

# Self Urethral Dilatation for Urethral Stricture: Prince of Wales Hospital Experience

W.Y. Yung  
*Registered Nurse*  
*Department of Surgery, Prince of Wales Hospital, Shatin, HKSAR*



# Objectives of Study

- Evaluate the effectiveness of intermittent self urethral dilatation (SUD)
- Assess cost-effectiveness
- Assess clinical improvement of urine outflow
- How it affects Quality of Life

# Procedures of Self Urethral Dilatation

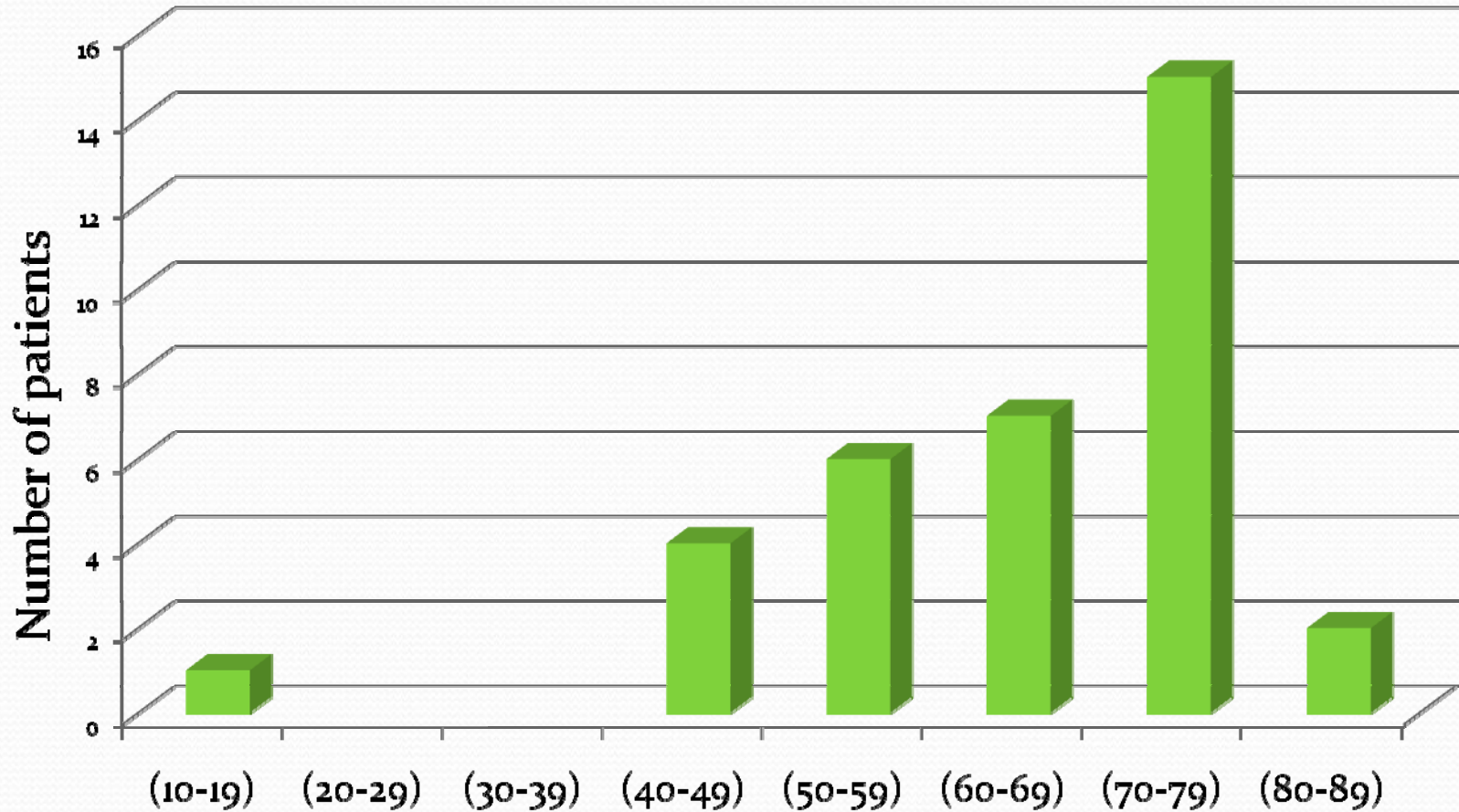
- A clean procedure
- A fine filiform/Nelaton's catheter passes through the narrowing parts until resistance is reached- hold it for ~20 min
- Gradually step up the diameter of the catheter (Fr 12-18)
- Require several session
- Frequency of dilatation and selected materials are based on individual needs and tolerance



# Materials and Methods

- Retrospective review
- From Documentary database
- Time period: Sep 2000 - July 2009
- Total patients  $n = 35$
- 25 male 10 female

# Age Distribution on Urethral Stricture



Age Group

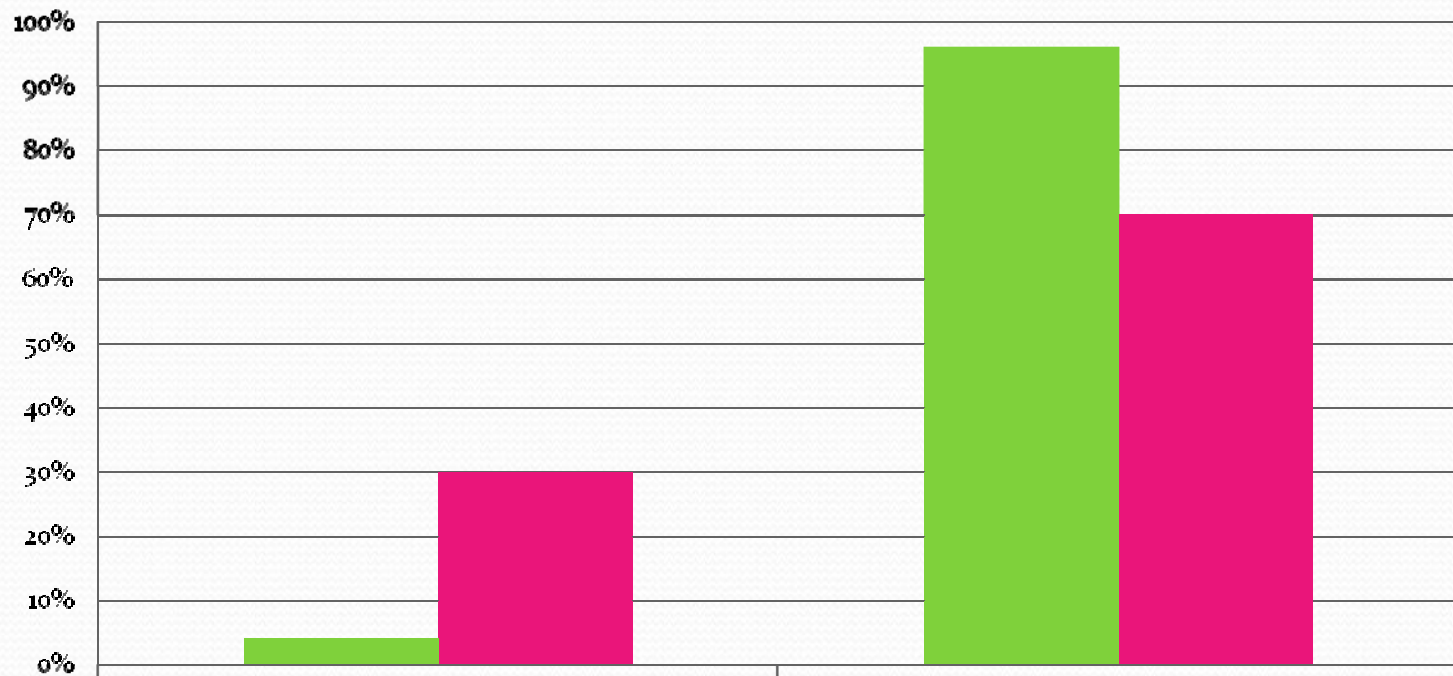
Age Range: 19 – 87 Mean age: 65.3



# First Presentation

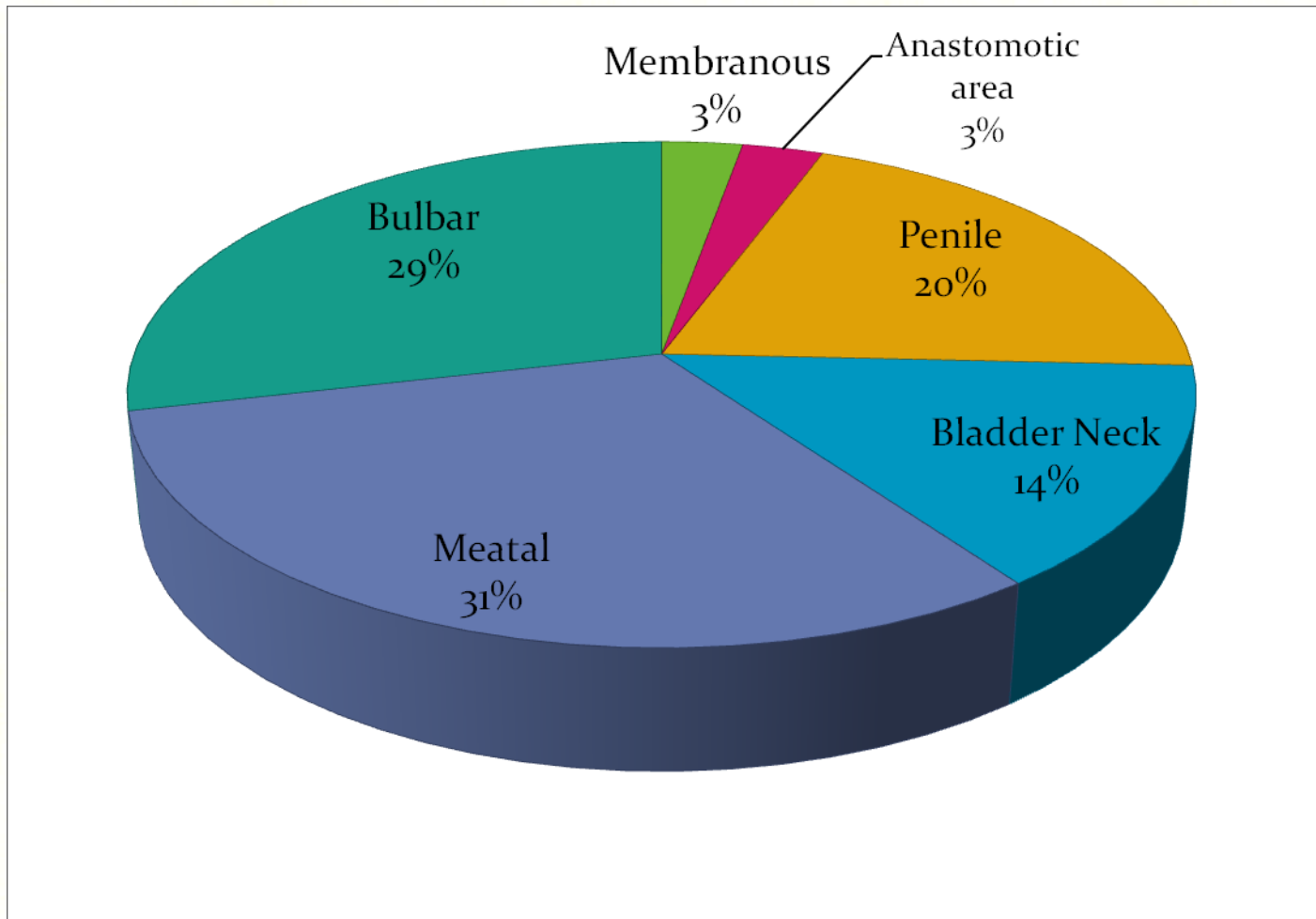
- 77% - Weak stream of urine
- 23% - AROU

# Causes of Performing Self Urethral Dilatation by Gender



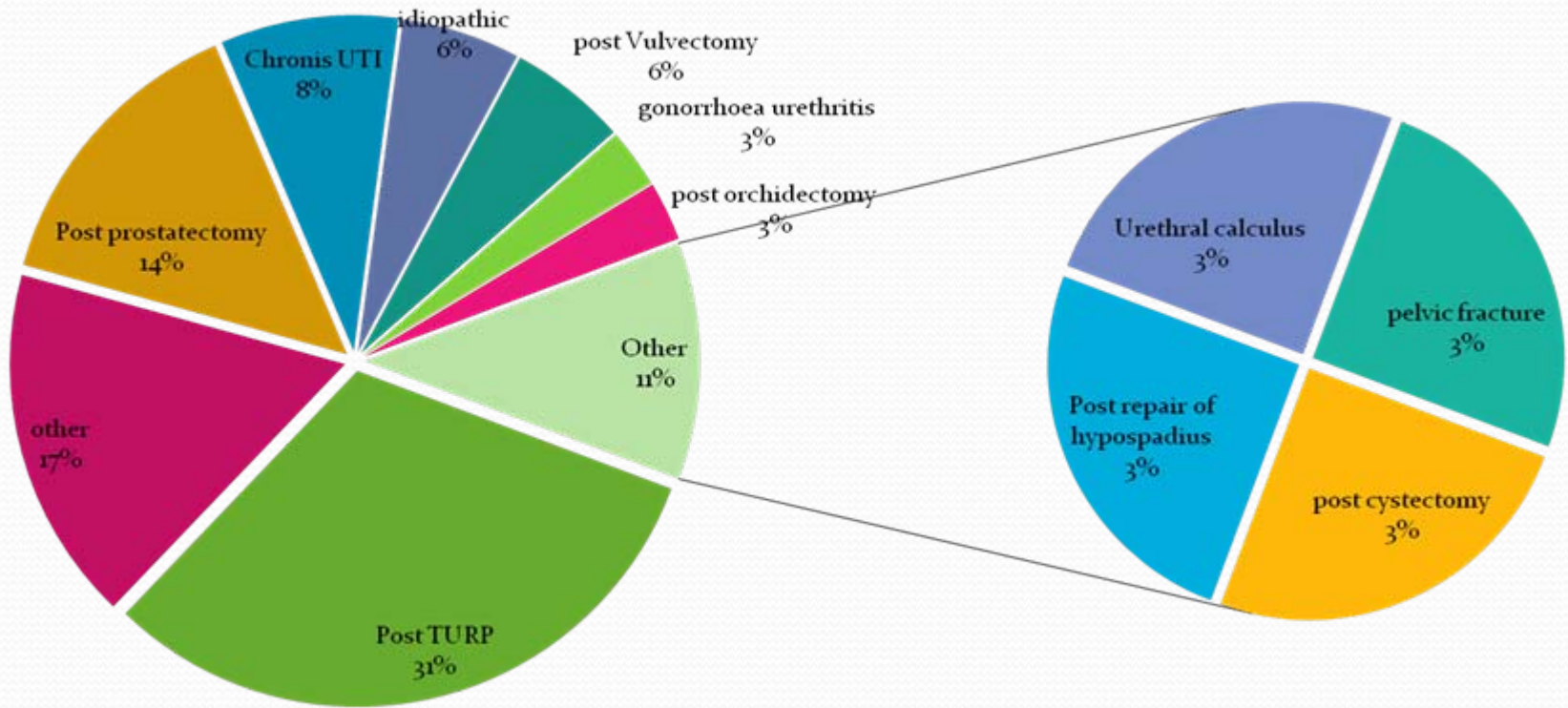
	Bladder Emptying	Stricture Therapy
Male	4%	96%
Female	30%	70%

# Location and Incidence (Male)





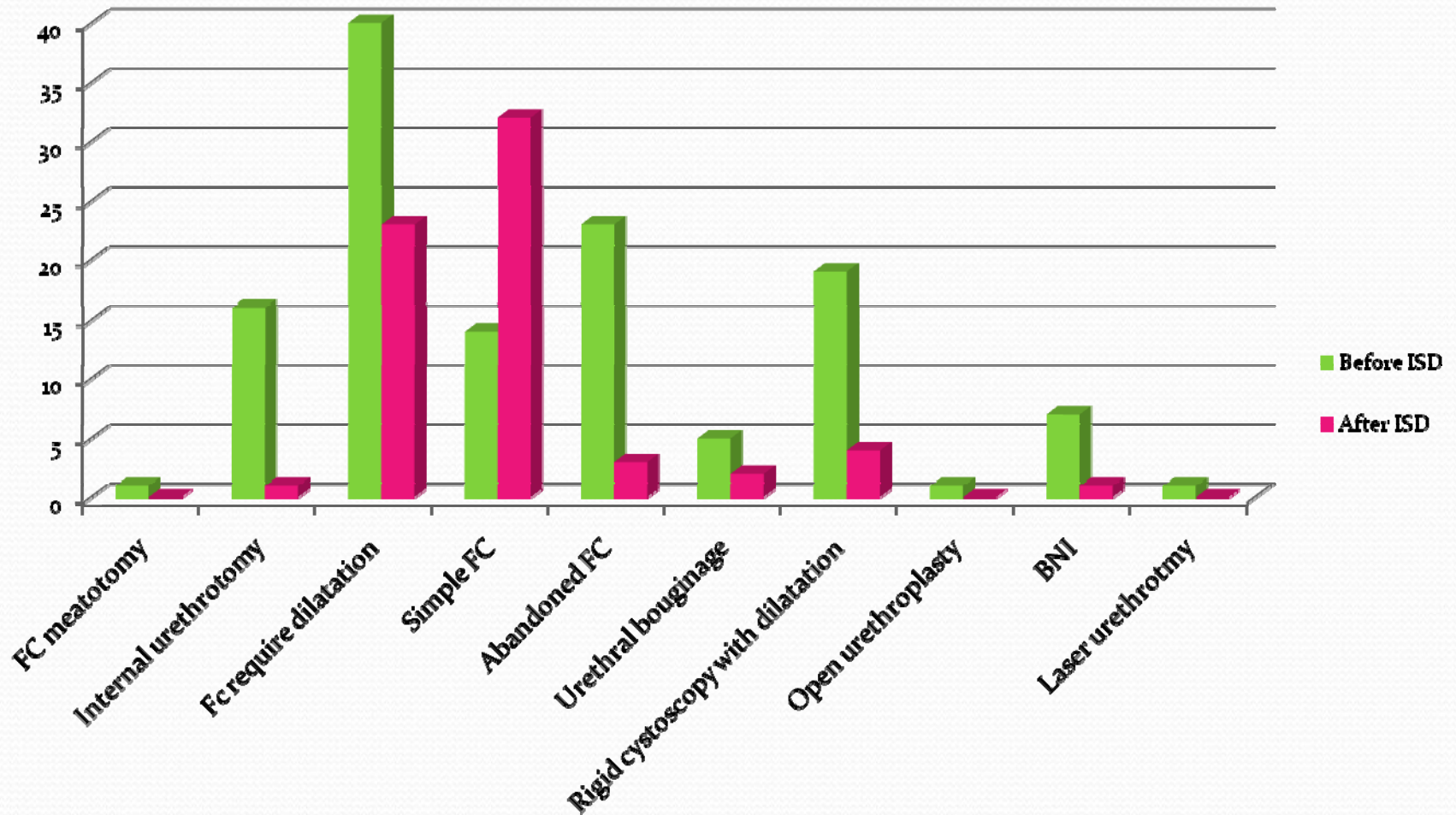
# Etiology of Urethral Stricture





**Cost-effective?**

# Procedures Done Before and After Self Urethral Dilatation





**Urine flow improved?**

# Mean Q max Before and After SUD

1 <sup>st</sup> Visit	1 Month After SUD
13.4 ml/s	18.9 ml/s

$p < 0.05$  (paired t-test)

# Mean Voided Volume Before and After SUD

1 <sup>st</sup> visit	1 Month After SUD
201.3ml	292.3ml

$p < 0.05$  (paired t-test)

# Complication During SUD

Complication	Number of Incidence
Urinary Tract Infection	One



**Positive social life impact?**



# Social Life Impact

- Questionnaire
  - Filled up by patient during FU
  - Contacted by nurses through telephone
- 25/35 responded



# Social Life Impact

- Quality of Life

Score 0-3 (positive impact)	Score 8-10 (impaired QOL)
72%	12%

# Social Life Impact

- Patient's Compliance

Score 1 (totally follow instructions)	Score 4-5 (never follow)
64%	0%

# Social Life Impact

- Perceived Difficulties


Score 0-3 (no difficulty)	Score 8-10 (severe difficulty)
56%	16%

# Social Life Impact

- Procedure Tolerance

Score 0-3 (totally tolerate)	Score 8-10 (cannot tolerate)
64%	8%

# Conclusion

- Self urethral dilatation -- a viable and effective treatment option for urethral stricture.
- Urine outflow/voided volume were improved
-  procedures related to stricture treatment
- Patients tolerated the procedure well
- Good impact towards their QOL

# Suggestion

- Consider offer a trial of self calibration program after single urethral dilatation/operation to stabilize the stricture –↓ recurrence rate
- Serve as an alternative treatment option when patients cannot tolerate reconstructive surgery / urethroplasty due to old age or unwillingness.



**Thank You!**

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