

2213 Primary Uterine Leiomyosarcoma: Outcome and Prognostic Factors in Eighty Consecutive Patients. A Rare Cancer Network Study

A. Franzetti Pellanda¹, M. Ozsahin¹, E. Dénaud-Alexandre², M. Krenfli³, P. Van Houtte⁴, A. Richetti⁵, S. Villa⁶, A. Kuten⁷, J. Jassem⁸, M. Bolla⁹, W.J. Hoogenraad¹⁰, M. Vaneijkeren¹¹, P. Poortmans¹², T. Collon¹³, A. Yavuz¹⁴, S. Chan¹⁵, C. Landmann¹⁶, C. Kirkove-Houssiau¹⁷, L. Scandolaro¹⁸, J. Bernier¹⁹, P. Juelke²⁰, C. Bosmann²¹, R.O. Mirimanoff¹

¹Centre Hospitalier Universitaire Vaudois, Lausanne, Switzerland, ²Hôpital Tenon, Paris, France, ³Università Degli Studi del Piemonte Orientale, Novara, Italy, ⁴Institut Jules Bordet, Bruxelles, Belgium, ⁵Ospedale di Circolo, Fond. Macchi, Varese, Italy, ⁶Institut Catal d'Oncologia, Barcelona, ⁷Rambam Medical Center, Haifa, Israel, ⁸Akademia Medyczna, Gdansk, Poland, ⁹Hôpital A. Michallon, Grenoble, France, ¹⁰Azn St. Radboud, Nijmegen, The Netherlands, ¹¹Universitair Ziekenhuis, Gent, Belgium, ¹²Dr Bernard Verbeeten Instituut, Tilburg, The Netherlands, ¹³Kantonsspital, St-Gallen, Switzerland, ¹⁴Karadeniz Technical University, Trabzon, Turkey, ¹⁵City Hospital, Nottingham, United Kingdom, ¹⁶Kantonsspital, Basel, Switzerland, ¹⁷UCL Clinique Univ. St-Luc, Bruxelles, Belgium, ¹⁸Ospedale Sant'Anna, Como, Italy, ¹⁹Ospedale San Giovanni, Bellinzona, Switzerland, ²⁰Universitätsspital, Zurich, Switzerland, ²¹Hôpital Cantonal Universitaire Genève, Genève, Switzerland

Purpose: To assess the outcome and to identify prognostic and therapeutic factors in patients with primary uterine leiomyosarcoma, a rare type of cancer with a definite pathological identity among the different categories of uterine sarcomas.

Materials and Methods: We evaluated 80 female patients treated between 1980 and 2000, in member institutions of the Rare Cancer Network. Mean of age was 52 years. Fifty six patients presented with FIGO stage I, 8 patients FIGO stage II, 8 patients FIGO stage III, 4 patients FIGO stage IV and in 4 patients the stage could not be determined. Regarding grading, 15 patients had a grade 1 or 2, 22 patients a grade 3, and in 43 patients, grading was not assessed. All patients benefited from a TAH BSO or from a Wertheim operation. After surgery, 54 patients were treated with pelvic external beam radiation therapy (EBRT), 15 of them receiving also brachytherapy. Twelve patients received also adjuvant chemotherapy. Median follow-up was 32 months (6-240).

Results: The 5-year overall and disease-free survival were 51% and 37%, whereas the 5-year local and locoregional recurrence-free survival were 80% and 72% respectively. A total of 14 local recurrences, 16 locoregional recurrences and 38 systemic metastases were observed. In univariate analyses (Log-Rank test) the factors influencing significantly the overall survival were age, FIGO staging and histological grade. Multivariate analyses (Cox model) revealed that previous uterine surgery (curetage or myomectomy), FIGO stage > I and grade 3 represented independent adverse prognostic factors. EBRT influenced neither overall survival nor local or locoregional control. Thirty four patients presented with acute toxicity during EBRT and 8 patients with late toxicity grade superior or equal to 3. The only factor influencing the development of grade superior or equal to 3 late toxicity was the use of brachytherapy.

Conclusions: In our series, patients with stage I, grade 1 or 2 had a very good prognosis. Patients with previous uterine surgery had a poor prognosis. Adjuvant radiation therapy did not seem to improve either survival or local control. In addition, brachytherapy increased treatment-related morbidity. Chemotherapy seemed to increase local and systemic control for advanced stages. The patterns of failure and prognostic factors found in this study could be considered in the overall management of this rare cancer.

2214 When Will the Feeding Tube Come Out after Radiotherapy for Head and Neck Cancer

M.O. Al-Othman, R.J. Amdur, R.W. Hinerman, W.M. Mendenhall

Dept. of Radiation Oncology, University of Florida, Gainesville, FL

Purpose: This is the first comprehensive evaluation of the patterns of feeding tube use in patients with head and neck cancer treated with primary radiotherapy.

Materials and Methods: 934 patients with previously untreated invasive squamous cell carcinoma of the head and neck were treated with curative intent between January 1983 and December 1997 and observed for at least 2 years. The duration of feeding tube dependence was recorded at monthly intervals. Tumor sites included Stage T1-T4 tumors of the tonsillar region (26%), base of tongue (20%), soft palate (6%), pharyngeal walls (8%), pyriform sinus (7%), and supraglottic larynx (21%); Stage T3-T4 glottic larynx (7%); and synchronous head and neck primary tumors of the listed sites (5%). Univariate and multivariate analyses were used to evaluate factors related to two separate end points: feeding tube placement for acute radiotherapy toxicity, if placed before start of radiotherapy or within 3 months; and tube placement for late complications, if placed >3 months after start of radiotherapy.

Results: Feeding tubes were placed in 235 patients (25%): 212 patients (22.5%) for acute radiotherapy toxicity, 18 patients (2%) for late effects, and 5 patients (0.5%) for both acute and late effects. The median duration of feeding tube dependence when placed for acute toxicity (217 patients) was 3.7 months. The cumulative percentages of patients who had their feeding tubes removed within 3 months, 6 months, 9 months, and 1 year were 40%, 67%, 82%, and 86%, respectively. In 5% of patients the tube remained beyond 2 years. The actuarial risk of feeding tube placement for late effects (23 patients) was 2% at 5 years. On multivariate analysis, the risk of feeding tube placement for acute toxicity was more likely with higher external beam radiation dose ($p < .0001$), adjuvant chemotherapy ($p = .0002$), advanced age ($p = .0002$), and the presence of neck disease ($p = .0045$). The likelihood of feeding tube placement for late effects was greater in women ($p = .0293$), with higher radiation dose ($p = .0345$), and for certain primary sites ($p = .0360$) including pharyngeal wall, pyriform sinus, and multiple synchronous primaries. The influence of fractionation did not reach statistical significance in this series.

Conclusion: This study gives physicians, patients, and insurance providers the information they need to predict the pattern and duration of feeding tube use in patients treated with radiotherapy for head and neck cancer.