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DOI: 10.1200/JCO.2012.42.0455; published online ahead of print at www.jco.org on April 2, 2012

# Relapsed Seminoma During Surveillance: First Treatment Choice Should Be Radiotherapy

To the Editor: Treatment options for men with clinical stage I testicular seminoma include surveillance or adjuvant treatment with either radiation therapy (RT) or single-agent carboplatin. All three approaches yield excellent results. Thus, the potential long-term complications of adjuvant therapies must be balanced against the patient's ability and willingness to comply with the surveillance approach. The study presented by Aparicio et al<sup>1</sup> is appreciated because it confirms the safety of surveillance in stage I testicular cancer. However, some issues require discussion.

The authors<sup>1</sup> used a risk-stratification approach to offer surveillance only to those patients with no risk factors or only one risk factor as determined by pathology specimens, whereas those patients with rete testis invasion and a tumor diameter of more than 4 cm were offered two cycles of carboplatin. Sixteen patients experienced relapse (15 during surveillance and one after receiving adjuvant carboplatin). Interestingly, 15 patients were managed with salvage multiagent chemotherapy (CT) and only one patient with RT. A regimen of etoposide and cisplatin (we assume four cycles) was administered as salvage treatment to those patients who had retroperitoneal recurrences (stage IIA and nonbulky IIB; median tumor size of 25 mm).

We believe that in this setting, the standard treatment should have been salvage RT for most men. RT administered at a low dose to the para-aortic nodes and ipsilateral pelvis followed by a boost to the involved nodal area (total dose to gross disease, 30 to 35 Gy) is well tolerated and requires approximately 3 weeks (compared with 3 months of CT), without alteration of the physical appearance and with little or no risk for neuropathy, renal dysfunction, or need for hospitalization. CT can lead to an increased risk of cardiovascular disease, and it is also associated with an increase in second cancers at rates similar to that of RT.<sup>2-4</sup>

The efficacy of RT in men with nonbulky abdominal disease is illustrated in the Swedish and Norwegian Testicular Cancer Project (SWENOTECA) study that involved 1,384 men. This series included 102 men with clinical stage IIA to IIB disease. The 5-year overall survival and cause-specific survival were 100%. There were three relapses in the 29 men who were treated with RT, all of whom received salvage treatment with CT. These relapses might be attributable to the lower doses of radiation used (27 Gy). One of the largest cohorts of patients with stage II seminoma comes from The Princess Margaret Hospital (Toronto, Ontario, Canada), where 126 men were treated. Of 95 patients who received primary RT, 79 had stage IIA/B disease. With a median follow-up of 8.5 years, the 5- and 10-year overall survival and cause-specific survival were both 93% and 94%, respectively; the 5- and 10-year relapse-free rates were both 85%. By treatment modality, patients treated with RT had 5-year relapse-

free rates of 91.7% and 89.7% for stage IIA and IIB, respectively.<sup>6</sup> Other contemporary studies in patients with stage IIA and nonbulky stage IIB seminoma treated with primary RT have yielded 5-year disease-free survival rates of 90% or higher.<sup>7</sup>

Therefore, the use of salvage RT would have made a good deal of sense in the study by Aparicio et al, <sup>1</sup> which aimed at a reduction in treatment burden. The use of radiation for stage IIA and nonbulky stage IIB disease is also in line with the recommendations of the National Comprehensive Cancer Network, <sup>8</sup> the European Germ Cell Cancer Consensus Group, <sup>9</sup> and European Society for Medical Oncology guidelines. <sup>10</sup> Thus, one goal should be to improve the outcomes already achieved by RT and to minimize adverse effects. For example, a Swiss study is evaluating the possibility of de-escalating RT with the sequential use of carboplatin for stage II seminoma.

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### **AUTHORS' DISCLOSURES OF POTENTIAL CONFLICTS OF INTEREST**

The author(s) indicated no potential conflicts of interest.

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DOI: 10.1200/JCO.2012.41.7030; published online ahead of print at www.jco.org on April 2, 2012

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