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The Importance of Early Diagnosis and Tumor Size in Testicular Cancers

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To the Editor,

Accounting for just 1% of total malignancies in males, testicular cancers are the most prevalent organ malignancies in males aged 20-40 (1). Although still relatively uncommon, researchers have yet to identify why the rate of occurrence of these tumors has been rising over the last twenty years (2). An early indication of testicular cancer is most frequently a palpable mass that is not painful. The absence of pain may result in diagnostic delay, which is a clinically important problem. The complete cure rate for testicular cancer is now nearly 100%, mostly attributable to timely diagnosis and to the fact that these types of tumors are highly sensitive to both chemotherapy and radiotherapy (3). Therefore, tumor size has become a significant factor both in the clinical stage of testicular cancers and surgical treatment. With seminomas in particular, which are the most common type, tumor size is a staging criterion and a risk factor for occult metastatic disease. The eighth publication of the American Joint Committee on Cancer includes an important revision to Tumor-Node-Metastasis classification. Two subgroups were created for pathological tumor stage (pT1) seminomas based on tumor size, with a tumor <3 cm now categorized as pT1a and a tumor >3 cm considered as T1b (4). Moreover, meta-analyses showed that in stage 1 seminomas, patients with tumors >4 cm and/or presenting with rete testis involvement were at risk for developing occult metastatic disease (5,6). In a study we conducted last year in the Antalya region, the mean tumor size in radical orchiectomy materials from patients diagnosed as having seminoma was 4.75±2.04 cm, which is not encouraging (7). In further research on testicular tumors carried out in conjunction with our study nearly two decades earlier, the average seminoma

specimen tumor was found to be 4.92±3.03 cm (8). This indicates that tumor size when initially diagnosed has not seen notable improvement in the last twenty years. In addition, the size of the testis remains relevant when determining the extent of surgical treatment. Radical orchiectomy is still considered the gold standard for testicular tumor treatment; however, partial orchiectomy (PO) is a viable option in certain cases. In order to maintain the production of testosterone and development of sperm cells, preserving testicular function with PO is critical. Subsequent studies have shown that PO has no significant local or distant recurrence risk that may affect progression (9). Therefore, the latest American Urology Association guideline suggests that PO can be considered for patients with normal serum tumor markers and solitary tumors sized ≤2 cm (10). In a recent study, 124 patients operated for testicular tumors between 2011 and 2019 had tumors that measured 4.01±2.29 cm on average, and unfortunately, tumors were ≥2 cm in 76.4% of these patients (7). If evaluated from this point of view, we see it is already too late for PO at the time of diagnosis. These findings underline the importance of ensuring the public is well informed about early diagnosis, particularly those individuals who fall into the high-risk category based on age. The simplest and least expensive method to detect tumors of the testes is through self-examination (11). For males who are 15-45 years old in particular, and within society at large, increasing knowledge of the importance of routine self-checks will facilitate the detection of tumors in the testes at smaller sizes.

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References

- Ferlay J, Soerjomataram I, Dikshit R, et al. Cancer incidence and mortality worldwide: Sources, methods and major patterns in GLOBOCAN 2012. Int J Cancer 2015;136:E359-E386.
- Cheng L, Albers P, Berney DM, et al. Testicular cancer. Nat Rev Dis Prim 2018;4:29.
- 3. Baird DC, Meyers GJ, Hu JS. Testicular Cancer: Diagnosis and Treatment. Am Fam Physician 2018;97:261-268.
- Magers MJ, Idrees MT. Updates in Staging and Reporting of Testicular Cancer. Surg Pathol Clin 2018;11:813-824.
- Aparicio J. Prognostic factors for relapse in stage I testicular seminoma: tumor size and rete testis invasion revisited. Clin Transl Oncol 2018;20:1358-1359.
- Boormans JL, Mayor de Castro J, Marconi L, et al. Testicular Tumour Size and Rete Testis Invasion as Prognostic Factors for the Risk of Relapse of Clinical Stage I Seminoma Testis Patients Under

- Surveillance: a Systematic Review by the Testicular Cancer Guidelines Panel. Eur Urol 2018;73:394-405.
- 7. Sarier M, Tunç M, Özel E, et al. Evaluation of Histopathologic Results of Testicular Tumors in Antalya: Multi Center Study. Bull Urooncol 2020;19:64-67.
- 8. Oztekin S. Testisin Germ Hücreli Tümörlerinde Fas, FasL, ve p27 ekspresyonu: Histopatolojik alt tiplerine göre ve erişkinde normal testis dokusu ile karşılaştırılması. Akdeniz Univ. 2001. (Thesis)
- 9. Djaladat H. Organ-sparing surgery for testicular tumours. Curr Opin Urol 2015;25:116-120.
- Stephenson A, Eggener SE, Bass EB, et al. Diagnosis and Treatment of Early Stage Testicular Cancer: AUA Guideline. J Urol 2019;202:272-281.
- Kuzgunbay B, Yaycioglu O, Soyupak B, et al. Public awareness of testicular cancer and self-examination in Turkey: A multicenter study of Turkish Urooncology Society. Urol Oncol 2013;31:386-391.