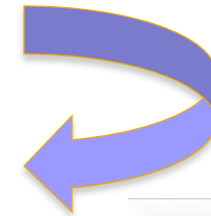
STRESS INCONTINENCE



URGENCY INCONTINENCE



MIXED INCONTINENCE



Challenges UI Outcomes Assessment

Surgeon says “cured”

Patient says “cured”

OBJECTIVE Outcomes *ONLY*

OBJECTIVE + SUBJECTIVE

(validated instruments, QOL)

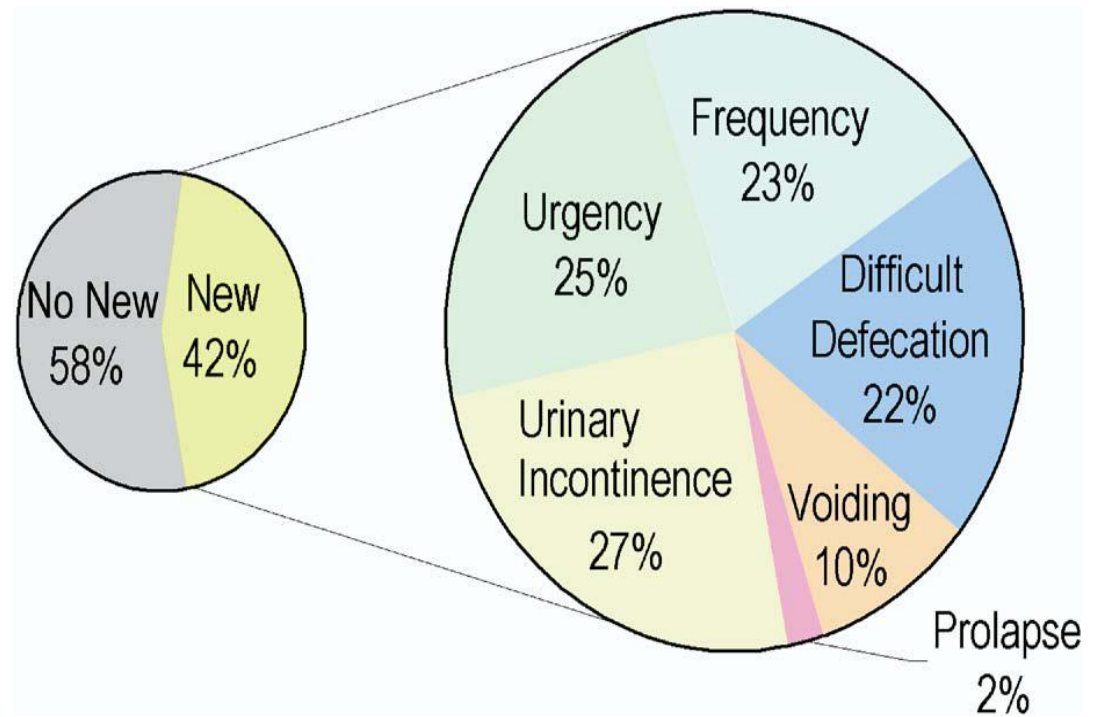
Objective + Subjective + Global Assessment

Objective + Subjective + Global Assessment + Goal Oriented

Incontinence gone ≠ Patient satisfaction

■ No incontinence... now has

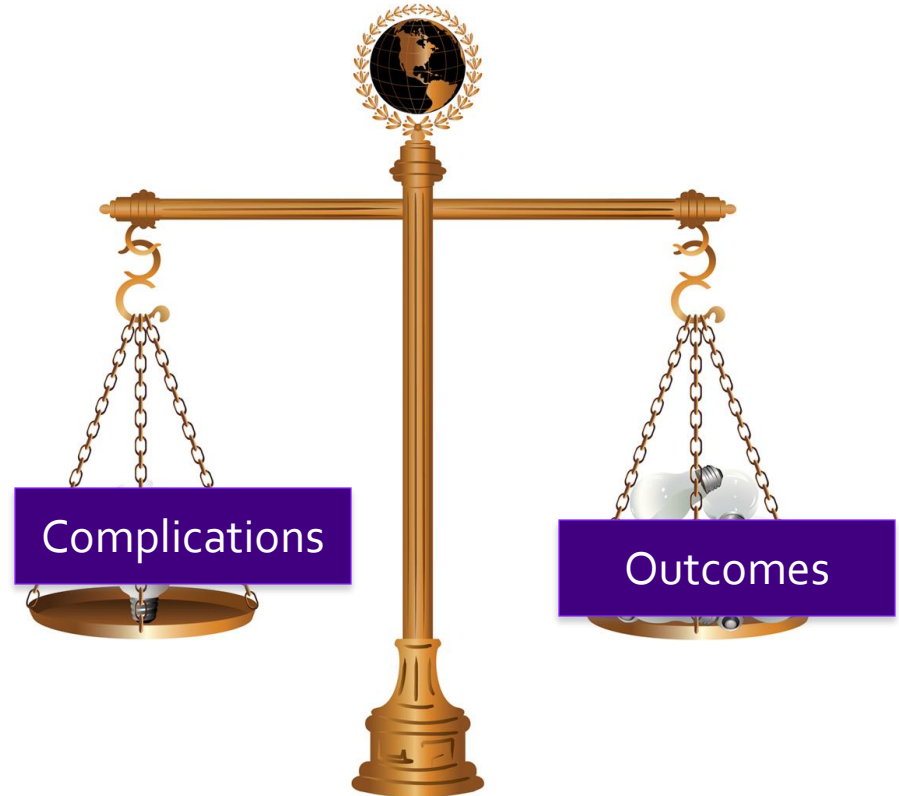
- Another UI subtype
- Voiding dysfunction
- Dyspareunia
- Complication
- Mesh erosion



Pham T et al

Patients want to:

- Optimize
 - Satisfaction
 - Outcomes
 - Anatomy
 - Functional
 - Quality of life
- Minimize
 - Complication
 - Recovery



Evidence

High quality

- Comparative effectiveness trials
- Systematic reviews
- Meta-analyses



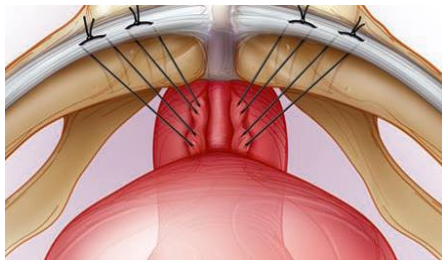
Stress Incontinence Surgical Treatment Efficacy



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2007

655 ♀



329 Burch

SUPERIORITY



326 Fascial Sling



570 (70%) 2-year follow up

Success

OVERALL

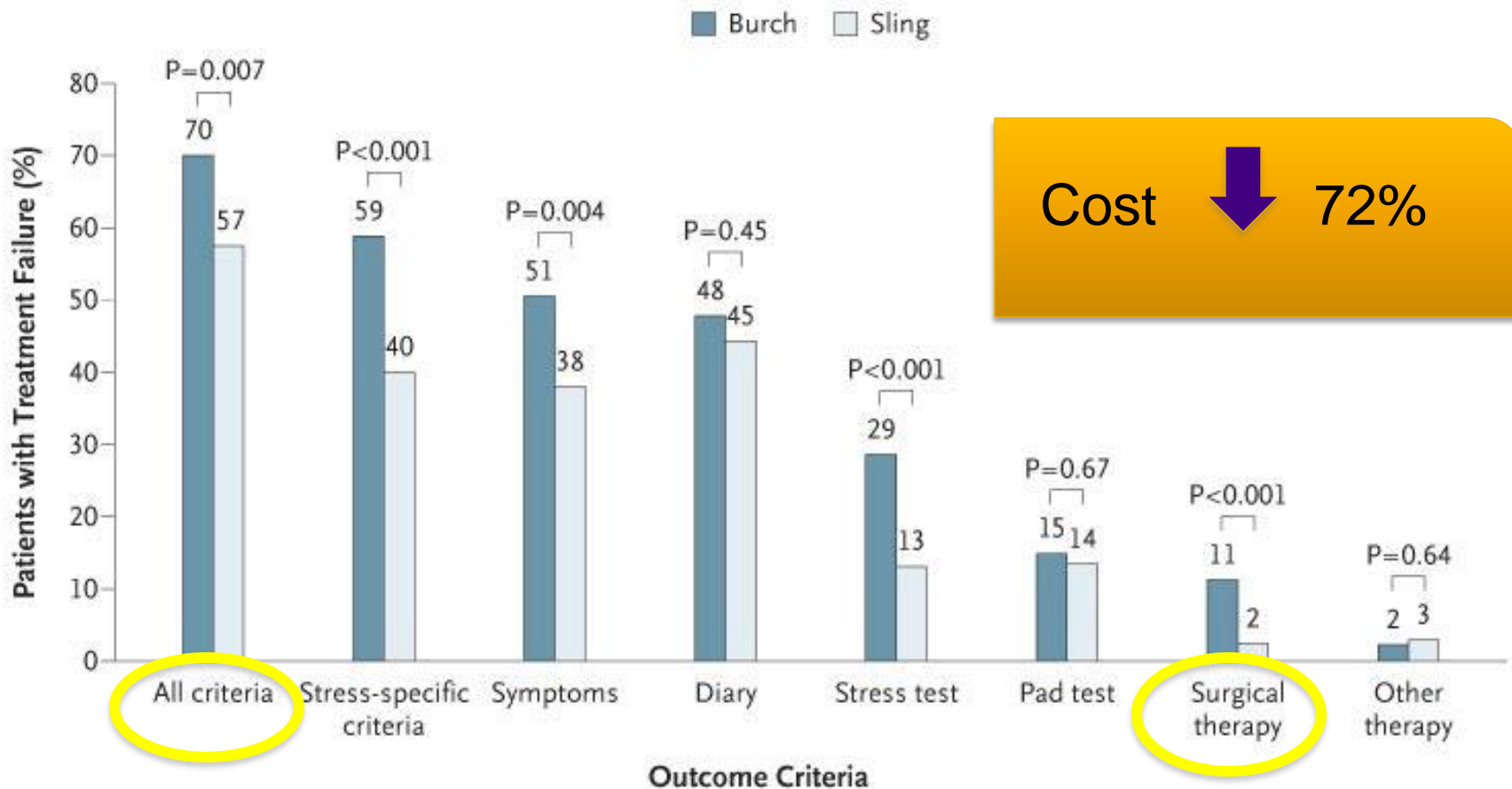
- No symptoms UI
- $\uparrow < 15$ g on 24 hour pad test
- No UI on 3-day diary
- Negative cough stress test at 300 ml
- No retreatment for UI (behavioral, pharmacologic, or surgical)

STRESS SPECIFIC

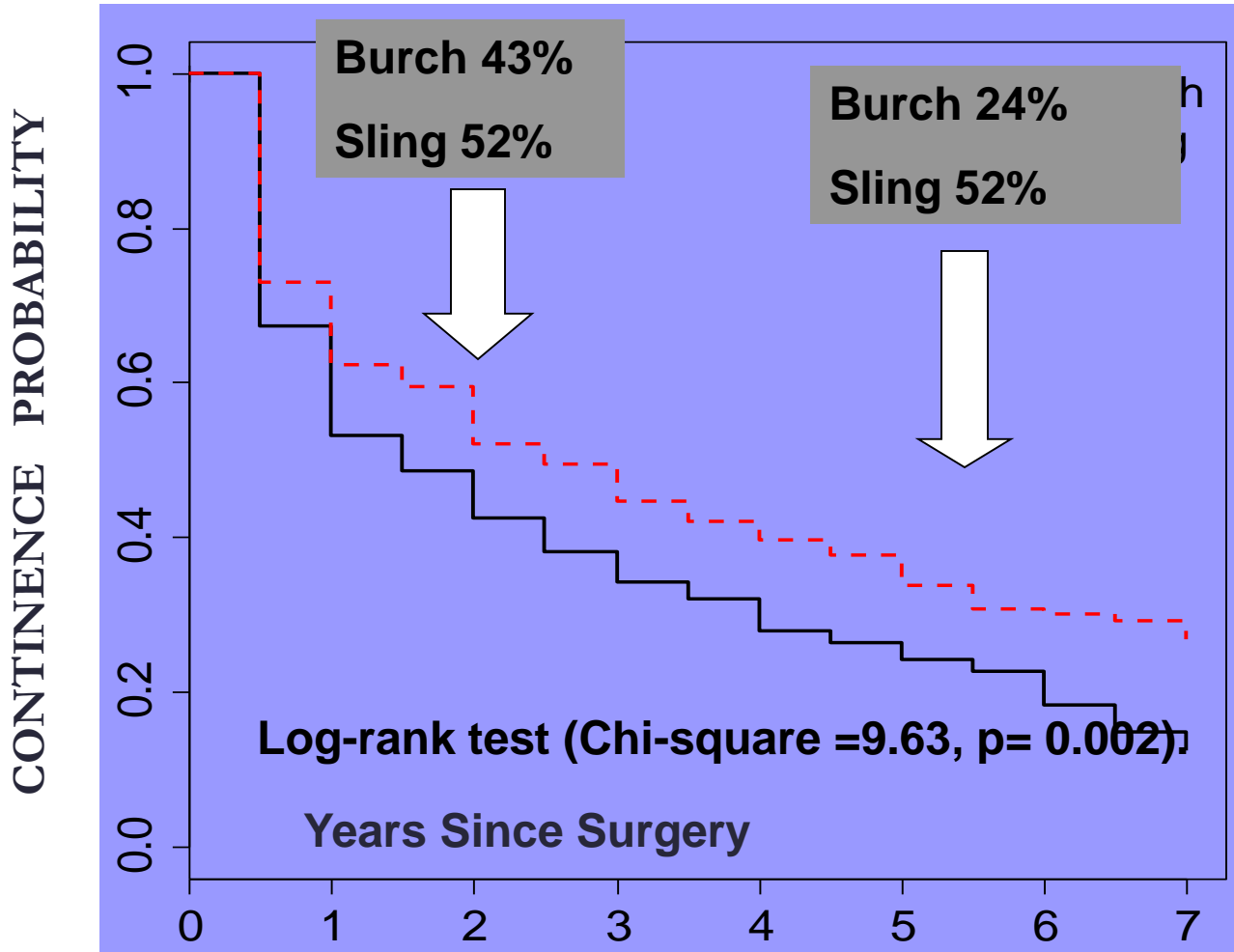
- No self-reported SUI
- Negative cough stress test
- No retreatment for SUI

Favored SLING

- Overall success 47% v 38%
- Stress specific success 66% v 49%
- Satisfaction 86% v 78%



5-Year Continence Rates



485 of 655

With UI more likely to enroll (86% vs 52%)

Satisfaction HIGH
73% & 83%

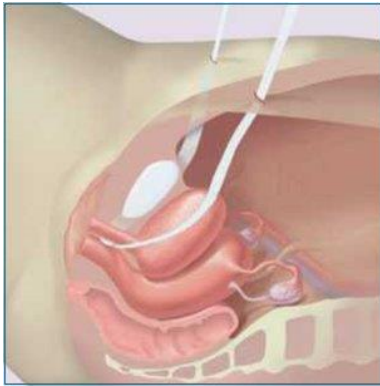
Mid-Urethral Slings

- 1st line surgical treatment
- 27% ↑ surgical treatment
 - 2000-2007
- Synthetic polypropylene mesh
- Best studied UI treatment
- Level 1 efficacy studies
- Adverse events well understood

Trial Of Mid-Urethral Slings (TOMUS)

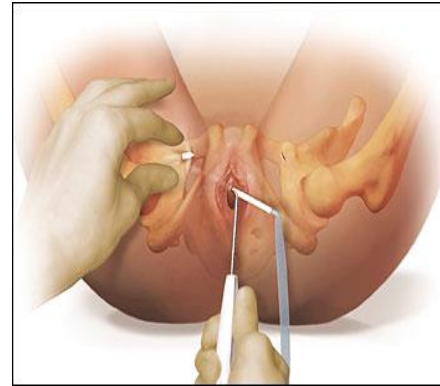


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298 Retropubic

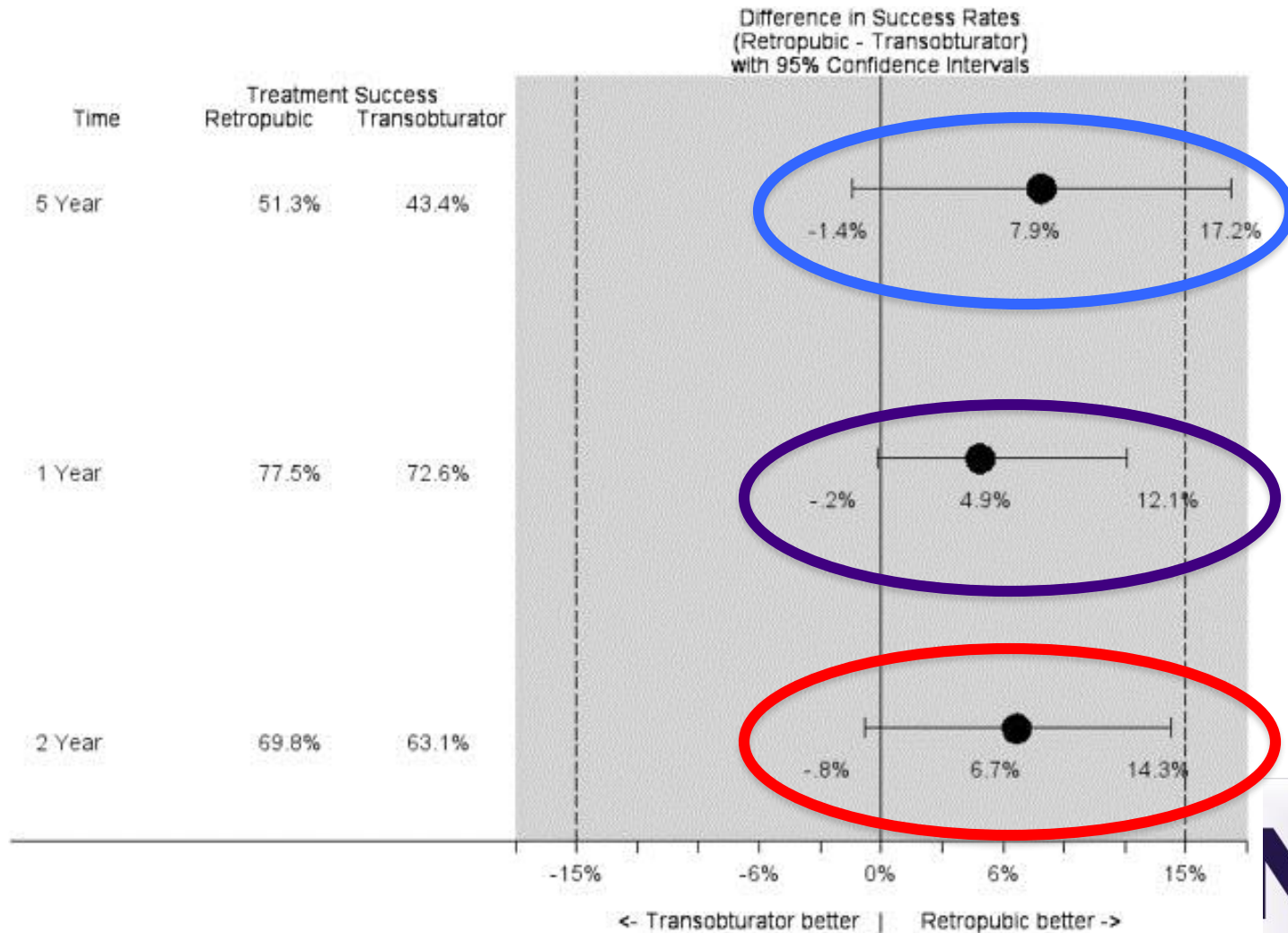
VS



299 Transobturator

- Equivalence trial
 - Confirm absence of meaningful difference
 - Predetermined equivalence margin ($\pm 12\%$)
- 98% completed 1-year primary outcome

Primary Outcomes



Specific Outcome Measures: 1-year

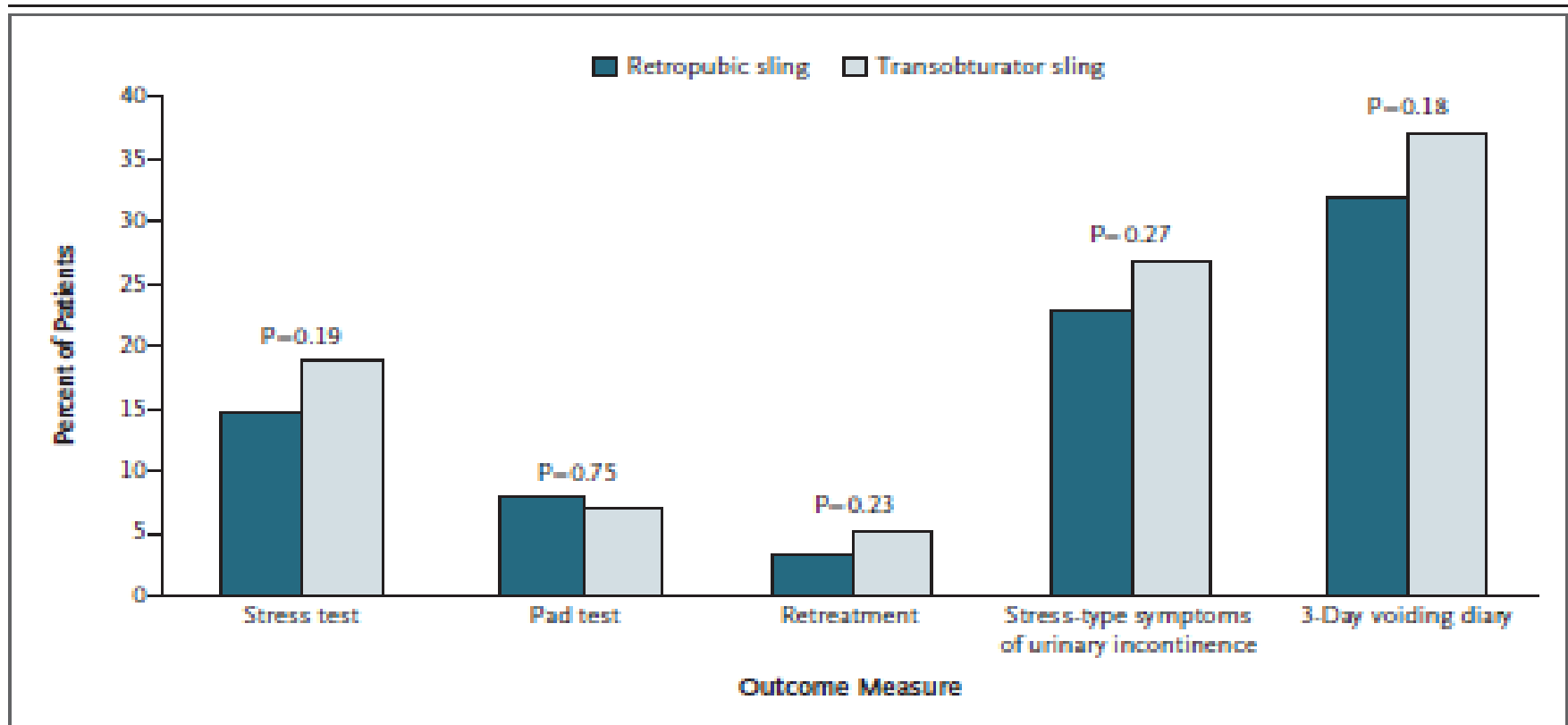


Figure 3. Proportion of Patients with Treatment Failure at 12 Months, According to Objective and Subjective Criteria. Retreatment includes surgical, pharmacologic, or behavioral treatment, placement of a new device, and other treatment. Stress-type symptoms of urinary incontinence were assessed with the use of the Medical, Epidemiological and Social Aspects of Aging questionnaire.¹⁶

PT vs Mid-Urethral Sling

RCT 460 Women with Stress Incontinence



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2013

■ Cross-overs @ 3 months

- 49% in PT to MUS
- 11% in MUS to PT

■ Subjective Improvement (IIT)

- 91% MUS v. 64% PT

■ V

C

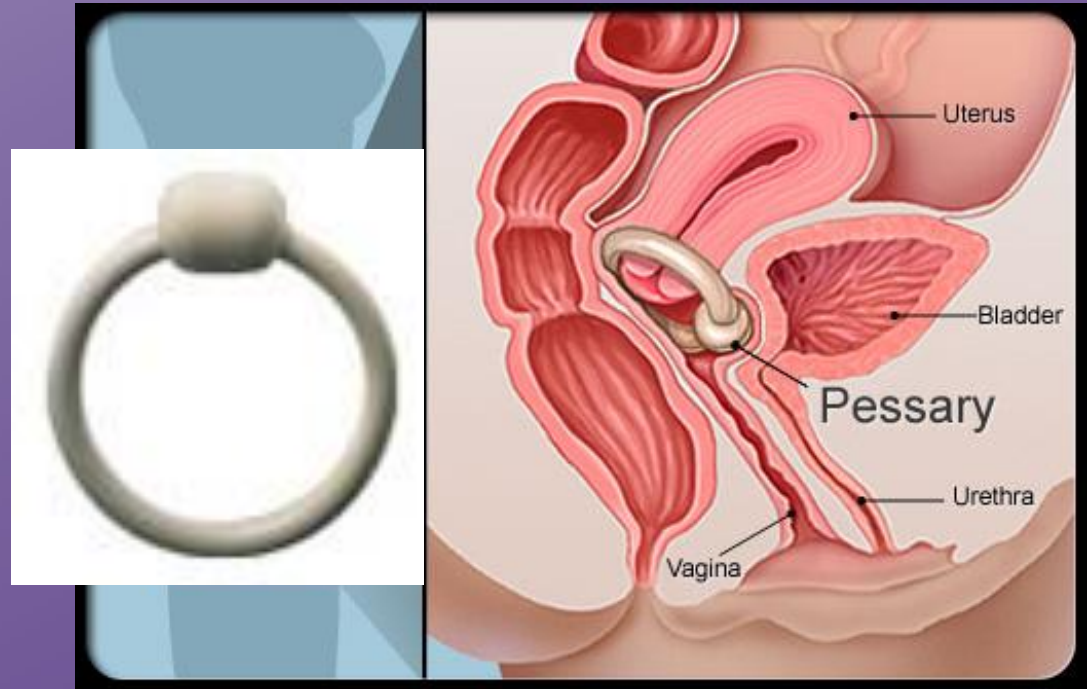
➤

Initial MUS as compared to PT
Higher rates of subjective improvement
Higher rates subjective and objective cure

ATLAS

RCT comparing conservative treatments for Stress Incontinence

- Pessary
- Pelvic Floor Muscle Training (Kegels)
- Combination



ATLAS

1-year Satisfaction Rates

- Physical therapy – 54%
 - Pessary – 50%
 - Combined – 54%
- SIGNIFICANTLY improved women's quality of life and bother from urinary incontinence
- BOTH effective NON-SURGICAL TREATMENTS for certain types of incontinence

Recent Meta-Analyses

- MIDURETHRAL SLINGS
 - Extensively studied, safe and efficacious
 - Outcomes
 - Retropubic MUS > Fascial sling, Obturator
 - Fascial sling > Burch
 - MUS = Burch
 - Dyspareunia low < 1%

Ford 2016, Schmiptf 2015

Value of Urodynamic Evaluation

VALUE



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Women with SUI planning surgery

- Basic Office Evaluation (N=259)
 - Normal PVR; Negative UA; + Cough Stress Test
- Multichannel Urodynamics (N=264)
- 1-year: Treatment success
 - Office Evaluation 77%
 - Urodynamics 77%

Office Evaluation NOT INFERIOR to UDS

Does Urodynamics Predict Success?

Baseline Urodynamic Predictors of Treatment Failure 1 Year After Mid Urethral Sling Surgery

Charles W. Nager,^{*,†} Larry Sirls,[†] Heather J. Litman,[†] Holly Richter,[‡]
Ingrid Nygaard,[†] Toby Chai,[§] Stephen Kraus,^{||} Halina Zyczynski,[¶] Kim Kenton,^{**}
Liyuan Huang,[†] John Kusek[†] and Gary Lemack^{††} for the Urinary Incontinence
Treatment Network

J Urol. Vol. 186, 597-603, August 2011

Not helpful

Failures with lower VLPP and MUCP

- no cut-offs



Overactive bladder

- Office procedure
 - Women with incontinence not responsive to other treatment
- First line treatment
- Botox vs Bladder Medications
 - 27% vs 13% completely dry at 6 months
- Lasts up to 6-9 months

Sexual Function & UI

- ↓ Sexual function, vaginal intercourse, satisfaction
- Sexual function IMPROVED after treatment for UI
 - Surgical and non-surgical
- TOMUS & SISTEr (2-year)
 - IMPROVED: Dyspareunia, coital UI, fear of UI with sex
- Meta-analysis/Systematic Reviews
 - Sexual function improved after surgery
 - Low rates of dyspareunia after MUS

Conclusions with LEVEL 1 Evidence

- MUS
 - Efficacy similar or better than traditional UI procedures with fewer AE
 - Substantial safety & efficacy data to support MUS as 1st line surgical treatment
 - Initial MUS higher 1-year cure rates than PT
- Botox higher rates of UI resolution than antimuscarinic
- UDS not necessary in preoperative evaluation of uncomplicated UI
- Sexual function improved after UI treatment

ON BEHALF OF ALL THE WOMEN SUFFERING
WITH PELVIC FLOOR DISORDERS, THANK YOU
FOR YOUR ATTENTION!

