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INCIDENCE OF EMESIS AND NAUSEA IN FRACTIONATED RADIOTHERAPY PATIENTS

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The findings of a large, multicentre assessment involving 1387 patients undergoing fractionated radiotherapy, between thorax and pelvis, demonstrated that few patients receive anti-emetic prophylaxis (≈15%). A subgroup of patients (n = 297) consented to complete the patient specific assessments recording daily their emesis and nausea; 269 patients (Group I) who had received no anti-emetic prophylaxis (normal emetogenic risk) and 28 patients (Group II) who had received prophylactic anti-emetic regimens not containing a 5-HT_3 receptor antagonist (elevated emetogenic risk). In Group I, 38% of patients experienced moderate/severe nausea, and 36% experienced emesis with 47% of patients experiencing both symptoms. Despite anti-emetic prophylaxis, 61% of patients in Group II experienced moderate/severe nausea and 57% experienced emesis with 75% of patients experiencing both symptoms. Twenty four percent of patients who completed the assessment received anti-emetic medication as treatment/rescue on at least one day of their course of fractionated radiotherapy. As expected the higher the dose per fraction of radiotherapy, the earlier in the course of radiotherapy patients received treatment/rescue anti-emetic medication. This assessment confirmed that the majority of patients receiving fractionated radiotherapy do not receive anti-emetic prophylaxis, although a significant proportion of patients experience emesis and nausea. In addition there is a need for more effective anti-emetic prophylaxis.

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MULTIVARIATE ANALYSIS OF COMPLICATIONS OF RADIOTHERAPY ALONE IN CERVIX CANCERS

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From 1970 to 1993, 632 patients with carcinomas of intact uterine cervix were treated with radiotherapy alone. The aim of the study is: (1) to describe all types of late normal tissue damage using French Italian syllabus. (2) to determine by univariate and multivariate analysis the predictive factors of rectal, bladder, colon, small bowel, genitalia and soft tissues severe sequelae (G3G4). *Results:* The distribution of sequelae and complications is: G1 23%, G2 18%, G3 6%, G4 2.5%. The distribution of G3G4 per organ is: Genitalia 6% (no G4), rectum 4%, colon 1.5%, bladder 1.2%, soft tissues 1%, small bowel 0.5%. Univariate analysis shows an increased risk of G3G4 rectal complications according to Figo substaging, external radiation dose above 40 Gy (ED), parametrium boost (PB), use of brachytherapy vaginal cylinders applicator (CA), high HWT or mean rectal dose rate. Bladder severe sequelae correlate with increased of Figo, ED, PB, CA, ICRU bladder dose and bladder maximum dose rate. The five main factors influencing the genitalia and soft tissues sequelae are Figo, ED, PB, CA and HWT. In multivariate analysis, CA remains the only predictive factor for G3G4 bladder events (odds ratio OR = 10.8); the mean dose rate increase, CA and Figo are predictive of severe rectal sequelae. Prevention of complications based upon individual changes of treatment planning according to dosimetry parameters led to a sharp decrease in severe complications with time (19% before 1978, 14% between 1978–1983, 6% after 1983). No lethal complications occurred after 1983. Five year specific and disease free survival rates per stage of patients treated during each period are similar.

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DEFINITIVE EXTERNAL BEAM RADIOTHERAPY FOR PROSTATE CANCER. RESULTS OF 230 TREATED PATIENTS IN ONE CENTER

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No randomized trials of the various treatment options for localized prostate cancer have been reported. Therefore, radical prostatectomy and definitive radiotherapy are competing management options. To define the potential radiocurability for localized prostate cancer a series of 230 pts treated with external beam irradiation (1981–1991) was analyzed.

All pts had histologically proven adenocarcinomas with staging according to the UICC-classification. There were 32 T1-, 71 T2-, 110 T3-, and 7 T4-carcinomas. A moderate differentiation showed 109 tumors, and a poor differentiation 43 tumors. Radiotherapy was applied by 8-MeV-photons of a linear accelerator. With computerized treatment planning, treatment volume included the prostate, paraprostatic and pelvic lymph nodes up to 45 Gy and was continued with shrinking fields up to 54 Gy to the prostate and paraprostatic tissues. Finally a boost with bisectional rotating was given up to a total dose of 66–70 Gy (1.8–2 Gy daily).

All pts are evaluable for response with a median follow-up of 60 months. Median age at diagnosis was 69 y. Overall 5- and 10-year survival rates are 67% and 46%. Disease-free 5- and 10 y-survival is 59% and 50% for T2-, and 56% and 37% for T3-carcinomas. 15% pts developed locoregional recurrence. This study reveals high effectiveness of definitive external radiotherapy for locoregional control of prostate cancer.

Ovarian tumours

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ADJUVANT RADIOTHERAPY IN STAGE I OVARIAN CANCER

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The retrospective analysis of 141 patients with stage I ovarian cancer registered in the Institute of Oncology in Gliwice from January 1985 to December 1991 was undertaken. Subsequent to the surgery 91 patients were treated by external magavoltage irradiation and 50 had no further treatment. There was no significant difference between the groups with the respect to stage and histological grade distribution. In radiotherapy group 13% developed recurrent disease comparing to 12% in control group. Adjuvant radiotherapy had no benefit in terms of relapse rate and survival. Multivariate analysis showed that dose of irradiation and the irradiated volume did not influence the prognosis.

Histological grade followed by stage were the major predictors for relapse and significantly correlated with survival.

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A DOSE INTENSITY STUDY OF CARBOPLATIN IN OVARIAN CANCER

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It is still discussed if there is a benefit of increasing the dose of platin in the treatment of ovarian cancer. In 1991 The Danish Ovarian Cancer Group (DACOVA) started a study to address this problem.

Patients with epithelial ovarian cancer stages II–IV were randomized to receive Carboplatin AUC = 4 versus AUC = 8 as calculated by Calvert's formula and the same dose of cyclophosphamide (500 mg/m^2). The treatment was given every 4 weeks for 6 cycles. The accrual was stopped in July 1994 and 222 patients were allocated. Fifty per cent underwent second-look laparotomy. The frequency of complete pathological remission was 16% and 15% and the median survival was 11 and 14 months for standard and high dose regimen respectively. Survival rate at 3 years was 30% and 33% respectively. The side effects were manageable in both arms and there were no treatment related deaths. The frequency of grade 3 and 4 bone marrow toxicity was significantly higher in the AUC8 arm.