

# Incontinence

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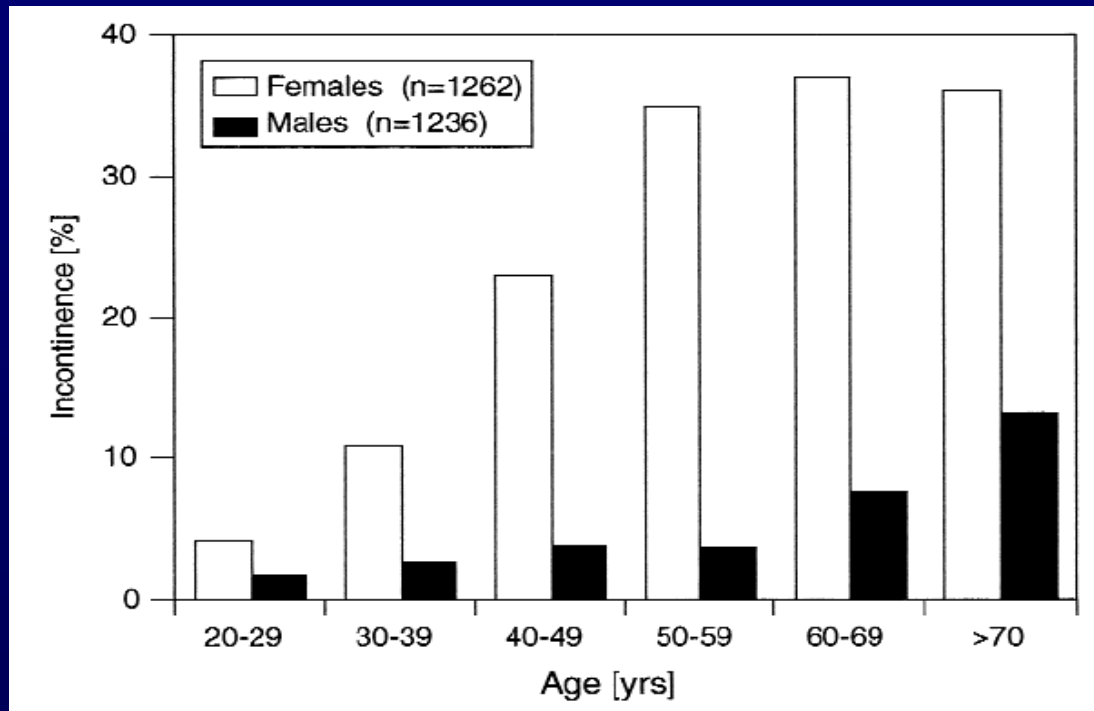


Training Course in Reproductive Health Research – Geneva 2008

# ICS definition of incontinence

Urinary incontinence is the complaint of any involuntary loss of urine

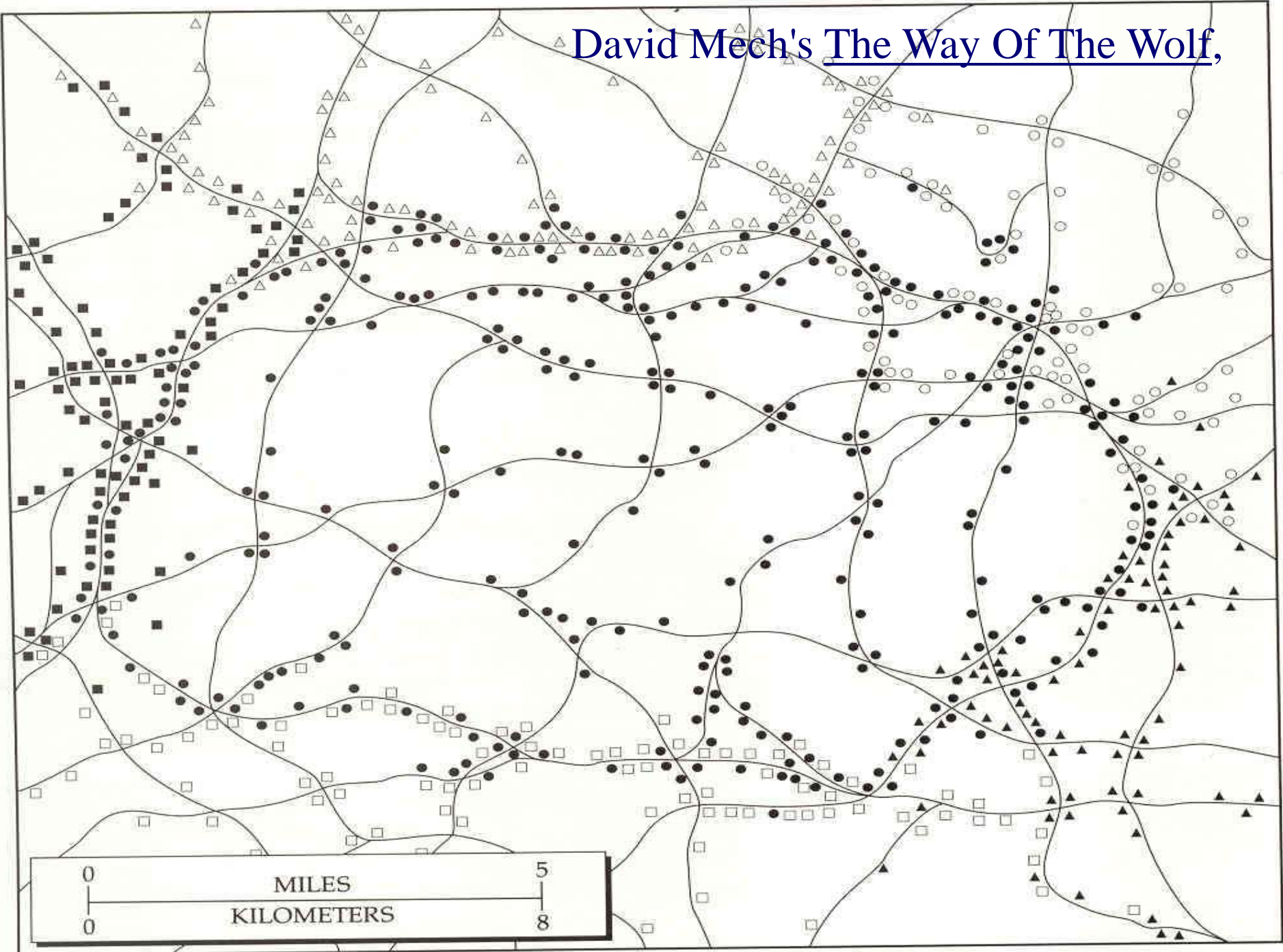
# Prevalence







David Mech's The Way Of The Wolf,







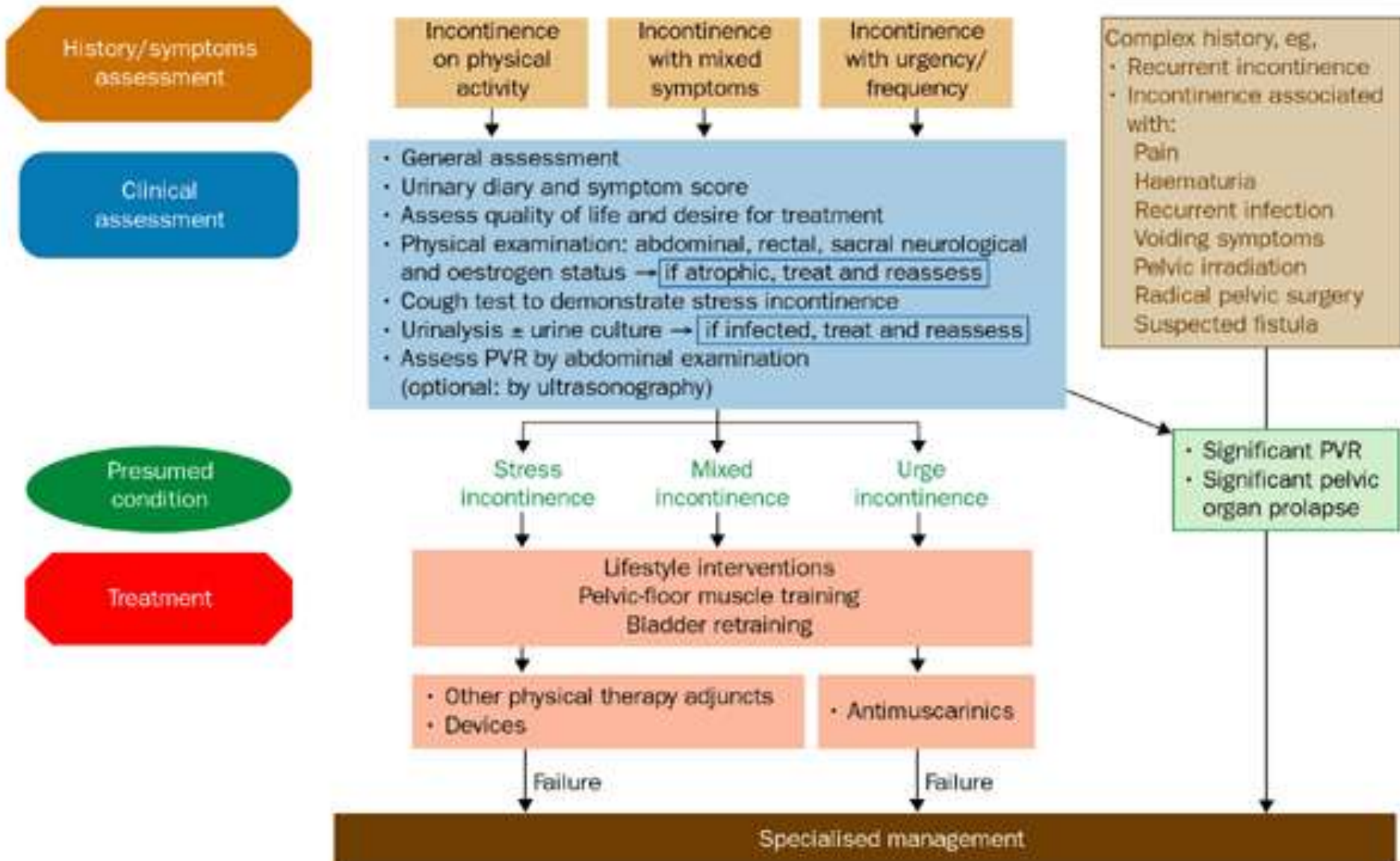


# Assessment and Treatment of Urinary Incontinence :

Scientific Committee of the First International  
Consultation on Incontinence

The Lancet 2000;355: 2153-58

# Initial management of urinary incontinence in women



# MANAGEMENT OF URINARY INCONTINENCE IN FRAIL OLDER PERSONS

## HISTORY/SYMPATOM/ ASSESSMENT

## INCONTINENCE

### CLINICAL ASSESSMENT

- Assess, treat and reassess potentially treatable conditions, including relevant comorbidities and activities of daily living (ADLs)
- Assess QoL, desire for Rx, goals of Rx, pt & caregiver preferences
- Targeted physical exam incl cognition, mobility, neurological
- Urinalysis + MSU
- Bladder diary
- Cough test and PVR (If feasible and if it will change management)

- UI associated with:
- Pain
  - Haematuria
  - Recurrent symptomatic UTI
  - Pelvic mass
  - Pelvic irradiation
  - Pelvic/LUT surgery
  - Major prolapse (women)
  - Post prostatectomy (men)

DIAPPERS

- Delirium
- Infection
- Atrophic vaginitis
- Pharmaceuticals
- Psychological
- Excess urine output
- Reduced Mobility
- Stool impaction and other factors

### CLINICAL DIAGNOSIS

\* These diagnoses may overlap in various combinations, eg, MIXED UI, DHIC (see text)

### INITIALE MANAGEMENT

(If Mixed UI, initially treat predominant symptoms)

### ONGOING MANAGEMENT and REASSESSMENT

#### Urge UI \*

- Lifestyle interventions
- Behavioral therapies
- Consider cautious addition and trial of antimuscarinic drugs
- ± Topical estrogens (women)

#### Significant PVR\*

- Treat constipation
- Review medications
- Double voiding
- Consider trial of alpha-blocker (men)
- If PVR>500: catheter decompression then reassess

#### Stress UI\*

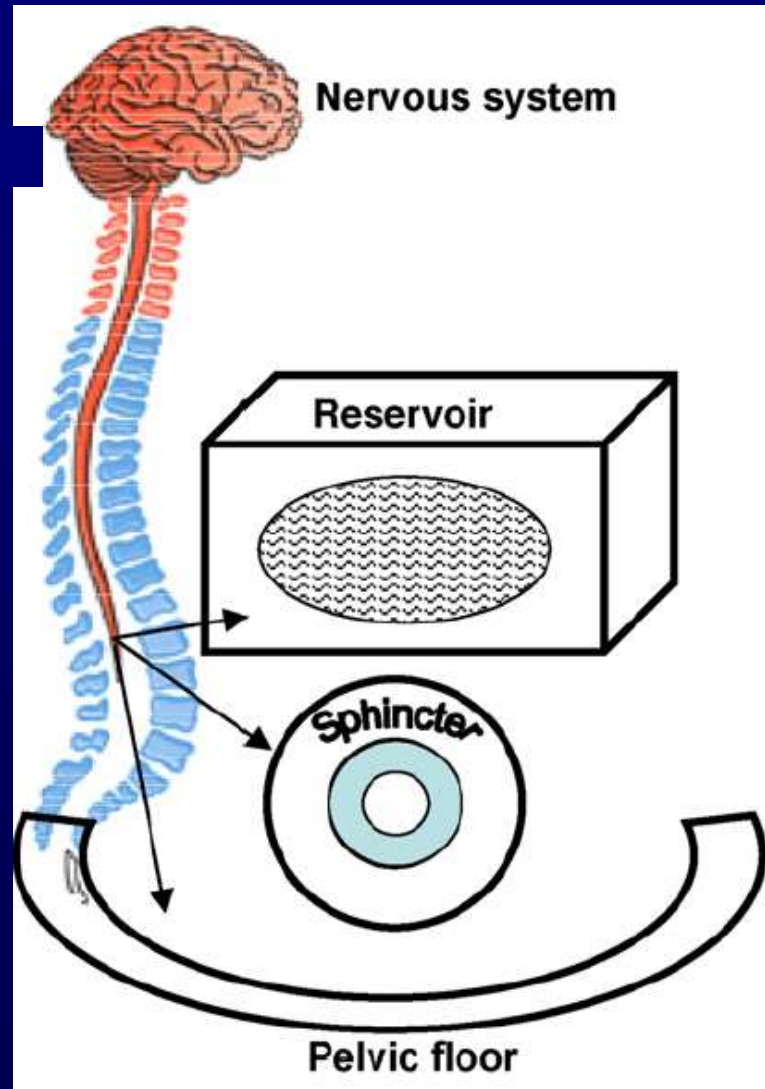
- Lifestyle interventions
- Behavioral therapies
- + Topical estrogens (women)

Continue conservative methods ± Dependent continence ± Contained continence

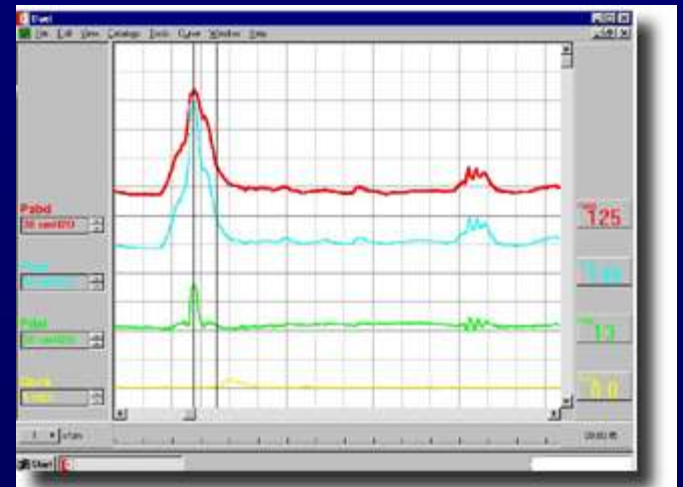
If fails, consider need for specialist assessment

# Think function

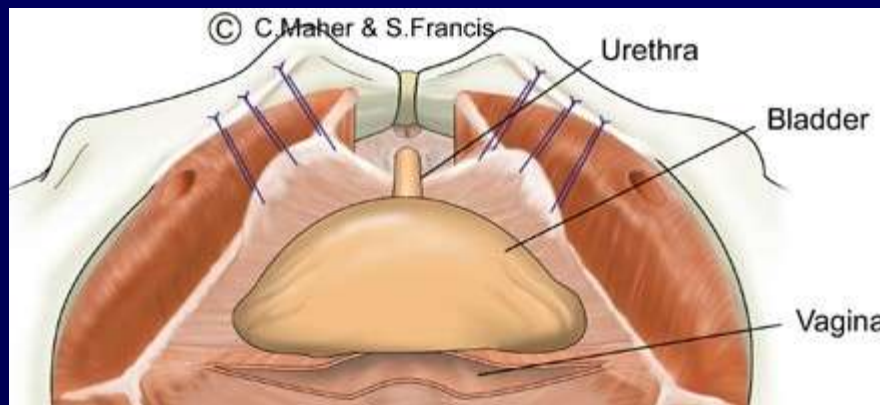
*Urinary  
Reproductive  
Anorectal*



# Urodynamics

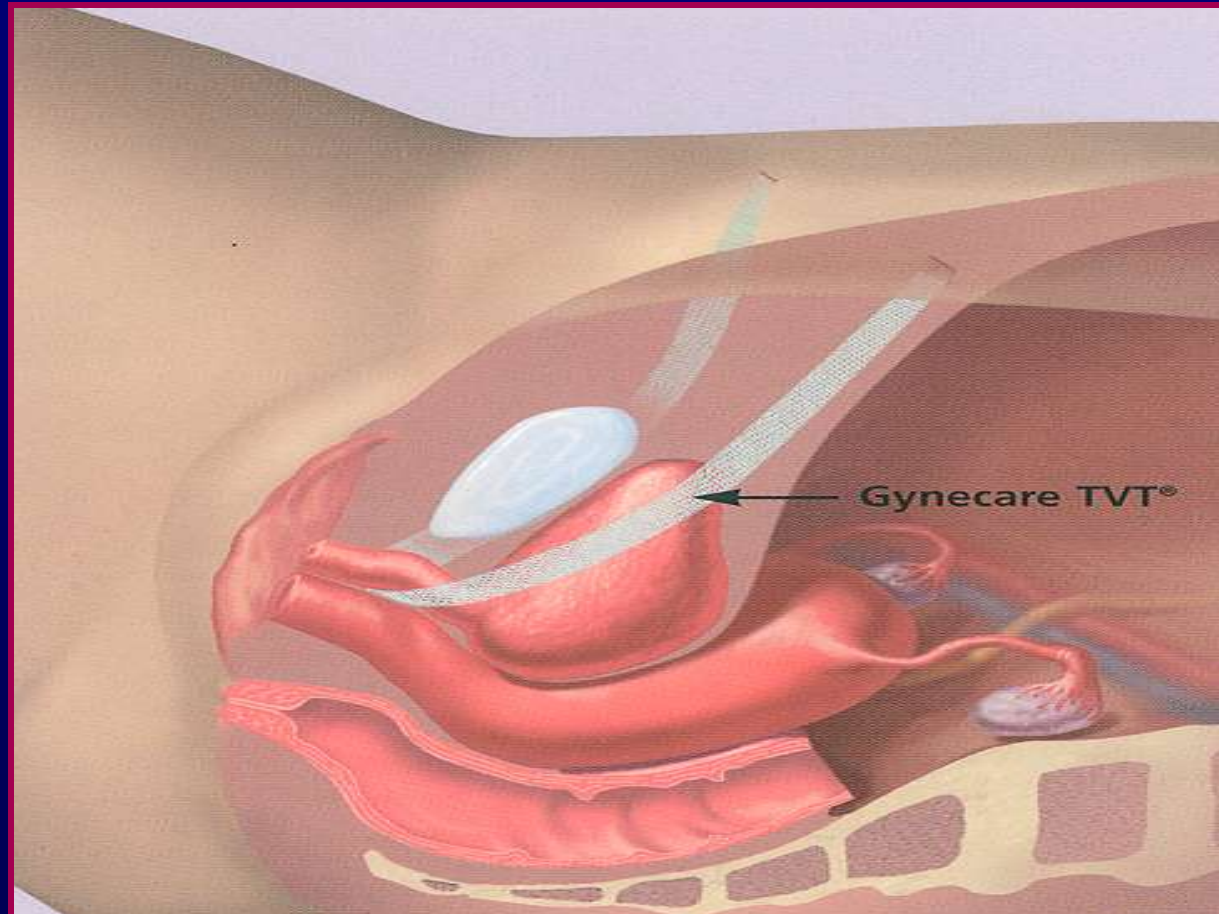


# Burch colposuspension

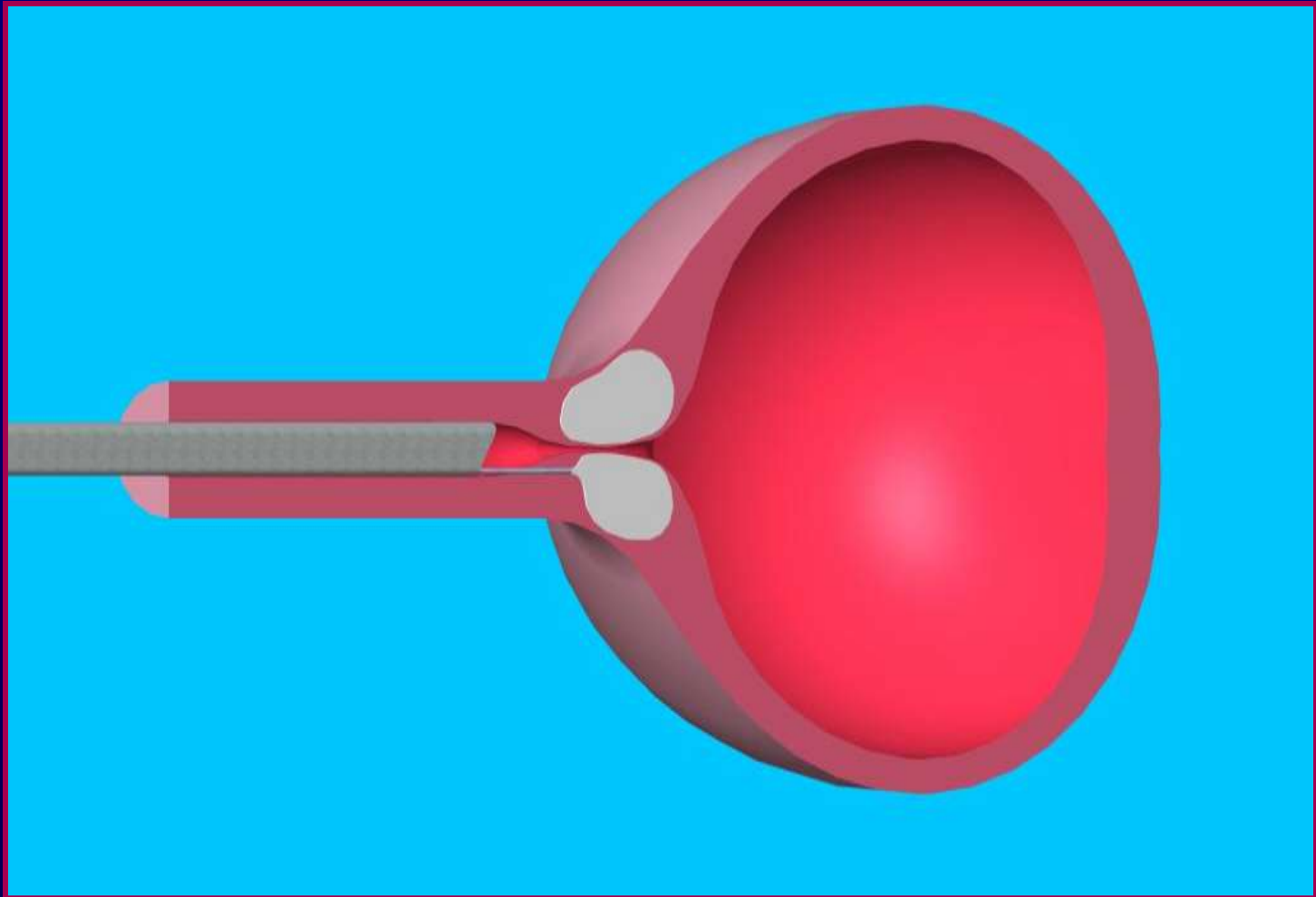


# TVT

*(tension free vaginal tape)*

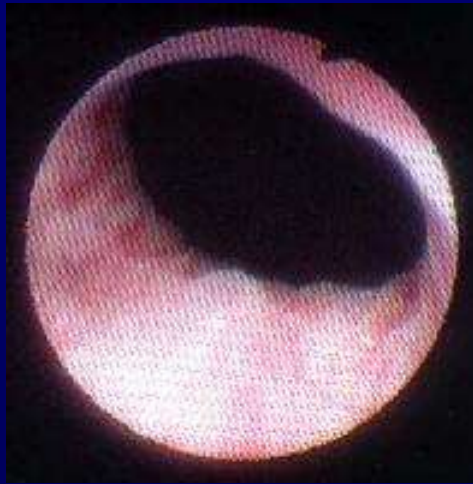


# Bulking agents





# Intraurethral bulking agents for urinary incontinence



Incontinence surgery: what is  
evidence-based ?

**"Evidence based medicine is the integration of best research evidence with clinical expertise and patient values"**

# How to find the current best evidence ?

1. Burn your (traditional) textbooks
2. Try "modern" textbooks
  - Frequently revised
  - Heavily referenced
  - Explicit selection
3. Invest in evidence databases

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## **Surgical treatment of stress urinary incontinence in women**

[George Flesh, MD](#)

*UpToDate performs a continuous review of over 330 journals and other resources. Updates are added as important new information is published. The literature review for version 12.3 is current through August 2004; this topic was last changed on September 10, 2004. The next version of UpToDate (13.1) will be released in February 2005.*

- Surgery is the gold standard for treatment of SUI
- The goals of surgical treatment are to:
  - Stabilize the bladder neck to prevent descent with increased intra-abdominal pressure
  - Create a stable fascial layer for urethral compression
- However, surgery does not make all women continent and some procedures that are initially successful can eventually fail.

- Unfortunately, comparing the different surgical procedures is difficult due to variations in patient selection, experience of the surgeon, diagnostic methods, techniques, outcome criteria, and length of follow-up

Hilton 2002

- A systematic review of 11 randomized controlled trials, 20 nonrandomized trials/prospective cohort studies, and 45 retrospective cohort studies concluded that recommendations as to the best clinical practice could not be based upon scientific evidence

Black 1996

## Key points:

- **Accurate diagnosis** is the first requirement
- The goal of surgery is to **stabilize the bladder neck** and to create a stable fascial layer for urethral compression.
- **Excessive tension** must be avoided.
- **Open Burch and sling procedures** are the techniques with the best documentation of long-term success.
- All patients with stress incontinence have some degree of **intrinsic sphincter deficiency (ISD)**.
- Periurethral bulking agents are useful for ISD without hypermobility and SUI with high surgical risk, but long-term outcome is poor without repeated injections.





ELSEVIER

GENERAL OBSTETRICS AND GYNECOLOGY: GYNECOLOGY

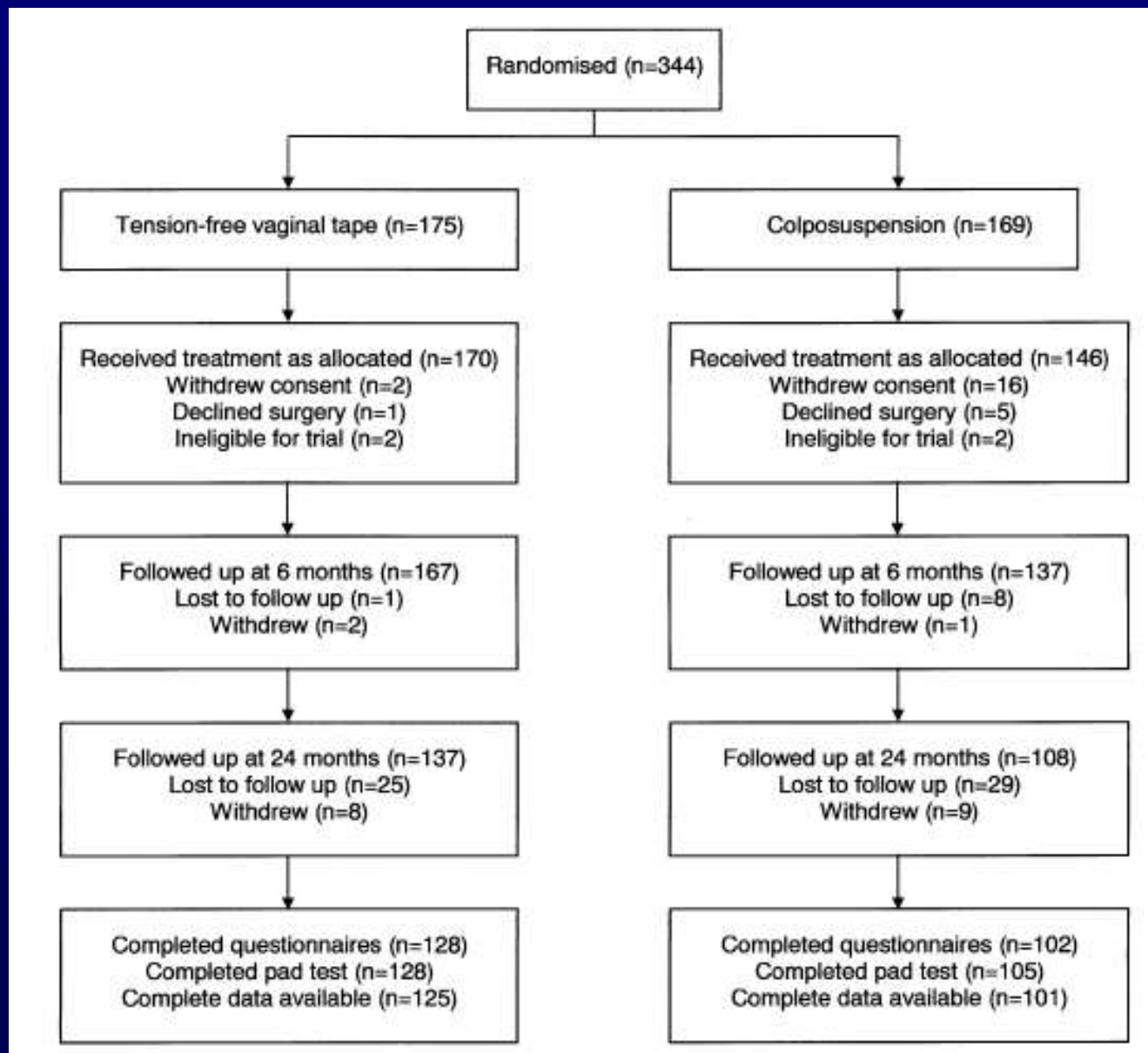
# A prospective multicenter randomized trial of tension-free vaginal tape and colposuspension for primary urodynamic stress incontinence: Two-year follow-up

Karen L. Ward, MRCOG, Paul Hilton, MD, FRCOG,\* on behalf of the UK & Ireland TVT Trial Group

*Department of Obstetrics and Gynaecology, University of Newcastle upon Tyne, and Directorate of Women's Services, Royal Victoria Infirmary, Newcastle upon Tyne, United Kingdom*

Received for publication May 24, 2003; revised July 27, 2003; accepted July 29, 2003

# Participants flow



# Results

**Table I** Analysis of pad test results at 2 years, using different assumptions about outcome for patients with missing data

| Assumption  | TVT     | %  | Colposuspension | %  | Odds ratio | 95% CI    | <i>P</i> value* |
|---|---------|----|-----------------|----|------------|-----------|-----------------|
| Women with data available at 24 mo  | 111/137 | 81 | 86/108          | 80 | 1.09       | 0.59-2.06 | .87             |
| Assuming all withdrawals are failures   | 111/175 | 63 | 86/169          | 51 | 1.67       | 1.09-2.58 | .02             |
| Assuming all withdrawals are cured  | 149/175 | 85 | 147/169         | 87 | 0.86       | 0.47-1.58 | .64             |
| Last observed result carried forward  | 136/175 | 78 | 115/169         | 68 | 1.64       | 1.01-2.65 | .052            |
| Assuming presurgery withdrawals are cured and last postoperative result carried forward | 141/175 | 81 | 138/169         | 82 | 0.93       | 0.54-1.60 | .89             |

\* Fisher exact test.

*The* NEW ENGLAND  
JOURNAL *of* MEDICINE

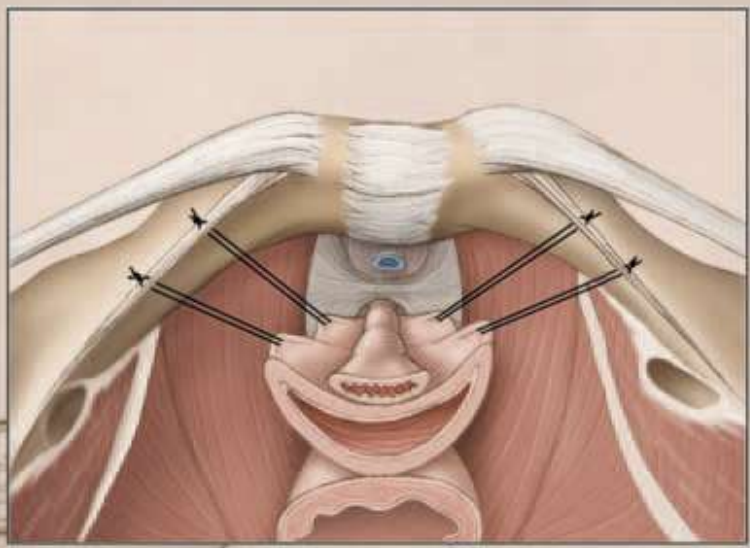
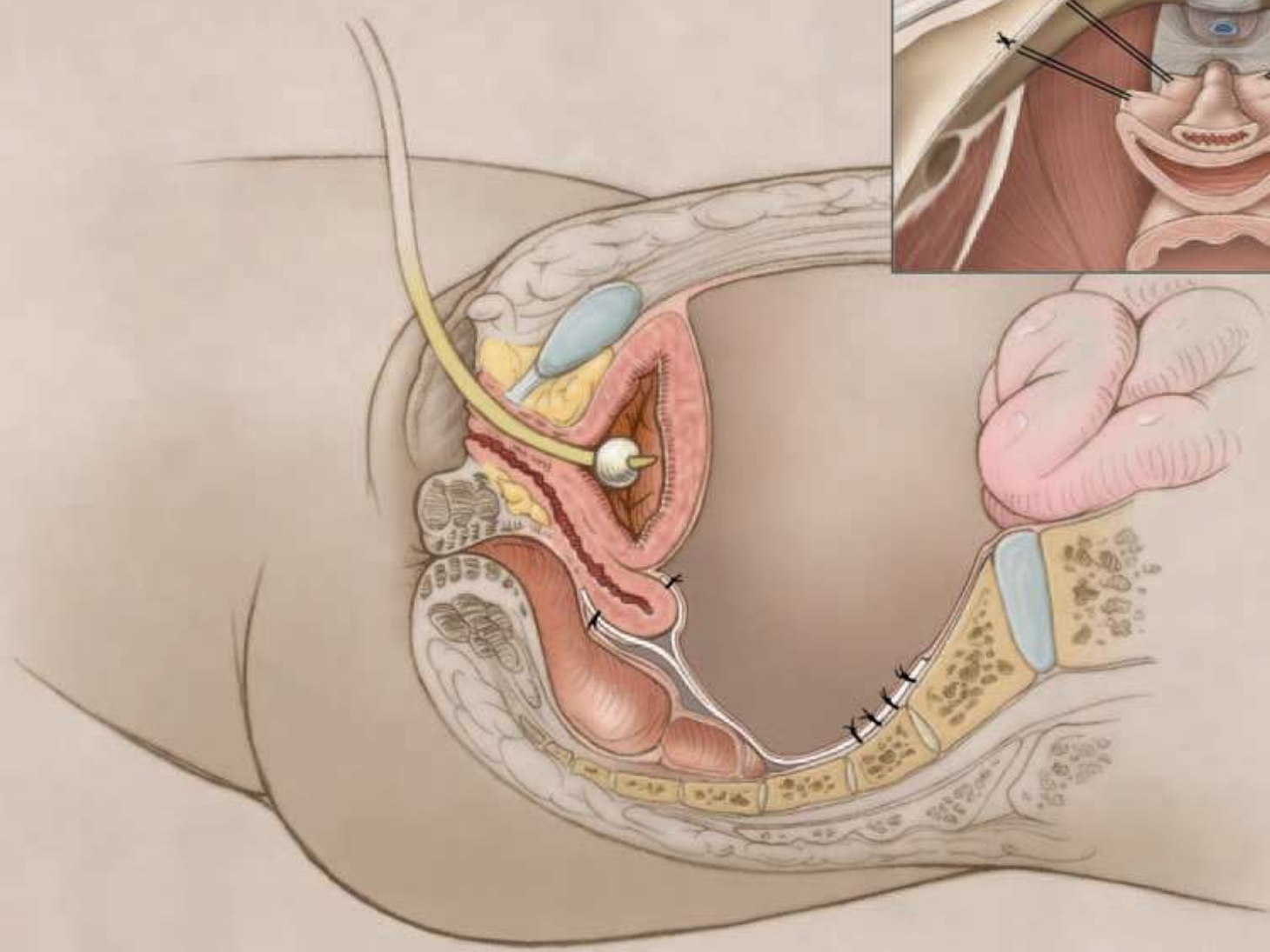
ESTABLISHED IN 1812

APRIL 13, 2006

VOL. 354 NO. 15

Abdominal Sacrocolpopexy with Burch Colposuspension  
to Reduce Urinary Stress Incontinence

Linda Brubaker, M.D., Geoffrey W. Cundiff, M.D., Paul Fine, M.D., Ingrid Nygaard, M.D., Holly E. Richter, M.D., Ph.D.,  
Anthony G. Visco, M.D., Halina Zyczynski, M.D., Morton B. Brown, Ph.D., and Anne M. Weber, M.D.,  
for the Pelvic Floor Disorders Network\*



**Table 3. Urinary Evaluation at Three Months after Surgery:**

| Variable                                | Burch Group<br>(N=157) | Control Group<br>(N=165) | P Value |
|---|------------------------|--------------------------|---------|
| Stress incontinence outcome — no./total | 35/147 (23.8)          | 67/152 (44.1)            | <0.001  |
| According to symptoms†                  | 29/153 (19.0)          | 60/151 (39.7)            | <0.001  |
| According to stress testing‡            | 7/148 (4.7)            | 14/162 (8.6)             | 0.14    |
| According to treatment                  | 8/157 (5.1)            | 19/165 (11.5)            | 0.05    |
| Other measures of stress incontinence   |                        |                          |         |
| Bothersome stress incontinence — n      | 9/147 (6.1)            | 37/151 (24.5)            | <0.001  |
| MESA score for stress incontinence¶     | 13.3±19.0              | 23.3±24.7                | <0.001  |

**Table 3. Urinary Evaluation at Three Months after Surgery.\***

| Variable   | Burch Group<br>(N=157) | Control Group<br>(N=165) | P Value |
|--|------------------------|--------------------------|---------|
| Urge outcome — no./total no. (%)                   | 50/153 (32.7)          | 58/151 (38.4)            | 0.48    |
| Serious adverse events to 3 mo — no./total no. (%) |                        |                          |         |
| All events   | 23/157 (14.6)          | 24/165 (14.5)            | 0.79    |
| Urologic and gynecologic events                    | 5/157 (3.2)            | 5/165 (3.0)              | 0.70    |
| Plausibly related events                           | 7/157 (4.5)            | 5/165 (3.0)              | 0.24    |

# Autologous myoblasts and fibroblasts versus collagen for treatment of stress urinary incontinence in women: a randomised controlled trial



Hannes Strasser, Rainer Marksteiner, Eva Margreiter, Gernar Michael Pinggera, Michael Mitterberger, Ferdinand Frauscher, Hanno Ulmer, Martin Fussenegger, Kurt Kofler, Georg Bartsch

## Summary

**Background** Preclinical studies have suggested that transurethral injections of autologous myoblasts can aid in *Lancet* 2007; 369: 2179-86

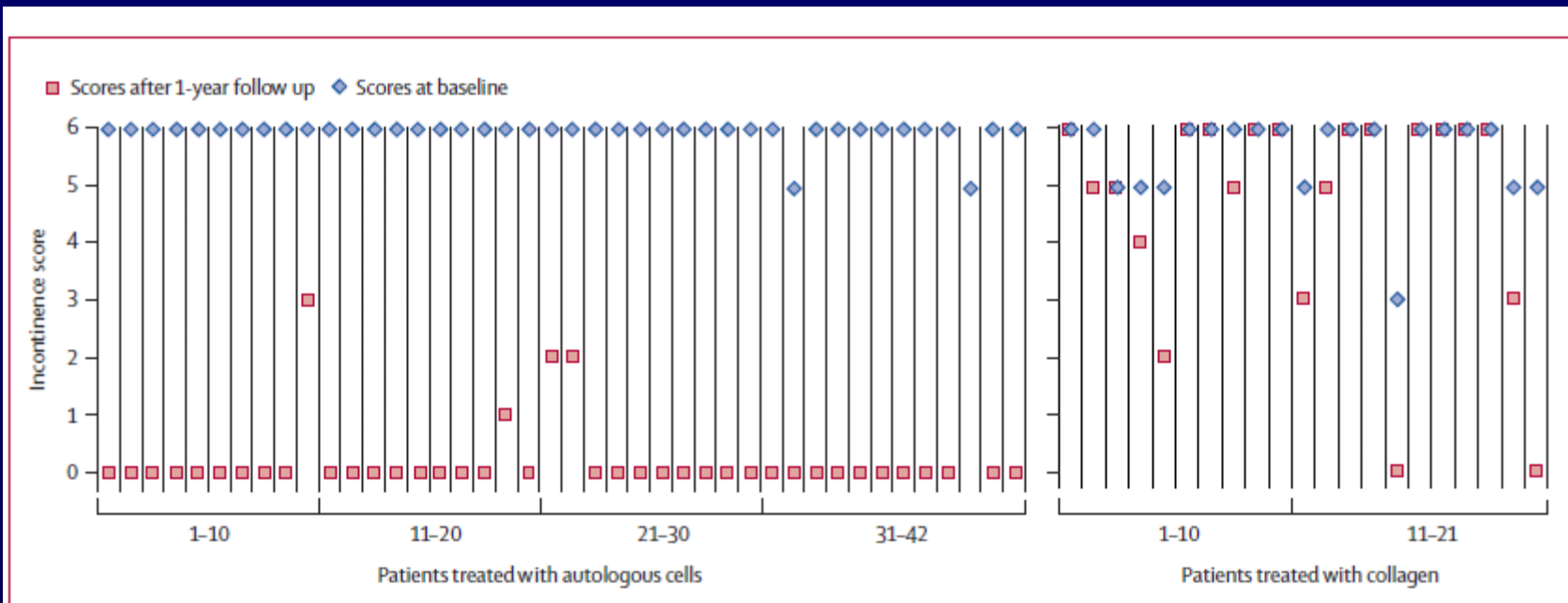


Figure 5: Incontinence score before and after treatment  
Blue marks represent baseline scores and pink marks are scores after 1 year of follow-up.



# Incontinence: sharing the expertise

- Local-international
- Multidisciplinary
- Public awareness
- Professional teaching
- Expertise availability-dissemination

# Incontinence

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