ULTRASOUND CHARACTERISTICS OF THE URETHRO-VESICAL SEGMENT IN WOMEN WITH STRESS URINARY INCONTINENCE.

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Introduction

- SUI affects 20–40% of women.
- Main mechanisms: urethral hypermobility and sphincter deficiency.
- Ultrasound is recommended but lacks standardization; conflicting data.

Aim:

To investigate whether ultrasound parameters correlate with symptom severity in SUI.

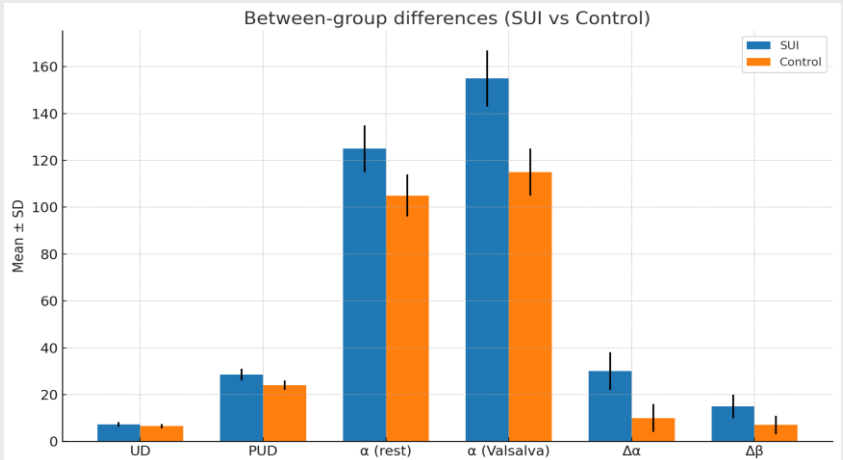
Methods:

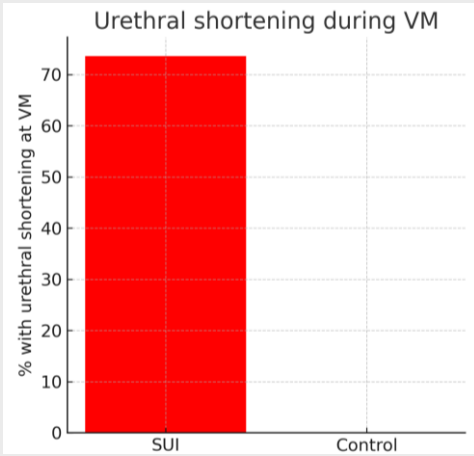
- Pilot study, 76 women (38 SUI, 38 control).
- Exclusion: pelvic surgery, tumors, POP > hymen, OAB, PVR >100 ml.
- Parameters: α angle, β angle, PUD, UD, UL, BND, BIA, BSD.

Results:

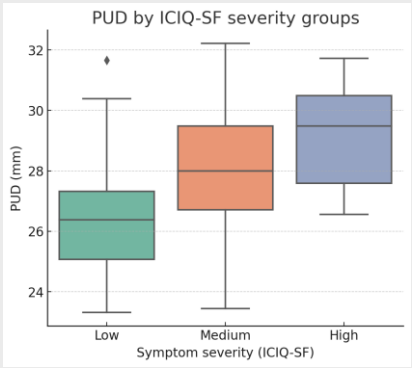
Parameter	SUI (Median [IQR])	Control (Median [IQR])	p-value
Age (years)	49.0 (41.7-60.2)	46.5 (42.0-54.2)	0.539
BMI (kg/m2)	26.2 (24.0-31.2)	26.6 (23.7-33.0)	0.787
Pregnancies (n)	3 (2-4)	3 (2-4.2)	0.651
Parity (n)	2 (1-2)	2 (1-2.2)	0.596

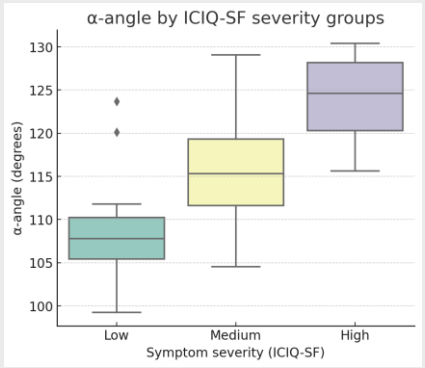
- Cystocele type III found in 18.4% of SUI cases.





- Intragroup: urethral shortening at VM in 73.6% SUI (p=0.001)





- No correlation with ICIQ-SF severity.

- SUI group had significantly higher:
  - UD at Valsalva (p=0.033)
  - PUD at rest & Valsalva (p=0.001, p=0.010)
  - α angle & Δα (p<0.001)
  - Δβ angle (p=0.004)

Conclusion

- TPUS is a reliable diagnostic tool for SUI.
- Recommended parameters: PUD, UD, α angle, Δα, Δβ.
- Further large-scale studies required.