

DAFTAR PUSTAKA

- 1- Egan KB. The Epidemiology of Benign Prostatic Hyperplasia Associated with Lower Urinary Tract Symptoms: Prevalence and Incident Rates. *Urol Clin North Am* [Internet]. 2016;43(3):289–97.
- 2- Ng M, Baradhi KM. Benign Prostatic Hyperplasia. [Updated 2020 Aug 10]. In: StatPearls [Internet]. Treasure Island (FL): StatPearls Publishing; 2020 Jan-. Available from: <https://www.ncbi.nlm.nih.gov/books/NBK558920/>
- 3- Abdelmoteleb H, Jefferies ER, Drake MJ. Assessment and management of male lower urinary tract symptoms (LUTS). *Int J Surg* [Internet]. 2016 ;25 (November): 164–71.
- 4- Patel ND, Parsons JK. Epidemiology and etiology of benign prostatic hyperplasia and bladder outlet obstruction. *Indian J Urol*. 2014;30(2):170-176.
- 5- Irwin GM. Erectile Dysfunction. *Prim Care - Clin Off Pract* [Internet]. 2019;46(2):249–55. Available from: <https://doi.org/10.1016/j.pop.2019.02.006>
- 6- Minh H, Nguyen T, Gabrielson AT, Hellstrom WJG. Erectile Dysfunction in Young Men — A Review of the Prevalence and Risk Factors. *Sex Med Rev* [Internet]. 2017;5(4):508–20. Available from: <http://dx.doi.org/10.1016/j.sxmr.2017.05.004>
- 7- Mobley DF, Khera M, Baum N. Recent advances in the treatment of erectile dysfunction. *Postgrad Med J*. 2017;93(1105):679–85.
- 8- Cordeiro AC, Mizzaci CC, Fernandes RM, Araujo-Junior AG, Cardoso PO, Dutra LV, et al. Simplified international index of erectile function (IIEF-5) and coronary artery disease in hypertensive patients. *Arq Bras Cardiol*. 2012;99(4):924–30.
- 9- Tang Z, Li D, Zhang X, Yi L, Zhu X, Zeng X, et al. Comparison of the simplified International Index of Erectile Function (IIEF-5) in patients of

- erectile dysfunction with different pathophysiologies. *BMC Urol.* 2014;14(52):1–6.
- 10- Cheng-Ling L, Hann-Chorng K. Pathophysiology of benign prostate enlargement and lower urinary tract symptoms: Current concepts. *Tzu Chi Med J.* 2017;29(2):79–83.
- 11- Mochtar CA, Umbas R, Soebadi DM, Rsyid N, Noegroho BS, Poernomo BB, et al. Ikatan Ahli Urologi Indonesia (IAUI) : Pembesaran Prostat Jinak (Benign Prostatic Hyperplasia / BPH). 2nd ed. 2015. 8-33 p.
- 12- Kessler A, Sollie S, Challacombe B, Briggs K, Van Hemelrijck M. The global prevalence of erectile dysfunction: a review. *BJU Int.* 2019;124(4):587–99.
- 13- Biromo P, Deswanto IA, Rasyid N. Epidemiology of erectile dysfunction: A cross-sectional web-based survey conducted in an Indonesian national referral hospital [version 1; peer review: 1 approved with reservations]. *F1000Research.* 2019; 8:1–11.
- 14- Nakamura M, Fujimura T, Nagata M, Hosoda C, Suzuki M, Fukuhara H, et al. Association between lower urinary tract symptoms and sexual dysfunction assessed using the core lower urinary tract symptom score and International index of erectile function-5
- 15- Dutkiewicz S, Skawiński D, Duda W, Duda M. Assessing the influence of benign prostatic hyperplasia (BPH) on erectile dysfunction (ED) among patients in Poland. *Cent Eur J Urol.* 2012;65(3):135–8.
- 16- Doğan Y, Uruç F, Aras B, Şahin A, Kıvrak M, Ürkmez A, et al. The relationships between metabolic syndrome, erectile dysfunction and lower urinary tract symptoms associated with benign prostatic hyperplasia. *Turk Urol Derg.* 2015;41(1):7–12.
- 17- Glina S, Glina FPA. Pathogenic mechanisms linking benign prostatic hyperplasia, lower urinary tract symptoms and erectile dysfunction. *Ther Adv Urol.* 2013;5(4):211–8.

- 18- Mirone V, Sessa A, Giuliano F, Berges R, Kirby M, Moncada I. Current benign prostatic hyperplasia treatment: Impact on sexual function and management of related sexual adverse events. *Int J Clin Pract.* 2011;65(9):1005–13.
- 19- Haddad A, Jabbour M, Bulbul M. Phosphodiesterase type 5 inhibitors for treating erectile dysfunction and lower urinary tract symptoms secondary to benign prostatic hyperplasia: A comprehensive review. *Arab J Urol [Internet].* 2015;13(3):155–61.
- 20- Ignarro LJ. Nitric oxide is not just blowing in the wind. *Br J Pharmacol.* 2019;176(2):131–4.
- 21- DeMartino AW, Kim-Shapiro DB, Patel RP, Gladwin MT. Nitrite and nitrate chemical biology and signalling. *Br J Pharmacol.* 2019;176(2):228–45.
- 22- Hedlund P. Nitric oxide/cGMP-mediated effects in the outflow region of the lower urinary tract - Is there a basis for pharmacological targeting of cGMP? *World J Urol.* 2005;23(6):362–7.
- 23- McVary KT. Erectile dysfunction and lower urinary tract symptoms secondary to BPH. *Eur Urol.* 2005;47(6):838–45.
- 24- Orabi H, Albersen M, Lue TF. Association of lower urinary tract symptoms and erectile dysfunction: Pathophysiological aspects and implications for clinical management. *Int J Impot Res.* 2011;23(3):99–108.
- 25- Nunes KP, Webb RC. New insights into RhoA / Rho-kinase signaling : a key regulator of vascular contraction ABSTRACT. *Small GTPases [Internet].* 2020;00(00):1–12.
- 26- Sopko NA, Hannan JL, Bivalacqua TJ. Understanding and targeting the Rho kinase pathway in erectile dysfunction. *Nat Rev Urol.* 2015;11(11):622–8.
- 27- Gur S, Kadowitz PJ, Hellstrom WJG. RhoA/Rho-Kinase as a therapeutic target for the male urogenital tract. *J Sex Med.* 2011;8(3):675–87.
- 28- Takahashi R, Nishimura J, Seki N, Yunoki T, Tomoda T, Kanaide H, et al. RhoA/Rho Kinase-Mediated Ca²⁺ Sensitization in the Contraction of Human Prostate. *Neurourol Urodyn.* 2007;551:547–51.

- 29- Morelli A, Vignozzi L, Filippi S, Vannelli GB, Ambrosini S, Mancina R, et al. BXL- 628, A VitaminD Receptor Agonist Effective in Benign ProstaticHyperplasiaTreatment, Prevents RhoA Activation and Inhibits RhoA Rho Kinase Signaling in Rat and Human Bladder. *Prostate*. 2007;67(April):1384–96.
- 30- Mills TM, Lewis RW, Wingard CJ, Linder AE, Jin L, Webb RC. Vasoconstriction, RhoA/Rho-kinase and the erectile response. *Int J Impot Res*. 2003;15:S20–4.
- 31- Wingard CJ, Johnson JA, Holmes A, Prikosh A. Improved erectile function after Rho-kinase inhibition in a rat castrate model of erectile dysfunction. *Am J Physiol - Regul Integr Comp Physiol*. 2003;284(6 53-6):1572–9.
- 32- Orabi H, Albersen M, Lue TF. Association of lower urinary tract symptoms and erectile dysfunction: Pathophysiological aspects and implications for clinical management. *Int J Impot Res* [Internet]. 2011;23(3):99–108. Available from: <http://dx.doi.org/10.1038/ijir.2011.14>
- 33- Haga N, Akaihata H, Hata J, Aikawa K, Yanagida T, Matsuoka K, et al. The association between local atherosclerosis of the prostatic artery and benign prostatic enlargement in humans: Putative mechanism of chronic ischemia for prostatic enlargement. *Prostate*. 2018;78(13):1001–12.
- 34- Jung JH, Ahn SV, Song JM, Chang SJ, Kim KJ, Kwon SW, et al. Obesity as a risk factor for prostatic enlargement: A retrospective cohort study in Korea. *Int Neurourol J*. 2016;20(4):321–8.
- 35- Lovren F, Teoh H, Verma S. Obesity and Atherosclerosis: Mechanistic Insights. *Can J Cardiol* [Internet]. 2015;31(2):177–83. Available from: <http://dx.doi.org/10.1016/j.cjca.2014.11.031>
- 36- Higashi Y. Lower urinary tract symptoms/benign prostatic hypertrophy and vascular function: Role of the nitric oxide–phosphodiesterase type 5–cyclic guanosine 3',5'-monophosphate pathway. *Int J Urol*. 2017;24(6):412–24.
- 37- Nachawati D, Patel J. Alpha Blockers. [Updated 2020 Dec 14]. In: StatPearls [Internet]. Treasure Island (FL): StatPearls Publishing; 2021 Jan-. Available from: <https://www.ncbi.nlm.nih.gov/books/NBK556066/>

- 38- Baron M, Cornu J-N. Medical Aspects of the Treatment of LUTS/BPH: Alpha-Blockers [Internet]. Lower Urinary Tract Symptoms and Benign Prostatic Hyperplasia. Elsevier Inc.; 2018. 177–188 p. Available from: <http://dx.doi.org/10.1016/B978-0-12-811397-4.00008-1>
- 39- Lepor H, Kazzazi A, Djavan B. α -Blockers for benign prostatic hyperplasia : the new era. *Curr Opin Urol.* 2012;22:7–15.
- 40- Quaresma BMCS, Pimenta AR, Santos da Silva AC, Pupo AS, Romeiro LAS, Silva CLM, et al. Revisiting the pharmacodynamic uroselectivity of α 1-adrenergic receptor antagonists. *J Pharmacol Exp Ther.* 2019;371(1):106–12.
- 41- Goi Y, Tomiyama Y, Maruyama I, Tatemichi S, Maruyama K, Kobayashi M, et al. Silodosin, an α (1A)-adrenoceptor antagonist, may ameliorate ischemia-induced bladder denervation and detrusor dysfunction by improving bladder blood flow. *Pharmacology* 2016;97 (3–4):161–70.
- 42- Yokoyama O. Pharmacological and genetic analysis of mechanisms underlying detrusor overactivity in rats. *Neurourol Urodyn* 2010;29(1):107–11.
- 43- Kadekawa K, Sugaya K, Nishijima S, Ashitomi K, Miyazato M, Ueda T, et al. Effect of naftopidil, an alpha1D/A-adrenoceptor antagonist, on the urinary bladder in rats with spinal cord injury. *Life Sci* 2013;92(20–21):1024–8.
- 44- Miyazato M, Oshiro T, Chancellor MB, de Groat WC, Yoshimura N, Saito S. An alpha1-adrenoceptor blocker terazosin improves urine storage function in the spinal cord in spinal cord injured rats. *Life Sci* 2013;92(2):125–30.
- 45- Sountoulides P, Gravas S. The Impact of Combination Therapy with α -Blockers and 5ARIs on the Progression of BPH. *Curr Drug Targets.* 2015;16(11):1172-9. doi: 10.2174/1389450116666150223164032. PMID: 25706255.
- 46- Lee M, Sharifi R. Non-invasive Management Options for Erectile Dysfunction When a Phosphodiesterase Type 5 Inhibitor Fails. *Drugs and Aging* [Internet]. 2018;35(3):175–87. Available from: <https://doi.org/10.1007/s40266-018-0528-4>

- 47- Berkseth KE, Thirumalai A, Amory JK. Pharmacologic Therapy in Men's Health: Hypogonadism, Erectile Dysfunction, and Benign Prostatic Hyperplasia. *Med Clin North Am.* 2016;100(4):791–805.
- 48- Demir O, Ozdemir I, Bozkurt O, Aslan G, Esen AA. The effect of α -blocker therapy on erectile functions in patients with lower urinary tract symptoms due to benign prostate hyperplasia. Vol. 11, *Asian Journal of Andrology.* 2009. p. 716–22.
- 49- Martínez-Salamanca JI, Fuente JM La, Martínez-Salamanca E, Fernández A, Pepe-Cardoso AJ, Louro N, et al. α 1A-Adrenergic Receptor Antagonism Improves Erectile and Cavernosal Responses in Rats With Cavernous Nerve Injury and Enhances Neurogenic Responses in Human Corpus Cavernosum From Patients With Erectile Dysfunction Secondary to Radical Prostatectomy. *J Sex Med.* 2016;13:1844–57.
- 50- Yang CH, Raja A. Terazosin. [Updated 2020 May 29]. In: StatPearls [Internet]. Treasure Island (FL): StatPearls Publishing; 2021 Jan-. Available from: <https://www.ncbi.nlm>
- 51- Westfall, Thomas C. Macarthur, Heather Westfall, David P. Adrenergic Agonists and Antagonists. In: Brunton LL, Hilal-Dandan R BA, Knollmann BC, editors. *Goodman and Gilman's pharmacological basis of therapeutics.* 13th ed. New York: McGraw-Hill Medical; 2018: p. 191-223
- 52- Hytrin [package insert]. United States: Abbott Laboratories; 2007
- 53- Başar MM, Yılmaz E, Ferhat M, Başar H, Batıslam E. Terazosin in the treatment of premature ejaculation: A short-term follow-up. *Int Urol Nephrol.* 2005;37(4):773–7.
- 54- Hakky TS, Urology A, Georgia S, Jain L. Current use of phosphodiesterase inhibitors in urology. *Turkish J Urol.* 2015;41(2):88–92.
- 55- Huang SA, Lie JD. Phosphodiesterase-5 (PDE5) Inhibitors In the Management of Erectile Dysfunction. *P&T.* 2013;38(7):407–19.
- 56- Dhaliwal A, Gupta M. PDE5 Inhibitor. [Updated 2020 Jun 23]. In: StatPearls [Internet]. Treasure Island (FL): StatPearls Publishing; 2021 Jan-. Available from: <https://www.ncbi.nlm.nih.gov/books/NBK549843/>

- 57- LiverTox: Clinical and Research Information on Drug-Induced Liver Injury [Internet]. Bethesda (MD): National Institute of Diabetes and Digestive and Kidney Diseases; 2012-. Phosphodiesterase Type 5 (PDE5) Inhibitors. [Updated 2017 Aug 2]. Available from: <https://www.ncbi.nlm.nih.gov/books/NBK548192/>
- 58- Amano T, Earle C, Imao T, Matsumoto Y, Kishikage T. Administration of daily 5 mg tadalafil improves endothelial function in patients with benign prostatic hyperplasia. *Aging Male* [Internet]. 2018;21(1):77–82. Available from: <https://doi.org/10.1080/13685538.2017.1367922>
- 59- Oger S, Behr-Roussel D, Gorny D, Lecoz O, Lebret T, Denoux Y, et al. Combination of doxazosin and sildenafil exerts an additive relaxing effect compared with each compound alone on human cavernosal and prostatic tissue. *J Sex Med.* 2009;6(3):836–47.
- 60- Kaplan SA, Gonzalez RR, Te AE. Combination of Alfuzosin and Sildenafil is Superior to Monotherapy in Treating Lower Urinary Tract Symptoms and Erectile Dysfunction. *Eur Urol.* 2007;51(6):1717–23.
- 61- Amano T, Earle C, Imao T, Matsumoto Y, Kishikage T. Administration of daily 5 mg tadalafil improves endothelial function in patients with benign prostatic hyperplasia. *Aging Male* [Internet]. 2018;21(1):77–82. Available from: <https://doi.org/10.1080/13685538.2017.1367922>
- 62- Erdemir F, Harbin A. 5-Alpha Reductase Inhibitors and Erectile Dysfunction: The Connection. 2008;2917–24.
- 63- Öztekin ÇV, Gur S, Abdulkadir NA, Lokman U, Akdemir AÖ, Cetinkaya M, et al. Incomplete Recovery of Erectile Function in Rat after Discontinuation of Dual 5-Alpha Reductase Inhibitor Therapy. *J Sex Med.* 2012;9(7):1773–81.
- 64- Füllhase C, Schneider MP. 5-Alpha-Reductase Inhibitors and Combination Therapy. *Urol Clin North Am* [Internet]. 2016;43(3):325–36. Available from:
- 65- Eckhard C. Untersuchungen über die Erektion des Penis beim Hunde. *Beitr Anat Physiol* 1863; 3: 123 ± 126.

- 66- Mattiasson A, Uvelius B. Changes in contractile properties in hypertrophic rat urinary bladder. *J Urol.* 1982 Dec;128(6):1340-2. doi: 10.1016/s0022-5347(17)53503-x. PMID: 7154206.
- 67- Chen L, Yang Y, Yang J, He P, Amend B, Stenzl A, Hu J, Zhang Y, Wang Z. Suture causing urethral meatus stricture: A novel animal model of partial bladder outlet obstruction. *Neurourol Urodyn.* 2018 Sep;37(7):2088-2096. doi: 10.1002/nau.23427. Epub 2018 Jun 28. PMID: 29953650.
- 68- Parsons BA, Drake MJ. Animal models in overactive bladder research. *Handb Exp Pharmacol.* 2011;(202):15-43. doi: 10.1007/978-3-642-16499-6_2. PMID: 21290220.
- 69- Kitta T, Kanno Y, Chiba H, Higuchi M, Ouchi M, Togo M, Moriya K, Shinohara N. Benefits and limitations of animal models in partial bladder outlet obstruction for translational research. *Int J Urol.* 2018 Jan;25(1):36-44. doi: 10.1111/iju.13471. Epub 2017 Oct 1. PMID: 28965358.
- 70- Melman A, Tar M, Boczko J, Christ G, Leung AC, Zhao W, Russell RG. Evaluation of two techniques of partial urethral obstruction in the male rat model of bladder outlet obstruction. *Urology.* 2005 Nov;66(5):1127-33. doi: 10.1016/j.urology.2005.06.070. PMID: 16286152.
- 71- Gheinani AH, Köck I, Vasquez E, Baumgartner U, Bigger-Allen A, Sack BS, Burkhard FC, Adam RM, Monastyrskaya K. Concordant miRNA and mRNA expression profiles in humans and mice with bladder outlet obstruction. *Am J Clin Exp Urol.* 2018 Dec 20;6(6):219-233. PMID: 30697578; PMCID: PMC6334198.
- 72- Tassone NM, Li B, Devine MY, Hausner PM, Patel MS, Gould AD, Kochan KS, Dettman RW, Gong EM. Voided volumes predict degree of partial bladder outlet obstruction in a murine model. *Am J Clin Exp Urol.* 2018 Oct 20;6(5):189-196. PMID: 30510971; PMCID: PMC6261872.
- 73- Metcalfe PD, Wang J, Jiao H, Huang Y, Hori K, Moore RB, Tredget EE. Bladder outlet obstruction: progression from inflammation to fibrosis. *BJU Int.* 2010 Dec;106(11):1686-94. doi: 10.1111/j.1464-410X.2010.09445.x. PMID: 20590549.

- 74- Piao S, Ryu J-K, Shin H-Y, Han J-Y, Lee H-S, Suh J-K. The mouse as a model for the study of penile erection: moving towards a smaller animal. *International Journal of Andrology*. 2007;30(5):452-457. doi:10.1111/j.1365-2605.2006.00737.x
- 75- Metcalfe PD, Wang J, Jiao H, et al. Bladder outlet obstruction: progression from inflammation to fibrosis. *BJU International*. 2010;106(11):1686-1694. doi:10.1111/j.1464-410x.2010.09445.x
- 76- Burnett A. General use of animal models for investigation of the physiology of erection. *International Journal of Impotence Research*. 2001;13(3):135-139. doi:10.1038/sj.ijir.3900678
- 77- Sidler M, Aitken K, Jiang J, Bijos D, Belik J, Bägli DJ. Finding NeMO—Nerve-sparing Mid-urethral Obstruction: A Pathophysiologically Accurate Model of Rodent Partial Bladder Outlet Obstruction. *Urology*. 2017;105:208.e1-208.e9. doi:10.1016/j.urology.2017.03.032
- 78- Kitta T, Kanno Y, Chiba H, et al. Benefits and limitations of animal models in partial bladder outlet obstruction for translational research. *International Journal of Urology*. 2017;25(1):36-44. doi:10.1111/iju.13471
- 79- Zhang N, Ma L, Zhang J, Chen J. Improved model for the establishment and evaluation of detrusor overactivity in female Wistar rats. *International braz j urol*. 2014;40(3):414-422. doi:10.1590/s1677-5538.ibju.2014.03.17
- 80- Tubaro A, Mariani S, De Nunzio C, Miano R. Bladder weight and detrusor thickness as parameters of progression of benign prostatic hyperplasia. *Current Opinion in Urology*. 2010;20(1):37-42. doi: 10.1097 /mou.0b013e32 833307e0
- 81- Kim WH, Bae WJ, Park JW, et al. Development of an Improved Animal Model of Overactive Bladder: Transperineal LigationversusTransperitoneal Ligation in Male Rats. *The World Journal of Men's Health*. 2016;34(2):137. doi:10.5534/wjmh.2016.34.2.137
- 82- Sugino Y, Kanematsu A, Hayashi Y, et al. Voided stain on paper method for analysis of mouse urination. *Neurourology and Urodynamics*. 2008;27(6):548-552. doi:10.1002/nau.20552

- 83- Munekado Kojima, Emi Inui, Atsushi Ochiai, Yoshio Naya, Osamu Ukimura, Hiroki Watanabe, Noninvasive Quantitative Estimation of Infravesical Obstruction Using Ultrasonic Measurement of Bladder Weight, The Journal of Urology, Volume 157, Issue 2, 1997, Pages 476-479, ISSN 0022-5347, [https://doi.org/10.1016/S0022-5347\(01\)65178-4](https://doi.org/10.1016/S0022-5347(01)65178-4).
- 84- Akino H, Maekawa M, Nakai M, Shioyama R, Ishida H, Oyama N, Miwa Y, Yokoyama O. Ultrasound-estimated bladder weight predicts risk of surgery for benign prostatic hyperplasia in men using alpha-adrenoceptor blocker for LUTS. *Urology*. 2008 Oct;72(4):817-20. doi: 10.1016/j.urology.2008.04.058. Epub 2008 Jul 2. PMID: 18597835.
- 85- Almeida FG, Freitas DG, Bruschini H. Is the ultrasound-estimated bladder weight a reliable method for evaluating bladder outlet obstruction? *BJU Int*. 2011 Sep;108(6):864-7. doi: 10.1111/j.1464-410X.2010.09881.x. Epub 2010 Dec 16. PMID: 21166745.
- 86- Levin, R.M., Schuler, C., Leggett, R.E., Callaghan, C. and Maknuru, S. (2013), Duration vs severity of obstruction. *Int J Urol*, 20: 107-114. <https://doi.org/10.1111/j.1442-2042.2012.03184.x>
- 87- Tanaka Y, Masumori N, Itoh N, Sato Y, Takahashi A, Ogura H, Furuya S, Tsukamoto T. Urodynamic effects of terazosin treatment for Japanese patients with symptomatic benign prostatic hyperplasia. *J Urol*. 2002 Jun;167(6):2492-5. PMID: 11992065.
- 88- Wilt TJ, Howe W, MacDonald R. Terazosin for treating symptomatic benign prostatic obstruction: a systematic review of efficacy and adverse effects. *BJU Int*. 2002 Feb;89(3):214-25. PMID: 11856101.
- 89- Gur S, Sikka SC, Chandra S, Koka PS, Agrawal KC, Kadowitz PJ, Hellstrom WJ. Alfuzosin attenuates erectile dysfunction in rats with partial bladder outlet obstruction. *BJU Int*. 2008 Dec;102(11):1651-7. doi: 10.1111/j.1464-410X.2008.07914.x. Epub 2008 Oct 16. PMID: 18990166.
- 90- Bastaskin T, Kaya E, Ozakca I, Yilmaz D, Bayatlı N, Akdemir AO, Gur S. Effects of silodosin, a selective alpha-1A adrenoceptor antagonist, on erectile function in a rat model of partial bladder outlet obstruction. *Neurourol*

- Urodyn. 2017 Mar;36(3):597-603. doi: 10.1002/nau.23015. Epub 2016 Apr 6. PMID: 27061103.
- 91- Turkan S., Yardımoğlu Yılmaz M. , Culha M. M. , Soylu A. G. , Çiftçi S. , Yılmaz H. Histological effects on the penile tissue of papaverine and combination of PPR papaverine prostaglandine regitine treated with intracavernosal injection ICI in the rats. MITTEILUNGEN KLOSTERNEUBURG, 2014 vol.64, pp.54-70.
- 92- Chang S, Hypolite JA, Zderic SA, Wein AJ, Chacko S, Disanto ME. Increased corpus cavernosum smooth muscle tone associated with partial bladder outlet obstruction is mediated via Rho-kinase. Am J Physiol Regul Integr Comp Physiol. 2005 Oct;289(4):R1124-30. doi: 10.1152/ajpregu.00717.2003. Epub 2005 Jun 16. PMID: 15961528.
- 93- Lin WY, Mannikarottu A, Chichester P, Guven A, Johnson A, Neuman P, Juan YS, Schuler C, Kogan B, Levin RM. Changes in the smooth muscle of the corpora cavernosum related to reversal of partial bladder outlet obstruction in rabbits. J Androl. 2008 Mar-Apr;29(2):164-71. doi: 10.2164/jandrol.107.003160. Epub 2007 Nov 14. PMID: 18004011.
- 94- Véronneau-Longueville F, Rampin O, Jardin A, Benoit G, Giuliano F. Expression of alpha 1 adrenoceptor subtypes in rat corpus cavernosum. Int J Impot Res. 1998 Sep;10(3):187-94. doi: 10.1038/sj.ijir.3900348. PMID: 9788109.
- 95- Traish AM, Kim NN, Goldstein I, Moreland RB. Alpha-adrenergic receptors in the penis: identification, characterization, and physiological function. J Androl. 1999 Nov-Dec;20(6):671-82. PMID: 10591604.
- 96- Malykhina AP, Lei Q, Chang S, Pan XQ, Villamor AN, Smith AL, Seftel AD. Bladder outlet obstruction triggers neural plasticity in sensory pathways and contributes to impaired sensitivity in erectile dysfunction. Am J Physiol Regul Integr Comp Physiol. 2013 May 15;304(10):R837-45. doi: 10.1152/ajpregu.00558.2012. Epub 2013 Mar 27. PMID: 23535456; PMCID: PMC6195648.

- 97- Choi YD, Mah SY, Xin ZC, Choi HK. The distribution of nitric oxide synthase in human corpus cavernosum on various impotent patients. *Yonsei Med J.* 1997 Jun;38(3):125-32. doi: 10.3349/ymj.1997.38.3.125. PMID: 9259611.
- 98- Yono M, Yamamoto Y, Yoshida M, Ueda S, Latifpour J. Effects of doxazosin on blood flow and mRNA expression of nitric oxide synthase in the spontaneously hypertensive rat genitourinary tract. *Life Sci.* 2007 Jun 27;81(3):218-22. doi: 10.1016/j.lfs.2007.05.004. Epub 2007 May 21. PMID: 17574276; PMCID: PMC2077832.
- 99- Lin WY, Mannikarottu A, Chichester P, Neuman P, Johnson A, Pérez-Martínez FC, Levin RM. The effect of chronic partial bladder outlet obstruction on corpus cavernosum smooth muscle and Rho-kinase in rabbits. *Neurourol Urodyn.* 2008;27(8):826-31. doi: 10.1002/nau.20607. PMID: 18551564.
- 100- Liu CM, Lo YC, Wu BN, Wu WJ, Chou YH, Huang CH, An LM, Chen IJ. cGMP-enhancing- and alpha1A/alpha1D-adrenoceptor blockade-derived inhibition of Rho-kinase by KMUP-1 provides optimal prostate relaxation and epithelial cell anti-proliferation efficacy. *Prostate.* 2007 Sep 15;67(13):1397-410. doi: 10.1002/pros.20634. PMID: 17639498.
- 101- Ruan C, Lu J, Wang H, Ge Z, Zhang C, Xu M. miR-26b-5p regulates hypoxia-induced phenotypic switching of vascular smooth muscle cells via the TGF- β /Smad4 signaling pathway. *Mol Med Rep.* 2017 Jun;15(6):4185-4190. doi: 10.3892/mmr.2017.6509. Epub 2017 Apr 25. PMID: 28487943.
- 102- Chacko S, Chang S, Hypolite J, Disanto M, Wein A. Alteration of contractile and regulatory proteins following partial bladder outlet obstruction. *Scand J Urol Nephrol Suppl.* 2004;(215):26-36. doi: 10.1080/03008880410015147. PMID: 15545194.
- 103- Yang L, He DL, Wang S, Cheng HP, Wang XY. Effect of long-term partial bladder outlet obstruction on caldesmon isoforms and their correlation with contractile function. *Acta Pharmacol Sin.* 2008 May;29(5):600-5. doi: 10.1111/j.1745-7254.2008.00784.x. PMID: 18430369.

- 104- Shukla AR, Nguyen T, Zheng Y, Zderic SA, DiSanto M, Wein AJ, Chacko S. Over expression of smooth muscle specific caldesmon by transfection and intermittent agonist induced contraction alters cellular morphology and restores differentiated smooth muscle phenotype. *J Urol.* 2004 May;171(5):1949-54. doi: 10.1097/01.ju.0000123061.87723.e9. PMID: 15076319.
- 105- Burkhard FC, Lemack GE, Zimmern PE, Lin VK, McConnell JD. Contractile protein expression in bladder smooth muscle is a marker of phenotypic modulation after outlet obstruction in the rabbit model. *J Urol.* 2001 Mar;165(3):963-7. PMID: 11176523.
- 106- Walther S, Strittmatter F, Roosen A, Heinzer F, Rutz B, Stief CG, Gratzke C, Hennenberg M. Expression and alpha1-adrenoceptor regulation of caldesmon in human prostate smooth muscle. *Urology.* 2012 Mar;79(3):745.e5-12. doi: 10.1016/j.urology.2011.10.053. Epub 2011 Dec 23. PMID: 22197205