

18. BÖLÜM

Mesanenin Benign Mezenkimal Tümörleri

Seda DUMAN ÖZTÜRK¹

Mesane tümörlerinin çoğu ürotelyal epitel kökenlidir. Mezenkim kaynaklı mesane tümörleri daha az sıklıkta görülmektedir (1).

Mesanede görülen mezenkimal tümörlerin ortak özelliği mesanenin herhangi bir yerinde ortaya çıkabilmeleridir. Klinik olarak hemen hemen hastaların tümünde idrar kaçırma, dizüri, hemtaüri, ağrı ve obstruktif şikayetler bulunurken tamamen asemptomatik olarak da saptanabilirler.

Mesanenin benign mezenkimal tümörlerini leiomyom, inflamatuar myofibroblastik tümör, hemanjiom, epiteloid hemanjioendotelyoma, soliter fibröz tümör, nörofibrom, granüler hücreli tümör, glomus tümörü, pecoma, arteriovenöz malformasyon ve gastrointestinal stromal tümör olarak sıralayabiliriz. Bu tümörlerden görece en sık görülenlerine bu kitapta yer vermek istedik.

LEİOMYOMLAR

Leiomyom düz kaslardan köken alan bir tümördür. Leiomyomlar mesanenin en sık görülen benign mezenkimal tümörüdür. Buna rağmen tüm mesane tümörleri arasında dünyada bildirilen yaklaşık 250 vakada görülme sıklığı <%0,5'dir (2,3,4,5). İlk kez Virchow tarafından 1931 yılında rapor edilmiştir (6,7).

Genelde kadın ve erkeklerde eşit sıklıkta görüldüğü bildirilen bu tümörlerin başvuru yaşı 21-80 olarak bildirilmektedir (1).

Bu tümörlerin etiyolojileri tam olarak aydınlatılamamıştır. Leiomyomlar en sık endovezikal olarak karşımıza çıksa da intramural ve ekstravezikal yerleşimli de olabilirler (8).

¹ Uzm. Dr. Recep Tayyip Erdoğan Üniversitesi Eğitim ve Araştırma Hastanesi,
sedadm08@gmail.com

KAYNAKÇA

1. Tavora, F., Kryvenko, O. N., & Epstein, J. I. (2013). Mesenchymal tumours of the bladder and prostate: an update. *Pathology*, 45(2), 104-115.
2. Mendes, J. E., Ferreira, A. V., Coelho, S. A. ve ark.. (2017). Bladder leiomyoma. *Urology Annals*, 9(3), 275.
3. Carvalho TG, Botelho F, Resende A ve ark. 2010 Leiomyomas of the bladder and urethra - two clinical cases. *Acta Urol*. 2010;27:51–4.
4. Khater N, Sakr G. Bladder leiomyoma: Presentation, evaluation and treatment. *Arab J Urol*. 2013;11:54–61. [PMC free article] [PubMed]
5. Pardal H, Ferronha F, Gameiro C ve ark. 2011 Intramural vesical leiomyoma in a patient with a pelvic fibrous tumour - case report. *Acta Urol*. 2011;2:28–31.
6. JL K. Leiomyoma of the bladder with a report of a case and a review of the literature. *J Urol* 1931;26:575–89
7. Xin, J., Lai, H. P., Lin, S. K. ve ark. (2016). Bladder leiomyoma presenting as dyspareunia: Case report and literature review. *Medicine*, 95(28).
8. Khater, N., & Sakr, G. (2013). Bladder leiomyoma: Presentation, evaluation and treatment. *Arab journal of urology*, 11(1), 54-61.
9. Martin, S. A., Sears, D. L., Sebo, T. J. ve ark. (2002). Smooth muscle neoplasms of the urinary bladder: a clinicopathologic comparison of leiomyoma and leiomyosarcoma. *The American journal of surgical pathology*, 26(3), 292-300.
10. Tavora, F., Kryvenko, O. N., & Epstein, J. I. (2013). Mesenchymal tumours of the bladder and prostate: an update. *Pathology*, 45(2), 104-115.
11. Lee TK, Miyamoto H, Osunkoya AO, ve ark. Smooth muscle neoplasms of the urinary bladder: a clinicopathologic study of 51 cases. *Am J Surg Pathol* 2010; 34: 502–9.
12. Inamdar, A. A., & Pulinthanathu, R. (2019). Malignant transformation of inflammatory myofibroblastic tumor of urinary bladder: A rare case scenario. *Bladder*, 6(2), e39.
13. Song, D. (2019). Inflammatory myofibroblastic tumor of urinary bladder with severe hematuria: A Case report and literature review. *Medicine*, 98(1).
14. Roth, J. A. (1980). Reactive pseudosarcomatous response in urinary bladder. *Urology*, 16(6), 635-637.
15. Fletcher, C. D. M. U. (2002). Pathology and genetics of tumors of soft tissue and bone. *World Health Organization Classification of Tumors*, 4, 35-46.
16. Gass, J., Beaghler, M., & Kwon, M. (2019). Inflammatory myofibroblastic tumor of the urinary bladder: a case report. *Journal of Endourology Case Reports*, 5(2), 31-33.
17. Teoh, J. Y. C., Chan, N. H., Cheung, H. Y. ve ark. (2014). Inflammatory myofibroblastic tumors of the urinary bladder: a systematic review. *Urology*, 84(3), 503-508.
18. Ayati, M., Nowroozi, M. R., Momeni, S. A., Moghadam, S. O. ve ark. (2019). Radical cystectomy for management of inflammatory myofibroblastic tumor of the urinary bladder: A rare case report. *Urology case reports*, 27, 100997.
19. Montgomery, E. A., Shuster, D. D., Burkart, A. L. ve ark. (2006). Inflammatory myofibroblastic tumors of the urinary tract: a clinicopathologic study of 46 cases, including a malignant example inflammatory fibrosarcoma and a subset associated with high-grade urothelial carcinoma. *The American journal of surgical pathology*, 30(12), 1502-1512.
20. Cao, Z., Gao, Q., Fu, M. ve ark. (2019). Anaplastic lymphoma kinase fusions: Roles in cancer and therapeutic perspectives. *Oncology Letters*, 17(2), 2020-2030.
21. Sukov, W. R., Cheville, J. C., Carlson, A. W. ve ark. (2007). Utility of ALK-1 protein expression and ALK rearrangements in distinguishing inflammatory myofibroblastic tumor from malignant spindle cell lesions of the urinary bladder. *Modern pathology*, 20(5), 592-603.
22. Tsuzuki, T., Magi-Galluzzi, C., & Epstein, J. I. (2004). ALK-1 expression in inflammatory myofibroblastic tumor of the urinary bladder. *The American journal of surgical pathology*, 28(12), 1609-1614.

23. Hamza, A., & Guo, C. C. (2020). Perivascular Epithelioid Cell Tumor of the Urinary Bladder: A Systematic Review. *International Journal of Surgical Pathology*, 28(4), 393-400.
24. Folpe AL, Kwiatkowski DJ. Perivascular epithelioid cell neoplasms: pathology and pathogenesis. *Hum Pathol*. 2010;41:1-15.
25. Sukov, W. R., Cheville, J. C., Amin, M. B. ve ark. (2009). Perivascular epithelioid cell tumor (PEComa) of the urinary bladder: report of 3 cases and review of the literature. *The American journal of surgical pathology*, 33(2), 304-308.
26. Vannucchi, M., Minervini, A., Salvi ve ark. (2020). TFE3 Gene Rearrangement in Perivascular Epithelioid Cell Neoplasm (PEComa) of the genitourinary tract. *Clinical Genitourinary Cancer*.
27. Martignoni, G., Pea, M., Zampini, C. ve ark. (2015, March). PEComas of the kidney and of the genitourinary tract. In *Seminars in diagnostic pathology* (Vol. 32, No. 2, pp. 140-159). WB Saunders.
28. Williamson, S. R., Cheng, L., Eble, J. N. ve ark. (2015). Renal cell carcinoma with angiomyoma-like stroma: clinicopathological, immunohistochemical, and molecular features supporting classification as a distinct entity. *Modern Pathology*, 28(2), 279-294.
29. Dim DC, Cooley LD, Miranda RN. Clear cell sarcoma of tendons and aponeuroses: a review. *Arch Pathol Lab Med*. 2007;131:152-156.
30. Hisaoka M, Ishida T, Kuo TT, ve ark. Clear cell sarcoma of soft tissue: a clinicopathologic, immunohistochemical, and molecular analysis of 33 cases. *Am J Surg Pathol*. 2008;32: 452-460.
31. Williamson SR, Bunde PJ, Montironi R, ve ark. Malignant perivascular epithelioid cell neoplasm (PEComa) of the urinary bladder with TFE3 gene rearrangement: clinicopathologic, immunohistochemical, and molecular features. *Am J Surg Pathol*. 2013;37:1619-1626.
32. Tian, C., Li, Z., & Gao, D. (2019). Bladder PEComa: A case report and literature review. *Radiology Case Reports*, 14(10), 1293-1296.
33. Folpe AL, Kwiatkowski DJ. Perivascular epithelioid cell neoplasms: pathology and pathogenesis. *Hum Pathol*. 2010;41:1-15.
34. Westra, W. H., Grenko, R. T., & Epstein, J. (2000). Solitary fibrous tumor of the lower urogenital tract: a report of five cases involving the seminal vesicles, urinary bladder, and prostate. *Human pathology*, 31(1), 63-68.
35. Rovegno, F. A., Hernandez, C. Y., Gradin et sl. (2019). Solitary fibrous tumor of the pelvis involving the bladder. Case report and literature review. *Urology case reports*, 24, 100864.
36. Cerdá NM, López GC, Gil BR, ve ark. Solitary fibrous tumor of the orbit: morphological, cytogenetic and molecular features. *Neuropathology* 2006;26:557-63.
37. Sun, S., Tang, M., Dong, H. ve ark. (2020). Solitary fibrous tumor involving urinary bladder: a case report and literature review. *Translational Andrology and Urology*, 9(2), 766.
38. Prunty MC, Gaballah A, Ellis L, ve ark. Solitary Fibrous Tumor of the Pelvis Involving the Urinary Bladder. *Urology* 2018;117:27-30.
39. Mosquera JM, Fletcher CD. Expanding the spectrum of malignant progression in solitary fibrous tumors: a study of 8 cases with a discrete anaplastic component--is this dedifferentiated SFT? *Am J Surg Pathol* 2009;33:1314-21.
40. Fletcher CDM. WHO classification of tumors of soft tissue and bone. IARC Press; 2013.
41. England DM, Hochholzer L, McCarthy MJ. Localized benign and malignant fibrous tumors of the pleura. A clinico-pathologic review of 223 cases. *Am J Surg Pathol*.1989;13:640-658.
42. Demicco EG, Wagner MJ, Maki RG, ve ark. Risk assessment in solitary fibrous tumors: validation and refinement of a risk stratification model. *Mod Pathol*. 2017;30:1433-1442.
43. Mukai S, Tanaka H, Yamasaki K, ve ark. Urinary bladder pyogenic granuloma: a case report. *J Med Case Rep*. 2012;6:149. <https://doi.org/10.1186/1752-1947-6-149>.
44. Syu, S. H., Chan, K. S., Hsiao, C. H. ve ark. (2019). A large urinary bladder hemangioma mimicking urachal cancer: a case report and literature review. *Urology*, 123, 224-226.

45. Tavora, F., Montgomery, E., & Epstein, J. I. (2008). A series of vascular tumors and tumorlike lesions of the bladder. *The American journal of surgical pathology*, 32(8), 1213-1219.
46. Martov, A. G., Pominalnaya, V. M., Kurkov ve ark. (2019). Transurethral resection of a large bladder hemangioma of mixed histological composition: a case report. *Research and reports in urology*, 11, 175.
47. Abbas, F., Memon, A., Siddiqui, T. ve ark. (2007). Granular cell tumors of the urinary bladder. *World Journal of Surgical Oncology*, 5(1), 1-7.20.
48. Kang, H. W., Kim, Y. W., Ha, ve ark. (2010). Granular cell tumor of the urinary bladder. *Korean journal of urology*, 51(4), 291-293.
49. Wang, W., Montgomery, E., & Epstein, J. I. (2008). Benign nerve sheath tumors on urinary bladder biopsy. *The American journal of surgical pathology*, 32(6), 907-912.
50. Kalafatis, P., Kavantzas, N., Pavlopoulos ve ark. (2002). Malignant peripheral nerve sheath tumor of the urinary bladder in von Recklinghausen disease. *Urologia internationalis*, 69(2), 156-159.
51. Umakanthan, S., Naik, R., Bukelo, M. ve ark. (2015). Primary bladder neurofibroma: A rare case with clinical implications and diagnostic challenges. *Journal of clinical and diagnostic research: JCDR*, 9(9), ED05.
52. Cheville J. Folpe A. 2016 Mesenchymal tumours Ed Holger Moch WHO Classification of Tumors of the Urinary and Male Genital Organs (122-127). Lyon, France: IARC Press;