

## **INTRAVAGINAL BRACHYTHERAPY FOR PATIENTS WITH ENDOMETRIAL CANCER AFTER SURGERY-REVIEW OF TECHNICAL DEVELOPMENTS**

**E.Cikowska-Woźniak A.Roszak H.Wolszyńska G.Kosicka**

Greatpoland Cancer Centre, Department of Gynaecological Radioterapy, Garbary 15, 61-866 Poznań, Poland

The use of intravaginal brachytherapy as a post-operative procedure to reduce the incidence of recurrence of carcinoma of the endometrium is well known. We analysed 3 different methods of intravaginal brachytherapy: conventional brachytherapy Ra-226, LDR after-loading technic Cez 137 and HDR after-loading brachytherapy Iridium 192. In the period 1953 -1986 in Gynaecological Radiotherapy Department in Poznań, brachytherapy with vaginal applicators containing 30 mg radium, filtrated by 2 mm Pb, were used after total hysterectomy. The given dose was 3000 mgh in 100 hours of one insertion. Since 1986 Caesium 137 in one oblong applicator has been used to fill the

vagina. Usually four sources were employed and treatment time was about 24 hours. On the basis of the radiological verification in two planes, the doses were calculated at 0,5 cm from the applicator surface and at the contact point of the contrast image of the Foley catheter placed in the bladder neck. Dose in the rectum was calculated at the distance shown by a marker situated in the rectum. The patients were treated to the total dose of 30 Gy. From 1995 HDR after-loading increasingly replaced LDR after-loading in intravaginal brachytherapy. With iridium 192 the overall dose was applied in three fractions- each 6Gy calculated at 0,5 cm from the surface of the oblong applicator. Complications were graded with EORTC\ RTOG criteria.

## **CHEMORADIOTHERAPY OF ANAL CANCER - A REPORT OF 12 CASES**

**K. Serkies, R. Dziadziuszko, J. Jassem**

Department of Oncology and Radiotherapy, Medical University of Gdańsk, Poland

Between 1991 and 1996, 12 patients (9 males and 3 females) with squamous-cell anal carcinoma, stage T1-3 NO-3MO, were treated at our institution with concomitant chemotherapy and radiation. Median age of patients was 57 years (range 38-70 years.)

Ten patients received radiotherapy to the pelvis and inguinal lymph nodes at the dose of 30 Gy. After planned interval (average 11 days), patients received a boost of 16-20 Gy to the tumor. Two remaining patients were irradiated to the pelvis (50 Gy in one patient, 45 Gy and then boost of 15 Gy in the second one). Daily doses of 1.8 to 2.0 Gy, 5 times per week, were used. Concomitant chemotherapy included Mitomycin C (10-15 mg/m<sup>2</sup>, day 1) and 5 Fluorouracil (750 mg/m<sup>2</sup>, days 1-4 or 1-5) delivered at the beginning (twelve pts) or at the beginning and at the end of treatment (seven pts).

In the patients (83%) complete clinical remission (CR) was achieved, confirmed by

negative biopsy from the site of primary tumour in five cases. All patients with CR remain free of disease for a median of 18 months (range: 7-70 months).

Surgery (abdomino-perineal resection) was performed in the two patients who achieved only partial response. One of them remains free of disease 48 months after chemoradiotherapy and the another is alive with disease dissemination to the liver, which occurred 9 months after completion of radiotherapy.

Treatment tolerance was acceptable. Three patients experienced WHO grade 3 neutropenia. Late complications were observed in three patients (25%) and included intermittent stool incontinence (two pts) and erection disorders (one pt).

The results of this analysis remain in accordance with the literature data and confirm the role of conservative management of anal cancer.