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## 23<sup>rd</sup> European Congress of Pathology

*Pathology – diagnostic, prognostic, predictive*

27 August – 1 September 2011  
Helsinki Exhibition & Convention Centre  
Helsinki, Finland



ABSTRACTS

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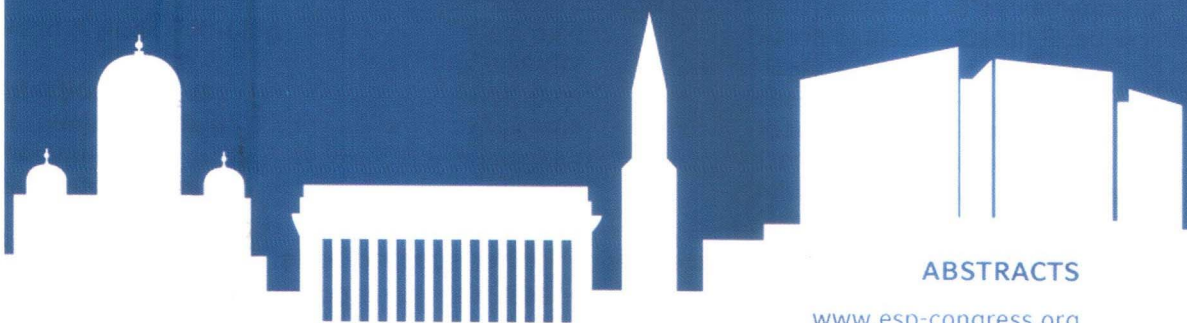


Photo: Niko Saveri

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cervix (CUC) and to identify specific profiles of expression that might be used as biomarkers of progression.

**Method:** There were 28 CUC and 25 NUC analyzed. Total RNA was prepared using TRIzol® and RecoverAll. MiRNA and small RNA reference gene expression were analyzed using RT-PCR assays. As endogenous references small RNAs (RNU44+U47+RNU48) were used. Data were analyzed according to Kolomogorov–Smirnov and Mann–Whitney test.

**Results:** There was always an overlap between the expressions in normal vs. tumor samples. The miRNAs overexpressed in cervical carcinoma were miR-1246, miR-1290, miR-1308, miR-142-3p, miR-1826, miR-200c, miR-205, miR-21, miR483-5p, miR491-3p, miR-720, miR-765 and miR-31, but only miR-205, miR-200c and miR-1290 reached statistical significance. miR-205 was up-regulated in squamous cell carcinomas but downregulated in adenocarcinomas. Six genes, CDKN2A, MKI67, TOP2A, MMP9, BIRC5 and MCM5 were overexpressed in CUC, in line with the miRNA overexpression.

**Conclusion:** miRNAs are differently expressed in neoplastic and normal cervix, and this correlates with the expression of certain oncoproteins possibly controlled by those miRNAs.

## 019

### Malignant melanoma metastatic to the endometrium: report of two cases

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**Objective:** Malignant melanoma is rarely a primary tumor in the female genital tract. In the uterine corpus, it develops only as a metastasis from various sites (less than 15 cases reported to date). We present two cases of metastases of malignant melanoma of the skin to the endometrium.

**Method:** Two 56- and 67-year-old patients were admitted for abnormal vaginal bleeding. In both of them, curettage was followed by total hysterectomy. Clinical history revealed that they had been previously diagnosed with malignant melanoma of the skin 1 and 3 years ago, respectively.

**Results:** On microscopy, nests or cords of atypical epithelioid cells, with intracytoplasmic melanin pigment were detected adjacent to atrophic endometrial glands. Cells were positive for S-100 protein, Melan A, Tyrosinase, Vimentin and HMB-45. On the hysterectomy specimen, in the uterine cavity, there were 3- and 1-mm diameter well-circumscribed nodules of atypical spindle cells with intra-

cytoplasmic melanin pigment. Infiltration occurred preferentially along the endometrial and endocervical surfaces and that myometrial invasion was only small.

**Conclusion:** If atypical bleeding takes place in postmenopausal patients with a diagnosis of malignant melanoma of the skin, endometrial metastases should be excluded. The prognosis of the patients is very poor; both patients are alive with clinical disease.

## 020

### Significance of perinecrotic expression of CA9 and Glut-1 in endometrial carcinoma

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**Objective:** Tumor hypoxia has been known to be associated with aggressive phenotypes and tumor resistance to therapy. Several tens of genes are induced by tumor cells to survive in a microenvironment of hypoxia. The aim of this study was to evaluate the prognostic value of CA9 and Glut-1 that are major factors of hypoxia-induced pathway in endometrial carcinoma.

**Method:** Archival tissue was retrieved from 144 patients and expression of CA9 and Glut-1 were analyzed using immunohistochemistry.

**Results:** A significantly increased expression of two markers was found at the perinecrotic area of tumor cells. A trend to worse disease-free survival was noted with increased perinecrotic expression of CA9 and Glut-1. Particularly, perinecrotic co-expression of CA9 and Glut-1 was prognostic. Positive correlation was not observed between CA9 and Glut-1.

**Conclusion:** Perinecrotic expressions of CA9 and Glut-1 are important prognostic factors in endometrial carcinoma. More aggressive treatment may be necessary to improve the outcome of patients showing these patterns.

## 021

### CD44 expression in glandular lesions and adenocarcinoma of the uterine cervix

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**Objective:** CD44 is an adhesion molecule, which binds hyaluronic acid and participates in a number of cell-cell interactions. CD44 postulated to play a role in process of tumor invasion and metastases. To clarify the possible role of CD44 in progression of uterine cervical adenocarcinomas this investigation was carried out.



**Method:** There were 43 cases studied, including benign glandular lesions (10), dysplastic lesions/adenocarcinoma in situ (AIS) (16) and invasive adenocarcinoma (IA) (17). All cases were reviewed by three pathologists to obtain a consensus diagnosis. Immunohistochemical staining for CD44 (clone DF1485) was performed on 4- $\mu$ m sections of formalin-fixed, paraffin-embedded specimens.

**Results:** In 85% cases of benign, 93% dysplastic lesions and 90% AIS moderate and strong membrane expression observed. There was not any statistical difference in the groups considered. However, significantly decreased expression was observed in 92% cases of IA. Simultaneously, a strong expression in stromal component was observed around IA and in sites of microinvasion. Thus, redistribution of CD44 from cells to stroma was observed in sites of invasion.

**Conclusion:** The results suggest that CD44 is associated with invasive features of cervical adenocarcinoma and may be valuable marker of stromal invasion.

## 022

### Omental pregnancy: a rare ectopic pregnancy

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**Objective:** Omental pregnancy is a rare entity. The diagnostic is difficult and still continues to challenge the clinicians.

**Method:** We present the case of a 49-year-old female who presented to the hospital with abdominal pain for a few years.

**Results:** The repeat laparoscopy showed omental and peritoneal ectopic decidua. Histopathological examination confirmed it to be an intraabdominal pregnancy.

**Conclusion:** We conclude that an abdominal pregnancy, though rare, has a seven times higher mortality than non-abdominal pregnancies.

## 023

### Four cases of simplex (differentiated) variant of vulvar intraepithelial neoplasia

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**Objective:** Simplex (differentiated) variant of vulvar intraepithelial neoplasia (VIN) (carcinoma in situ, simplex type)

is relatively an infrequent form of VIN. The diagnosis of simplex variant of vulvar intraepithelial neoplasia (SVIN) is difficult and there is conflicting data in the literature if SVIN is a precursor of vulvar squamous cell carcinoma (VSCC).

**Method:** There were 344 biopsies of vulva evaluated for VIN and VSCC. There were 15 cases of VIN and 8 cases of VSCC analyzed for SVIN.

**Results:** Four cases had SVIN. The mean age of the patients was 80 (versus 69 for ordinary VSCC). Three of the cases were adjacent to keratinizing VSCC; one was separate. Two were with early carcinoma; two were widely invasive. All the cases had thickened epidermis. There was parakeratosis. The keratinocytes had dense eosinophilic cytoplasm atypical nuclei at the basal layer, but the superficial keratinocytes were without atypia. Laminin were made to the carcinomas with early invasion.

**Conclusion:** Despite the data in the literature, all of our SVIN cases were accompanying VSCC. This showed that the detailed examination of the adjacent epithelium in VSCC patients can increase the incidence of SVIN. Furthermore, it is important to emphasize the diagnosis of SVIN and early dermal invasion by neoplastic cells has difficulties.

## 024

### Ovarian cellular fibroma with deposition of hyaline globules: a case report

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This case report is of a patient years of age, with cellular ovarian fibroma containing hyaline globules, this being an unusual association, rarely described in articles. The cellular fibroma is characterized by bland nuclei, three or fewer mitotic figures per 10 high-power fields and immunohistochemically the tumor was vimentin, CD56, calretinin positive with smooth muscle actin being only focally positive. The neoplastic cells formed densely cellular areas which alternated with a hypocellular, reticular-pattern like areas, associated with clusters of hyaline globules, these being periodic acid-Schiff and mucicarmine positive and Alcian blue negative. The hyaline globules were not an insignificant finding, but rather an eye-catching sign, ranging from 3 to 20  $\mu$ m, intra- and extracellularly. In more compact areas, between the spiral cells, we also observed cells with a signet-ring appearance. The differential diagnoses from Krukenberg tumor and Yolk sac tumor is discussed.