Collaborations Between SSO and the Connective Tissue Oncology Society (CTOS) Series

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Soft tissue sarcoma is a rare cancer affecting approximately 6 per 100.00 population. Except smaller superficial lesions, which can be easily excised, this disease is complex, even at its early stages, and is difficult to treat successfully. Treatment begins with the proper selection of the biopsy site. A thorough pathologic assessment is required to obtain the correct diagnosis; more than 200 sarcoma subtypes listed in the most recent World Health Organization textbook must be considered. Adequate imaging, specialized surgical resection technique and strategy, refined radiation oncology methods that depend on the lesion site, chemotherapeutic treatment, and targeted therapy in the neoadjuvant setting or depending on metastatic stage are all required, as is proper assessment of functional long-term results of treatment, which often significantly intervene into muscle compartments. Multidisciplinary treatment is thus required in a large proportion of patients with high-grade tumors.

The Connective Tissue Oncology Society (CTOS) was founded in 1995 in an effort to overcome suboptimal communication between experts in the field that was thought to detract from the optimization of patient care. Herman Suit spearheaded the idea, and the CTOS has been growing ever since. CTOS is multidisciplinary and international; its members include specialists in all aspects of the biology of sarcoma, including basic and clinical research. The two most recent meetings, in New York in

2013 and Berlin in 2014, attracted more than 800 attendees from all over the world.

Surgery is the mainstay of treatment of sarcoma, and thus it is logical for *Annals of Surgical Oncology* to host this special edition of oral presentations from CTOS 2014. The seven authors contributing to the CTOS section of this issue were selected according to the ranking of their abstracts by the scientific committee before the meeting and after evaluating their oral presentations. From a surgical oncology perspective, they represent the variety of topics covered by specific sessions during the meeting.

Three rare tumor situations are addressed: the paper by van Broekhoven et al. provides population-based data on aggressive fibromatosis (desmoid tumors), showing that there is a significant increase in the incidence of the disease, which more than doubles in number by increasing age of the people affected, even when the patients are still quite young and in the middle of their life span. The report out of the EURO-EWING-99 trial by Bedetti et al. on Ewing sarcomas located in the chest wall analyzed whether irradiation is required after an R0 resection, as proposed by the study protocol. This could not be verified, as the data showed an inferior outcome even with combined therapy. The treatment of giant cell tumor of the bone has undergone a major overhaul with the use of denosumab, a RANK ligand inhibitor. Rutkowski et al. report a phase 2 study demonstrating that preoperative drug treatment resulted in a less morbid procedure or could result in abandoning surgery completely.

Assessing the effects of radiotherapy on surgery is a crucial topic, and the four other papers deal with this topic. Griffin et al. analyzed the influence of the time interval between irradiation and surgery on wound complication rates in extremity sarcoma and found that there was a clear

trend ($p = 0.08$) of getting worse results if surgery was performed later than 6 weeks. Importantly, Eward's group searched the National Cancer Data base in order to find out to what extent guideline recommendations were being followed. They found that 38 % of patients with a clear indication did not receive radiotherapy and later had poorer survival. Jakob et al. reported on the neoadjuvant use of intensity-modulated radiation combined with sunitinib in locally advanced sarcomas, also including retroperitoneal tumors. They found that subsequent surgery was not compromised and that toxicity was acceptable despite larger irradiation fields. Finally, Baldini et al. reported an

interesting approach to contour the areas of risk for recurrence in retroperitoneal sarcoma patients scheduled for preoperative irradiation. Radiation and surgical oncologist teams disagreed on the radiation field mainly for the visceral organs but not for posterior or lateral space.

The articles that comprise this series clearly demonstrate that a multidisciplinary approach is being applied to the challenges and facets of clinical sarcoma treatment on a high scientific level.

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