

(HSV), cytomegalovirus (CMV) which have been incriminated with varying degree of evidence.

**Materials and Methods:** In 43 surgical specimens of cervical cancer, using PCR, HPV, HSV and CMV were identified by the presence of these viral specific gene fragments. The first pair of consensus primers on L1 region-L1C1 (sense strand) 5'-CGTAAACGTTTTCCTATTTTTT (antisense strand) 5'-TACCTAAATACTCTGTATTG were used to detect HPV. The length of this product was 250 bp. To detect HSV DNA, a second pair of primers that bracket a 92 bp segment were used. Their sequences are as follows: 5'-CATCACGACCCGAGAGGGAC and 5'-GGGCCAGGCGCTTGTGGTGA. These are regions which are identified in the genome of HSV type 1 and 2 and thus do not discriminate between these two types. The third pair primers 5'-TCCTCCTGCAGTTCGGCTTC and 5'-TTTCATGATATTCGCGACCT were used to detect CMV DNA sequence. The length of the PCR product was 240 bp.

**Results:** The prevalence of HPV, CMV and HSV infections was 72%, 67% and 76%, respectively. To examine mutual relationships between HPV with CMV, or with HSV infections. We calculate odds ratio (ORs) with their 95% confidence intervals (95% CI). We found more patients with HPV infections (69.7%) were coinfecting with CMV than those without HPV infections (55.6%), with ORs of 2.2 (95% CI 0.40–11.88). Patients with HPV infections (72.7%) were less likely to be coinfecting with HSV than those without HPV infections (88.9%) with an ORs of 0.28 (95% CI 0.01–2.69). The proportions of patients with large cell keratinization were 31.2%, 33.3% and 37.5% for those infected with HPV, CMV and HSV, respectively. The correlation between HSV infections and clinical stages were marginally significant, while both HPV and CMV infections were not.

**Conclusion:** This study demonstrated mixed infections of HPV, CMV and HSV in cervical cancer patients, suggesting that CMV and HSV might be cofactors in the malignancy of uterine cervix. Our results indicate that HSV infection associates with the cellular keratinization pattern and clinical stages of squamous cell carcinoma of uterine cervix.

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## PUBLICATION

### Identification of a 100-kb region of common allelic loss on chromosome bands 10q25-q26 in human endometrial cancer

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**Purpose:** Endometrial cancer is one of the common female pelvic malignancies. Incidence of this disease has been doubled in the last decade in Japan. However, molecular mechanisms of this disease are still elucidative. We screened genetic alterations in endometrial cancers by means of CGH, FISH, and microsatellite analysis, and found frequent allelic loss in chromosome 10q.

**Results:** PTEN was recently cloned and mapped on 10q. We analyzed mutation of this gene and found frequent somatic mutations in endometrial cancers. However, our LOH analysis revealed an existence of another region of frequent allelic loss in 10q25-q26, flanked by D10S587 and D10S1723. We have constructed a cosmid and BAC contig of this region, and further studied allelic loss by FISH utilizing these cosmid clones.

**Conclusion:** Finally, we found that three overlapping cosmid clones completely covered the region of common allelic loss, it was included in one BAC clone, the size was estimated to be less than 100-kb. Moreover, there was a cluster of the so-called rare cutters; Nottl, Mlul, Smal, and XhoI. Our results suggested a possible existence of the tumor suppressor gene in this region.

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## PUBLICATION

### Adjuvant radiation therapy in the treatment of endometrial stromal sarcoma (ESS)

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**Purpose:** The efficacy of adjuvant radiation therapy in the treatment of ESS has not been clarified.

**Methods:** During 1981–1998, 21 patients with ESS were treated. The age of patients ranged between 44–76 years. The 1989 FIGO classification for endometrial carcinoma was used for reclassification: 11 patients (52.4%) presented in stage I, 1 (4.8%) in stage II, 5 (23.8%) in stage III, 2 (9.5%) in stage IV, and 2 (9.5%) with large tumor relapses. 14 patients (66.7%) presented with a grade 1 tumor, 2 (9.5%) with a grade 2 tumor, 2 (9.5%) with

a grade 1 tumor, and in 3 patients (14.3%) tumor grading was unknown. 15 patients (71.4%) were referred for postoperative radiotherapy after hysterectomy, 2 for primary radiotherapy and 4 for radiotherapy with a palliative intention. 20 patients received external beam therapy in daily fractions up to a mean dose of 47.9 (27–57) Gy to the pelvis. 17 patients (81.0%) received brachytherapy to the vaginal vault.

**Results:** The mean follow up was 70.3 (8–170) months. 11 patients are still alive, 10 without tumor and 1 with tumor. 10 patients are dead, 6 due to ESS, 1 due to breast cancer, and 3 due to intercurrent disease. After adjuvant radiotherapy 3 patients (20%) with grade 3 tumors had tumor recurrences. All had distant metastases, one had local failure additionally. The patients with primary treatment died after a mean time of 8.5 months due to intercurrent diseases. All patients with a palliative intention showed partial response. 3 patients died due to tumor, and one patient with a grade 1 tumor is still alive 12 months after treatment.

**Conclusion:** Adjuvant radiation therapy is an effective treatment for patients with ESS due to the increase of local control and the increase of disease specific survival in early stages.

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## PUBLICATION

### Vulvo-vaginal reconstruction in advanced oncologic pathology

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**Introduction:** Ablative surgery of advanced pelvic primary tumours or of its recurrences involving extensive excisions represents a great reconstructive challenge, in which the main goals are to minimise complications and to find a better quality of life to patients.

To provide these reconstructions one need an appreciable amount of tissues, which is only possible to obtain using myocutaneous flaps. The two most used options are the Rectus Abdominis and the Gracilis flaps.

**Patients and Methods:** Between March 1994 and December 1998, we performed vulvo-vaginal reconstructions with Gracilis myocutaneous flaps in 11 patients with a mean age of 61 years (53–69 years). In 8 patients we used simultaneously 2 flaps, what represents a total of 19 flaps raised.

**Results:** We had in three patients minor complications, such as small dehiscence or local infection, treated by conservative methods. In one patient happened partial necrosis of both flaps, and we had to perform a peri-umbilical rectus abdominis pedicled flap. Healing has been achieved in all patients, who were discharged from the hospital without necessity of wound care.

An adequate pelvic filling and a good psychological acceptance of the operation, which, in some cases, made possible sexual activity were reached in all patients.

**Conclusion:** This procedure is a safe surgical technique, which aim is not to prolong survival, but it contributes for a better quality of life.

The psychological benefits and, in some cases, the possibility of sexual activity, the good pelvic filling and better healing were goals reached.

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## PUBLICATION

### Our experience with radiochemotherapy in locoregional advanced cervical cancer

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**Purpose:** To improve locoregional controle for some patients with advanced cervical cancer.

**Material and Method:** Between 1991–1995 in Oncological Institute of Bucharest 438 patients underwent radiotherapy (external irradiation delivering on average 50 Gy on the pelvis followed by intracavitary irradiation up to 30 Gy). Radical colpophysterectomy and pelvis lymphadenectomy could be performed at 371 patients, while in 67 cases this was not possible. These latter patients were elected to be treated with 2–4 cycles of chemotherapy.

**Results:** After chemotherapy 30 out of 67 pts. (44.7%) became able to undergo surgery. Postoperative histological exam showed no malignancy at 50% of them.

**Conclusion:** Although locoregional remission was not obtained in all cases, chemotherapy may be an option to improve therapeutic results.