

Special Issue on Germ Cell Tumors: Updates on Epidemiology, Biology, and Treatment Considerations

CALL FOR PAPERS

Germ cell tumors (GCTs) are the most common solid tumors in young men. GCTs represent a rare oncologic success story with 5-year cure rates >98% for early stage tumors and >80% even for patients with metastatic disease owing to the integration of surgery, cisplatin-based chemotherapy, and radiation therapy. Despite the excellent clinical outcomes in testicular GCTs, significant challenges and opportunities exist. The current optimal treatment for many patients is unknown due to the need to balance oncologic outcomes with toxicity of therapy. Patients with stage I tumors, which are the most common, have the option of observation with the risk for recurrence, retroperitoneal lymph node dissection with attendant surgical risks, or primary chemotherapy with risk of organ damage and future secondary malignancies. Among patients with advanced disease, up to 30% of advanced GCT patients exhibit cisplatin-resistance, requiring intensive salvage treatment and conferring a 50% risk of cancer-related death.

There is certainly room for improvement in managing patients with germ cell tumors, and it is critical that the urology, oncology, and radiooncology communities do not rest on the laurels of our past successes. We must understand the changing epidemiology of germ cell tumors to better identify risk factors that can potentially be modified. Acknowledging and overcoming socioeconomic barriers to the complex coordinated care that is required for optimal outcomes is also imperative. Unique considerations for patients with pediatric and adolescent GCTs must also be recognized to improve outcomes among this subgroup. Minimizing short, intermediate, and long-term treatment-related toxicity is also mandatory for these young cancer survivors who have a whole life to live. These active areas of research are promising avenues to improve oncologic and treatment-related outcomes in patients with GCTs.

Patients with germ cell tumors represent the highest number of life years lost for any nonpediatric tumors, and the management of patients with high risk and cisplatin-resistant disease is another arena where we can improve upon existing results. Early initiation of historical salvage-only regimens (Paclitaxel, Ifosfamide, and Cisplatin) in treatment-naïve high-risk patients may improve outcomes. The optimal type of salvage chemotherapy to administer (conventional versus high-dose) is currently under investigation. Further, understanding the biology of advanced germ cell tumors may allow for novel treatment options for patients with cisplatin-resistant disease as could an improved understanding of immune-oncology as a therapeutic strategy in patients with platinum-resistant disease. On the whole, the future is bright for the optimal and refined management of patients with germ cell tumors.

Potential topics include but are not limited to the following:

- ▶ Germ cell tumors: epidemiologic shifts, new insights into biology, and opportunities for improvement
- ▶ Germ cell tumor genomics: translating biologic understanding into rationale for novel treatment options
- ▶ Epidemiologic considerations in germ cell tumors
- ▶ Treatment trends in germ cell tumors
- ▶ Pediatric germ cell tumors: unique concepts
- ▶ Adolescent germ cell tumors: special considerations
- ▶ Conditional risk of relapse in surveillance for patients with NSGCT
- ▶ Retroperitoneal lymph node dissection for patients with Stage I-IIA seminoma
- ▶ Robotic-assisted laparoscopic retroperitoneal lymph node dissection: evolution of technique and early results
- ▶ Adjuvant therapy for stage IB germ cell tumors: one versus two cycles of BEP
- ▶ The use of modified templates in early and advanced stage nonseminoma
- ▶ Retroperitoneal lymph node dissection in the setting of elevated markers
- ▶ Controversies in management of good risk germ cell tumor: impact of chemotherapy regimen on retroperitoneal histology
- ▶ Paclitaxel, Ifosfamide, and Cisplatin or Bleomycin, Etoposide, and Cisplatin as first-line treatment in intermediate or poor risk germ cell tumors
- ▶ Long-term toxicities associated with systemic chemotherapy and radiation therapy for testicular cancer
- ▶ Management of extraretroperitoneal residual masses
- ▶ Interpreting positron emission tomography (PET) imaging in postchemotherapy seminoma
- ▶ Conventional dose versus high dose chemotherapy for relapsed germ cell tumors
- ▶ Immunooncology-related concepts in germ cell tumors

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