

Editorial referring to the paper: Ondrusova M, Balogova S, Lehotska V, Kajo K, Mrinakova B, Ondrus D. Controversies in the management of clinical stage I testicular seminoma. *Cent European J Urol.* 2016; 69: 35-39.

Best treatment option for clinical stage I seminoma patients

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In the present cross sectional study comprising 106 patients, the authors compared a risk adapted therapeutic strategy in patients with CSI seminoma [1]. The patients were distributed to active surveillance (AS) (n = 84) and adjuvant chemotherapy (ACT) (n = 22) with single dose carboplatin groups. The relapse rates between the 2 groups were similar. The authors advocated AS for patients with low risk of relapse and, on the other hand, ACT for those with high risk of relapse.

The current management options for CSI seminomas include adjuvant radiotherapy (ART), AS, and ACT. ART has been the preferred treatment modality for a long time, but concerns regarding its side effects, such as risks of cardiovascular disease and secondary malignancies, resulted in a significant change in the concept of ART. Thus, the option of ART has been removed from the current guidelines [2, 3].

Surveillance avoids overtreatment in approximately 85% of patients when appropriate follow-up protocols are used [4]. However, identifying the 15% who may harbor micrometastatic disease should be of utmost importance in patients under AS. Surveillance requires highly compliant patients willing to have multiple abdominal CT scans. The radiation from abdominal CT is not benign, with a lifetime attributable risk of secondary malignancy from 4 scans for an 18 year old patient calculated at 0.64% [5].

ACT has been shown to be non-inferior to ART [6]. In the largest series of ACT, a 4.1% relapse rate was demonstrated with a median time to relapse of 22.7 months among 517 patients [7]. A recent study which investigated the practice patterns for adjuvant therapies for CSI seminoma in the US population has demonstrated that ART has been largely replaced by ACT, rather than AS [8]. However, the authors concluded that the lack of an increase in AS in their cohort might represent overtreatment of the population. Proponents of AS consider ACT a potentially harmful and unnecessary intervention. However, in recent studies, especially low risk patients were selected for AS, whereas high risk patients were given ACT [9]. Due to this reason, such series may possibly be flawed by selection bias in favor of AS, whereas predominantly low risk patients were included rather than high risk ones [10]. The long term side effects of single dose ACT remain unclear; moreover, the use of ACT does not obviate the need for abdominal CT scans, which has been proposed as a concern against AS.

A risk adapted treatment strategy seems to be logical for CSI seminoma patients. Although rete testis invasion and primary tumor >4 cm were reported to be independent prognostic factors for relapse, these data have not been validated in prospective studies [11]. Currently, AS has been recognized as the treatment of choice of CSI seminomas in the EAU and American Society of Clinical Oncology guidelines [2, 3].

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