Interest, support, dedication as well as a structured personal approach in these terms are absolutely necessary, but not always self-evident - they can be acquired and the path can be adjusted to make a ‘dream career’ not a ‘road less travelled’.

SP-0514  
A radiobiologist’s perspective  
M. Koritzinsky1  
1Princess Margaret Cancer Centre, Toronto, Canada

Materials and Methods: From June 1983 to September 2012, 224 patients with locally oligo-recurrent cancer (ORGC, n=61; ORRC, n=60; ORS, n=103) underwent IOERT (12.5 Gy, range 10-15 Gy), and surgical resection with or without EBRT (range 30.6-50.4 Gy). Survival outcomes were estimated using the Kaplan-Meier method, and risk factors were analyzed using univariate and multi-variate analyses.

Results: The median follow-up time was 55 months (range, 2-189 months), and 5-year locoregional control (LRC) and overall survival was 74%, 57%, and 68%, respectively. Severe chronic toxicity (grade ≥ 3) occurred in nine patients (13%).

Conclusions: IOERT containing multimodality therapy for patients with pediatric sarcoma is well-tolerated, with high local control and acceptably low chronic toxicity rates.

OC-0518  
IOERT-containing multidisciplinary management of patients with locally oligo-recurrent cancer  
C. Solé1, F.A. Calvo2, A. Polo3, M. Cambeiro4, R. Martinez-Monge5, J. Gonzalez-Bayon3, J.L. Garcia Sabrido3  
1Instituto de Radiaciones Medicas, Radiotherapy, Santiago, Chile  
2Hospital Gregorio Maranon, Radiotherapy, Madrid, Spain  
3Hospital Ramon y Cajal, Radiotherapy, Madrid, Spain  
4Clinica Universitaria de Navarra, Radiotherapy, Pamplona, Spain  
5Hospital Gregorio Maranon, Surgery, Madrid, Spain

Purpose/Objective: The goal of the present study was to analyze prognostic factors in patients treated with surgical resection, intraoperative electron-beam radiotherapy (IOERT) with and without external beam radiotherapy (EBRT) for local (loco-regional) oligo-recurrent sarcoma (ORS), gynecological (ORGC) or rectal cancer (ORRC).

Materials and Methods: From January 1986 to December 2012, 224 patients with locally oligo-recurrent cancer (ORGC, n=61; ORRC, n=60; ORS, n=103) underwent IOERT (12.5 Gy, range 10-15 Gy), and surgical resection with or without EBRT (range 30.6-50.4 Gy). Survival outcomes were estimated using the Kaplan-Meier method, and risk factors were analyzed using univariate and multi-variate analyses.

Results: The median follow-up time was 55 months (range, 2-189 months), and 5-year locoregional control (LRC) and overall survival (OS) rates were 60, 44 and 65%; and 52, 43, 43% and 42 for ORS, ORRC and ORGC, respectively. On multivariate analysis, R1 resection, receiving EBRT at the time of recurrence and no tumor fragmentation retained significance with regard to LRC.

Conclusions: This joint analysis revealed that surgical margin, tumor fragmentation and EBRT affect LRC. Intensified local treatment needs to be further tested in the context of more efficient concurrent, neo-adjuvant, and adjuvant systemic therapy.

OC-0519  
Multidisciplinary treatment including Intraoperative Radiotherapy (IORT) for spinal mets from thyroid cancer  
K. Karasawa1, H. Murata1, K. Nihei1, H. Tanaka1, S. Koh1, K. Fuse1, T. Shimizuguchi1, M. Fujii2, Y. Machitori1, T. Hodumi1  
1Tokyo Metropolitan Komagome Hosp., Department of Radiology, Tokyo, Japan

Purpose/Objective: Well-differentiated thyroid cancer patients have relatively good prognosis even if they had distant metastases and can be treated by surgery, external beam radiation therapy, radioactive iodines, and thyroid hormones, etc. Spinal cord compression caused by spinal metastases is normally considered to carry devastating prognosis both for quantity and quality. However, with the use of decompression surgery and IORT, the patient’s quality of life has improved and with the use of multimodal...