The UroCuff Test

List of peer-reviewed publications

Original Research Articles

26. Can the Penile Cuff Test Predict the Outcome of Holmium Laser Enucleation of the Prostate for Benign Prostatic Obstruction? Ko KJ, Jun PN, Munjae L, Gyu HR, Kyu-Sung L. UROLOGY 124:207–212,2019.

25. What research is needed to validate new urodynamic methods? ICI-RS2017. Harding C, Rosier PF, Drake MJ, Valentini F, Nelson PP, Goping I, Gammie A. Neurourology and Urodynamics 2018;37:S32– S37.

24. Diagnosing bladder outlet obstruction using the penile cuff test in men with lower urinary tract symptoms. Ko, K. J., Suh, Y. S., Kim, T. H., Sung, H. H., Ryu, G. H., Lee KS. Neurourology and Urodynamics 2017 Feb 21. doi: 10.1002/nau.23203.

23. The UroCuff test: a non-invasive alternative to pressure flow studies in adult males with lower urinary tract symptoms secondary to bladder outlet obstruction. Matulewicz, R. S., & Hairston, J. C. The Canadian Journal of Urology (2015), 22(4), 7896-7901.

22. The role of noninvasive penile cuff test in patients with bladder outlet obstruction. SM Kazemeyni, e Otroj, D Mehraban, GH Naderi, A Ghadiri, M Jafari. Korean J Urol (2015); 56:722-728.

21. Correlation between penile cuff test and pressure-flow study in patients candidates for trans-urethral resection of prostate. Bianchi D, Di Santo A, Gaziev G, Miano R, Musco S, Vespasiani G and Agrò EF, BMC Urology (2014), 1471-2490/14/103.

20. Non-invasive urodynamics predicts outcome prior to surgery for prostatic obstruction. Losco G, Keedle L, King Q. BJU International (2013) 2: 61–64.

19. Interobserver agreement for noninvasive bladder pressure flow recording with penile cuff. McArdle F, Clarkson B, Robson W, Griffiths C, Drinnan M, Pickard R. Journal of Urology (2009), Vol. 182, 2397–2403.

18. Multisite evaluation of noninvasive bladder pressure flow recording using the penile cuff device: assessment of test-retest agreement. Clarkson B, Robson W, Griffiths C, McArdle F, Drinnan M, Pickard R. Journal of Urology (2008), Vol. 180, 2515-2521.

17. Categorization of obstruction using noninvasive pressure flow measurements: sensitivity to change following prostatectomy. Sajeel M, Harding C, Robson W, Drinnan M, Griffiths C, Pickard R. Journal of Urology (2007), Sep;178 (3 Pt 1):996-1000; discussion 1000-1. Epub 2007 Jul 16.

16. Predicting the Outcome of Prostatectomy Using Noninvasive Bladder Pressure and Urine Flow Measurements. C. Harding, W. Robson, M. Drinnan, M. Sajeel, P. Ramsden, C. Griffiths, R. Pickard European Urology (2007), Volume 52, Issue 1, Pages 186-192.

15. Basic principles of the Newcastle penile cuff test. M. J. Drinnan, W. A. Robinson, J. Caffarel, R.S. Pickard, S. L. McIntosh, C. Harding, C. J. Griffiths. Urodinamica (2006), 16: 289-297.

14. Variation in invasive and non-invasive measurements of isovolumetric bladder pressure and categorization of obstruction according to bladder volume. Harding CK, Robson W, Drinnan MJ, Ramsden PD, Griffiths C, Pickard RS. Journal of Urology (2006), Volume 176, Issue 1, Pages 172-176.

13. A nomogram to classify men with lower urinary tract symptoms using urine flow and noninvasive measurement of bladder pressure. Griffiths CJ, Harding C, Blake C, McIntosh S, Drinnan MJ, Robson WA, Abrams P, Ramsden PD, Pickard RS. Journal of Urology (2005), Oct;174 (4 Pt 1):1323-6; discussion 1326; author reply 1326.

12. Noninvasive assessment of bladder contractility in men. McIntosh SL, Drinnan MJ, Griffiths CJ, Robson WR, Ramsden PD, Pickard RS. Journal of Urology (2004), 172: 1394-1398.

11. An Automated penile compression release maneuver as a non-invasive test for diagnosis of bladder outlet obstruction. Harding CK, Robson WR, Drinnan MJ, Griffiths CJ, Ramsden PD, Pickard RS. Journal of Urology (2004), 172: 2312-2315.

10. Noninvasive measurement of bladder pressure. Does mechanical interruption of the urinary stream inhibit detrusor contraction? McIntosh SL, Griffiths CJ, Drinnan MJ, Robson WA, Ramsden PD, Pickard RS. Journal of Urology (2003), 169; 1003-06.

9. Validity of cuff-uroflow as a diagnostic technique for bladder outlet obstruction in males. Salinas J, Vírseda M, Arredondo F. Scand J Urol Nephrol. 2003;37(4):316-21.

8. Inter-observer agreement in the estimation of bladder pressure using a penile cuff. Drinnan MJ, McIntosh SL, Robson WA, Pickard RS, Ramsden PD, Griffiths CJ. Neurourol Urodynamics (2003), 22: 296-300.

7. Assessment of prostatic obstruction - a cuff may be enough. Drinnan MJ, Pickard RS, Ramsden PD, Griffiths CJ. Neurourol Urodynamics (2003), 22: 40-43.

6. Reproducibility of non-invasive urodynamics, using the cuff-uroflow, for the diagnosis of bladder outlet obstruction in males. Vírseda MC, Salinas JC, Arredondo FM, Teba FP, Vázquez DA., Scand J Urol Nephrol. (2002), 36(6):431-4.

5. Noninvasive Measurement of Bladder Pressure by Controlled Inflation of a Penile Cuff. Griffiths CJ, Rix D, MacDonald AM, Drinnan MJ, Pickard RS, Ramsden PD, Journal of Urology (2002), Volume 167, Issue 3, Pages 1344-1347.

4. Transmission of penile cuff pressure to the penile urethra. Drinnan MJ, Robson W, Reddy M, Pickard RS, Ramsden PD, Griffiths CJ. Journal of Urology (2001), 166: 2545-49.

3. Penile Urethral Compression-Release Maneuver as a Non-invasive Screening Test for Diagnosing Prostatic Obstruction. Maryrose P. Sullivan and Subbarao V. Yalla, Neurourology and Urodynamics (2000), 19:657–669.

2. Noninvasive Urodynamics: A Study of Male Voiding Dysfunction. D. Gleason, M. Bottaccini, L McRae. Neurourology and Urodynamics, (1997), Volume 25, p 93–100.

1. Noninvasive Quantitative Method for Measuring Isovolumetric Bladder Pressure and Urethral Resistance in the Male: I. Experimental Validation of the Theory, L. McRae, M. Bottaccini, D. Gleason Neurourology and Urodynamics, (1995), Volume 14, p 101–114.

Review Articles/Clinical Guidelines/Technology Assessments

20. New Diagnostics for Male Lower Urinary Tract Symptoms. Swavely NR, Speich JE, Stothers L, Klausner AP. Current Bladder Dysfunction Reports (2019) 14:90–97.

19. Mathematical Modeling and Uroflow-Based Nomograms in Voiding Dysfunction Evaluation: Ready for Prime Time? Valentini FA, Nelson PP. Current Bladder Dysfunction Reports (2019) 14:41–46.

18. Male LUTS diagnostics: Where are we in 2018? Do we have a consensus? Kyriazis I, Dimitriou D, Thanos A. Hellenic Urology 2018; 30 (1): 25-30.

17. Systematic Review of the Performance of Noninvasive Tests in Diagnosing Bladder Outlet Obstruction in Men with Lower Urinary Tract Symptoms. S. Malde, A. K. Nambiar, R. Umbach, T. B. Lam, T. Bach, A. Bachmann, M. J. Drake, M. Gacci, C. Gratzke, S. Madersbacher, C. Mamoulakis, K.A.O. Tikkinen, S. Gravas. European Urology 71 (2017) 391–402.

16. Male bladder outlet obstruction: Time to re-evaluate the definition and reconsider our diagnostic pathway? ICI-RS 2015. Rademakers K, Drake MJ, Gammie A, Djurhuus JC, Rosier PFWM, Abrams P, Harding C. Neurourol Urodyn. 2017 Apr;36(4):894-901.

15. International Continence Society: Dynamic Testing, in Incontinence: 4th International Consultation on Incontinence (2015), Hosker G, Rosier P, Gajewski J, Sand P, Szabo L, Capewell, A, Pages 413-522.

14. Guidelines on the Management of Non-Neurogenic Male Lower Urinary Tract Symptoms (LUTS), incl. Benign Prostatic Obstruction (BPO). S. Gravas, T. Bach, A. Bachmann, M. Drake, M. Gacci, C. Gratzke, S. Madersbacher, C. Mamoulakis, K.A.O. Tikkinen. European Association of Urology 2015.

13. Assessment of BPH/BOO. A. Mangera, N. I. Osman, C. R. Chapple. Indian J Urol. 2014 Apr-Jun; 30(2): 177–180.

12. The role of invasive and non-invasive urodynamics in male voiding lower urinary tract symptoms. Parsons BA, Bright E, Shaban AM, Whitehouse A, Drake M.World Journal of Urology (2011), Apr;29(2):191-7.

11. Review of invasive urodynamics and progress towards non-invasive measurements in the assessment of bladder outlet obstruction. CJ Griffiths, RS Pickard. Indian Journal of Urology (2009), Volume 25, Issue 1. p83-91.

10. Positioning Invasive versus Non-Invasive Urodynamics in the Assessment of Bladder Outlet Obstruction. Arnolds M. and Oelke M. Current Opinion in Urology (2009): Volume 19 - Issue 1 - p 55-62.

9. The penile cuff test: A clinically useful non-invasive urodynamic investigation to diagnose men with lower urinary tract symptoms. C. Harding, W. Robson, M. Drinnan, S. McIntosh, M. Sajeel, C.J. Griffiths, R.S. Pickard. Indian Journal of Urology, (2009), Volume 25, Issue 1 p116-121.

8. The Urodynamic Evaluation of Lower Urinary Tract Symptoms in Men. Griffiths D, Abrams P, D'Ancona CA., van Kerrebroeck P, Nishizawa O, Nitti VW, Foo KT, Tubaro A., Wein A. and Belal M. Current Bladder Dysfunction Reports (2008) Volume 3, Number 1, 49-57, DOI: 10.1007/s11884-008-0008-5.

7. Functional Studies to Assess Bladder Contractility. Sullivan M., Yalla S.V. Journal für Urologie und Urogynäkologie (2007), 14 (1): 7–10.

6. Mediplus CT3000 cuff machine for diagnosis of bladder outlet obstruction: Evidence review. E. Skryabina, C. Davey, Bath Institute of Medical Engineering; Centre for Evidence-based Purchasing (CEP), Policy and Innovation Directorate, NHS Purchasing and Supply Agency, UK, 2007.

5. The Role of Non-Invasive bladder pressure measurement by the penile cuff device for assessment of men with lower urinary tract symptoms. R.S. Pickard, C. Harding, W. A. Robinson, S. L. McIntosh, M. Sajeel, P. Ramsden, M. J. Drinnan, C. J. Griffiths. Urodinamica (2006), 16: 298-309.

4. Noninvasive Methods of Diagnosing Bladder Outlet Obstruction in Men. Part 2: Non-Invasive Urodynamics and Combination of Measures. Belal M, Abrams P. Journal of Urology (2006), Volume 176, Issue 1, Pages 29-35.

3. Can a noninvasive penile-cuff test predict bladder outlet obstruction? Nature Clinical Practice Urology March 2005 Vol 2 No 3.

2. Lower Urinary Tract Symptoms: Shifting Our Focus from the Prostate to the Bladder. The Journal of Urology Vol. 172, 1237–1238, October 2004.

1. Noninvasive techniques for the measurement of isovolumetric bladder pressure. Blake C, Abrams P. Journal of Urology (2004), 171: 12-19.

Original Research Abstracts

44. A Noninvasive Uroflowmeter-Cystometer (NUC), Which Can Measure Detrusor Pressure and Identify BOO Without Using a Catheter. Mooreville M, Meller A, Generotti C, Kron R. International Continence Society 2018 Abstract 187.

43. Investigating Variability in the Measurement of Penile Cuff Interruption Pressure Compared to Simultaneously Measured Invasive Bladder Pressure. Morton H, Bray A, Blake J, McIntosh S, Harding C. International Continence Society 2017 Abstract 52.

42. Similarity Analysis Between Catheterless Urodynamic Study Using Penile Cuff and Conventional Urodynamic Study for Evaluation of Male Lower Urinary Tract Symptom. Sangrak B, Joonse J, Bonghee P, Changhee H, Sunghak K, Yongseok L. American Urological Association 2016 Abstract PD01-01.

41. Diagnostic Accuracy of Non-Invasive Penile Cuff Test for the Assessment of Bladder Outlet Obstruction Comparing by Pressure Flow Study in Men with Lower Urinary Tract Symptom. Ko KJ, Jeong JY, Chung JY, Lee K. International Continence Society 2016 Abstract 443.

40. Diagnosis of bladder outlet obstruction using non-invasive bladder pressure flow recording with penile cuff: Preliminary study. Chung DY, Lee SH, Koo KC, Choi HY, Cho JS, Chung BH. European Association of Urology 2014 Abstract 988.

39. Decrease of Bladder Contractility is Slower Than Increase of Flow After Prostatic Obstruction Surgery. Mombelli G, Oliva I, Sandri S D. International Continence Society 2014 Abstract 595.

38. Non-Invasive Urodynamics to Evaluate Prostatic Obstruction Surgery Outcome. Mombelli G, Ranzoni S, Sandri SD. International Continence Society 2013 Abstract 158.

37. Non Invasive Urodynamics: The Penile Cuff Test in Patients Candidate to TURP. Finazzi Agrò E, Lamorte F, Patruno G, Bove P, Petta F, Topazio L, Di Santo A. International Continence Society 2012 Abstract 15.

36. Comparison of the performance of the non-invasive cuff test with the gold standard for diagnosing bladder outlet obstruction, pressure flow studies. JB Britton, D Small, B Parsons, S Banerjee, C Blake, M Drinnan. British Association of Urological Surgeons 2011 Abstract P23.

35. The Penile Cuff Test: A Non-Invasive Urodynamic Investigation to Diagnose Men with Lower Urinary Tract Symptoms. Gentile BC, Giulianelli R, Albanesi L, Mirabile G, Pisanti F, Schettini M. International Continence Society 2011 Abstract 903.

34. Is There a Role for Cuff Non-Invasive Pressure Flow Study Prior Prostatectomy in Men with Bladder Outlet Obstruction? Batezini N, Zambon JP, Girotti ME, Almeida F. International Continence Society 2011 Abstract 600.

33. Sources of Variability When Using Only Penile Cuff Test (PCT) Can Be Rubbed Out by Combination With "VBN" Method. Valentini F, Nelson P, Turner D, Osaghae S. Société Internationale d'Urologie 2010 Abstract MP-05.03.

32. Role of Non Invasive Urodynamics using penile cuff testing (CT3000) in diagnosing BOO. S Banerjee, C Unwin, V Srinivasan, H Toussi. British Association of Urological Surgeons 2010 Abstract P12.

31. The Role of Non-Invasive Pressure Flow Study in Highly Symptomatic/Bothered Men with Bladder Outlet Obstruction. Batezini N, Girotti ME, Zambon JP, Almeida F. International Continence Society 2010 Abstract 1224.

30. Can the Combination of Two Non-Invasive Evaluations of Bladder Outlet Obstruction (BOO) Rub Out Sources of Variability Using Penile Cuff Test (PCT)? Valentini F, Nelson P, Turner D. International Continence Society 2010 Abstract 317.

29. A Pilot Evaluation of Two Non- Invasive Technologies in the Assessment of Bladder Outlet Obstruction Topic: Bladder Outlet Obstruction (BOO). Britton J, Keane D, Williamson M, Harris N. International Continence Society 2010 Abstract 22.

28. Evaluation of Bladder Outlet Obstruction in Men with Benign Prostatic Enlargement Using Penile Cuff Test: Newcastle Nomogram vs Abrams-Griffiths Number and VBN Parameters. Nelson P, Valentini F, Turner D. International Continence Society 2009 Abstract 301.

27. The First Method of Continuous and Non-Invasive Bladder Pressure Measurement. Clarkson B, Robson W, McArdle F, Griffiths C, Pickard R, Drinnan M. International Continence Society 2009 Abstract 226.

26. Reassessment of Bladder Contractility Index Relationship. Griffiths C, Clarkson B, Drinnan M, Caffarel J, McInstosh S, Pickard R. International Continence Society 2008 Abstract 280.

25. Reliability of Peak Flow Rate Obtained from a Voiding Cycle Interrupted by Inflation of a Penile Cuff. Griffiths C, Drinnan M, Caffarel J, Robson W, Pickard R. International Continence Society 2006 Abstract 307.

24. The Origin of the Penile Compression Release Index – A Video Urodynamic Analysis. Belal M, Ellis-Jones J, Abrams P. International Continence Society 2006 Abstract 105.

23. The Penile Compression-Release Index is Sensitive to Change Following Prostatectomy. Harding C, Robson W, Drinnan M, Ramsden P, Griffiths C, Pickard R. International Continence Society 2005 Abstract 376.

22. A Questionnaire Study of Patients' Experience During Non-Invasive Urodynamics. Robson W, Walia D, Harding C, Griffiths C, Drinnan M, Ramsden P, Pickard R. International Continence Society 2005 Abstract 373.

21. A Non-Invasive Method for the Measurement of Urethral Opening Pressures. Blake C, Bevan W, Hassine A, Baldry L, Abrams P. International Continence Society 2005 Abstract 370.

20. Change in Bladder Contraction Strength Following TURP. Harding C, Robson W, Genner S, Drinnan M, Ramsden P, Griffiths C, Pickard R. International Continence Society 2005 Abstract 82.

19. Comparison of Invasive and Non-Invasive Bladder Pressure Measurements by Calculation of the Bladder Outlet Obstruction Index (BOOI). Griffiths C, Drinnan M, Harding C, Robson W, Ramsden P, Pickard R. International Continence Society 2005 Abstract 81.

18. Combination of Non-Invasive Urodynamic Parameters from a Single Penile Cuff Test for Diagnosis of Bladder Outlet Obstruction. Drinnan M, Harding C, Blake C, McIntosh S, Robson W, Pickard R, Abrams P, Ramsden P, Griffiths C. International Continence Society 2004 Abstract 334.

17. The Rise in Isovolumetric Detrusor Pressure is Greater in Male Patients with Detrusor Overactivity. Belal M, Blake C, Harding C, McIntosh S, Robson W, Drinnan M, Griffiths C, Ramsden P, Abrams P, Pickard R. International Continence Society 2004 Abstract 333.

16. Predictive Value and Sensitivity to Change of Non-Invasive Pressure Flow Studies. Harding C, Robson W, Drinnan M, Ramsden P, Griffiths C, Pickard R. International Continence Society 2004 Abstract 58.

15. Is Evaluation of Urethral Obstruction and Detrusor Force Possible from Coupling of Data from One Free Uroflow and One Penile Cuff Test in Patients with Benign Prostatic Enlargement (BPE)? Preliminary Study. Valentini F, Besson G, Nelson P. International Continence Society 2004 Abstract 51.

14. Detrusor Contractility is Greater in Male Patients with Detrusor Overactivity. Belal M, Blake C, Harding C, McIntosh S, Griffiths C, Robson W, Drinnan M, Ramsden P, Pickard R, Abrams P. International Continence Society 2004 Abstract 15.

13. Variation of Invasive and Non-Invasive Measurements of Isovolumetric Bladder Pressure According to Bladder Volume. Harding C, Robson W, Drinnan M, Ramsden P, Griffiths C, Pickard R. International Continence Society 2004 Abstract 14.

12. Evaluation of the Non-Invasive Estimation of Bladder Pressure Using a Penile Cuff. An Alternative to Pressure Flow Studies in Men? Blake C, Baldry L, Hassine A, Abrams P. International Continence Society 2003 Abstract 429.

11. Does the Presence of a Urethral Catheter Affect Pressure-Flow Parameters Measured Non-Invasively by the Penile Cuff Technique? Brown J, Harding C, Drinnan M, McIntosh S, Robson W, Griffiths C, Ramsden P, Pickard R. International Continence Society 2003 Abstract 427.

10. Assessment of Minimum Voiding Pressure Using a Penile Cuff. Blake C, Baldry L, Hassine A, Abrams P. International Continence Society 2003 Abstract 425.

9. Validation of the Penile Compression-Release Manoeuvre for Non-Invasive Diagnosis of Bladder Outflow Obstruction. Harding C, Mcintosh S, Robson W, Ramsden P, Drinnan M, Griffiths C, Pickard R. International Continence Society 2003 Abstract 3.

8. Non-Invasive Bladder Pressure: The Case for Using a Modified ICS Nomogram. Griffiths C, Blake C, Harding C, McIntosh S, Drinnan M, Robson W, Pickard R, Abrams P, Ramsden P. International Continence Society 2003 Abstract 2.

7. Patient Acceptability of a Non-Invasive Bladder Pressure Measurement Technique. Robson W, McIntosh S, Drinnan M, Ramsden P, Griffiths C, Pickard R. International Continence Society 2002 Abstract 176.

6. Non-Invasive Estimation of Bladder Pressure Using an Automated Penile Cuff Technique. McIntosh S, Drinnan M, Robson W, Ramsden P, Griffiths C, Pickard R. International Continence Society 2002 Abstract 175.

5. Inter-Observer Agreement in the Estimation of Bladder Pressure Using a Penile Cuff. Drinnan M, McIntosh S, Robson W, Ramsden P, Pickard R, Griffiths C. International Continence Society 2002 Abstract 174.

4. Non-Invasive Measurement of Bladder Pressure: Minimum Voided Volume and Test/Re-Test Reproducibility. McIntosh S, Pickard R, Drinnan M, Robson W, Ramsden P, Griffiths C. International Continence Society 2002 Abstract 173.

3. Comparison of Bladder Pressure, Urethral Pressure and Cuff Pressure During Interruption of Flow by Inflation of a Penile Cuff. MJ Drinnan, A Johnston, AM MacDonald, W Robson, RS Pickard, PD Ramsden, CJ Griffiths. International Continence Society 2001 Abstract 11.

2. Non-Invasive Bladder Pressure Monitoring – How Does Interrupting the Urinary Stream Affect Intra-Vesicle Pressure? SL McIntosh, MJ Drinnan, RS Pickard, WA Robson, PD Ramsden, CJ Griffiths. International Continence Society 2001 Abstract 10.

1. A new method for non-invasive measurement of voiding pressures? Assessment of penile cuff occlusion. Griffiths C, Pickard R, Tuckey J, Thomas D, Davies J, Ramsden P. International Continence Society 1999 Abstract 6.

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