therapy techniques and doses changed over time and according to the individual situation. External beam radiotherapy or combined radiotherapy was delivered to a total dose of 50-65 Gy.

Results: Survival rates were as follows: 5-year actuarial survival rate was 25%, relapse-free survival 24%, local control 45%. According to the margins of surgery the 5-year survival rate was 60% in case of surgery without residual tumor and 25% in case of microscopic tumor. No patient was alive after 40 month in case of inoperability or surgery with macroscopic residual tumor. No statistically significant difference in the survival rates was seen between the different groups.

Conclusion: The treatment of relapses of cervical carcinoma with radiotherapy is an effective, potentially curative treatment. The probability to cure the patients is higher in case of complete surgery without residual tumor. Probably higher doses for macroscopic tumor are needed.

1173 POSTER

Results of definitive radiation therapy in adenosquamous cell carcinoma of the uterine cervix

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Purpose: To define the clinical features and pattern of failure and to evaluate the results of radiation treatment in of adenosquamous cell carcinoma of the uterine cervix.

Methods and Materials: From Jun. 1981 to Dec. 1997, 43 patients with adenosquamous cell carcinoma of the uterine cervix were retrospectively analyzed external radiation treatment and HDR-ICR from Yonsei cancer center and Wonju cristian hospital. The median age was 51. Stage distribution according to FIGO were stage 1b in 10, 2a in 5, 2b in 18, 3b in 9, 4a in 1. Median follow-up period was 41 months.

Results: Overall survival rate and disease free survival rate were 57.2% and 60.2%. Complete response rate was 86.0%. Locoregional failure was observed in seven patients.

Conclusion: Major pattern of failure was locoregional failure. Adenosquamous cell carcinoma was not more aggressive than other pathologic types.

1174 POSTER

Prognostic factors in patients with cervical cancer treated with surgery and adjuvant radiotherapy first results after chemoradiation in high-risk-cases

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Purpose: Radical hysterectomy is an effective therapy in the treatment of stage IB and IIB cervical cancer. The presence of lymph node metastasis is associated with increased pelvic recurrence. New studies indicate that adding chemotherapy to radiation improves overall survival for women with cervical cancer.

Methods: We have retrospectively evaluated the treatment results and prognostic factors in patients with stage IB/IIB cervical cancers treated with radical hysterectomy and lymphadenectomy followed by adjuvant radiotherapy. From 1981 through 1993, a total number of 289 patients with stage IB (N=175) or IIB (N = 116) cervical cancers received adjuvant radiotherapy in our department. All patients were treated with High-voltage-irradiation, daily dose of 1.8 -2 Gy up to total dose of 50 Gy, parametrial boost in selected cases up to 54 Gy.

Results: The overall 5-year-survival was 70%. 5-year-survival according to stage was 75% for IB and 58% for stage IIB. The most important single prognostic factor was lymph node involvement with a 5-year-survival of 75% for pN0 and 52% for pN+. The prognosis decreased with increasing number of involved lymph nodes (5-year survival 58% for 1-2 involved nodes versus 20% for 3 and more positive nodes). Grading was of marginal prognostic significance. Histology (adenocarcinoma versus squamous cell cancer) was not significant.

In a Cox regression model including stage, grading, histology and lymph node status, the only significant factor was lymph node involvement. Since 1996, patients with risk factor (pN+ or histological lymphangiosis and G3) are routinely treated with postoperative radiotherapy combined with simultaneous cisplatin/5-FU chemotherapy (20mg Cisplatin/m2 and 600mg 5FU/m2, day 1-5 and day 29-33). The follow-up in this group (N =32) is limited but the 3-year-survival of 84% compares favorably to the historical results with radiotherapy alone.

Conclusions: In high-risk-cases of surgical treated cervical cancers seem to benefit from the concomitant radiochemotherapy with cisplatin/5-FU as compared to radiotherapy alone.

1175 POSTER

Radiochemotherapy in advanced cervical cancer - toxicity and efficacy

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Purpose: The efficacy and toxicity of radiochemotherapy with cisplatin in patients with cervical cancer stage IIB-IVA was evaluated.

Methods: From December 2000 to April 2001 43 patients with cervical cancer were treated with simultaneous radiochemotherapy with cisplatin. The mean age was 53 years (range 31 to 70). The pathology of the biopsy sections performed initially was squamosus cell carcinoma in 41 cases and 2 were undifferentiated carcinoma. A CT-based 3D-treatment planing was preferred in all cases. Every patient was treated with a four-field-box-technique with individual blocks to a total dose of 50Gy and with LDR brachytherapy at the total dose of 40-60Gy to point A in 2 fractions. Cisplatin 40mg/m2 was administered intravenously at 7 days interval from the first day of radiation for a maximum six cycles. The assessment was performed at the end of treatment with clinical examination, US and SCC serum level.

Results: At the end of the treatment the overall clinical response rate of was 86% (70% with a complete response and 16% with partial response). No major hematology and digestive tixicites were noticed during radiochemotherapy except mild neutropenia (grade 1-30%, grade 2-16%, grade 3-14%), anemia (grade 1-30%, grade 2-16%) and mild diarrhoea (grade 1-20%).

Conclusion: The results of this study suggest that the radiochemotherapy should be accepted as a safe and effective treatment of advanced cervical cancer.

1176 POSTER

An audit of transfusion practice during radiotherapy for cervix cancer at the Sydney cancer centre

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Introduction: Anaemia during Radiotherapy (RT) for cervix acncer is associated with poorer local control and survival based on retrospective studies. It has been suggested that the haemoglobin (HB) levels be maintained at least 120g/L during RT as the positive effect on treatment outcomes was observed up to this level. This audit was pedrformed to determine the frequency of full blood count (FBC), the Hb levels and the threshold for transfusion during RT.

Methods: During 1999, 26 patients with cervix cancer received pelvic RT (13 concurrent chemoRT, 2 definitive RT, 5 postoperative RT, 6 palliative RT). The medical records of these patients were reviewed and the Hb levels during RT, frquency of FBC and the transfusion threshold were analysed.

Results: The median age was 56 (range 29-86). The median Hb at time of diagnosis was 126 g/L (range 65-156 g/L). FBC was not performed during RT in 4 patients (2postoperative, 2palliative). For those who had FBC during RT, the median number of FBC was 5 (range 1-10). Patients in the chemotherapy group had significantly more FBC during RT (5 vs 1.5, $p<0.005$). Six patients received one blood transfusion during RT (all in the chemoRT group) and the median Hb prior to transfusion was 99.5 g/L. The median Hb during RT was 115.7 g/L (119.2 g/L for the non-transfused patients and 106.9 g/L for transfused patients). The median Hb during RT were similar in the chemoRT and RT alone groups(113.6 g/L and 113.9 g/L). Overall the Hb levels were maintained >100g/L in 17 patients and >120 g/L in 9 patientsduring RT.

Conclusions: In routine practice, the threshold for blood transfusion was <100g/L and the Hb levels were maintained close to 120 g/L with transfusion. This audit provides data for the design of any future trial aiming to examine the effect of Hb levels during RT on treatment outcomes. A randomized trial designed to compare this practice with other methods of maintaining Hb >120 g/L may have difficulty demonstrating a significant effect.