

P.02.442

Dysplastic changes in cervicovaginal smears: a cytohistologic comparisonI Meteoglu, M Erkuz, E Levi, N Çulhac
Adı Medical Faculty, Aydin/Merkez, Turkey**Aim:** The objective of this study is to compare histologic results of biopsies and/or curettage obtained following the preceding cytological 'ASCUS, AGCUS, LSIL, HSIL' diagnoses.**Materials and methods:** We re-examined 3685 smears and found 90 atypical/dysplastic smears between the period February 2001 to January 2002. Histological examination was carried out on colposcopic biopsies and/or endocervical curettage in 60 cases and cytologic results were correlated with the histologic diagnoses. ASCUS favour reactive category was not used. Only ASCUS favour dysplasia cases were reported as ASCUS.**Results:** For ASCUS diagnoses the histology was consistent with dysplasia or koilocytic atypia in 66.6% (12/18) of the cases. For AGUS, there was a histologic confirmation in 62.5% (5/8) of the cases. For LSIL, results were in agreement in 86.9% (20/23) of the cases. In HSIL there was a histologic confirmation of 100% (11/11).**Conclusion:** A significant number of ASCUS diagnoses proved to be neoplastic. LSIL and HSIL diagnoses had a higher specificity compared to ASCUS. With the recent changes in the Bethesda system, ASCUS diagnoses will have a higher rate of neoplastic cases.

P.02.447

Expression of heat-shock proteins hsp27, hsp70 and hsp90 in malignant epithelial tumours of the ovariesG Ö Elpek, N H Aksoy, S Karaveli, T Simsek, N Keles
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Recently, much attention has been focused on the role of heat shock proteins hsp27, hsp70 and hsp90 in clinical outcome of several malignancies. In epithelial ovarian carcinomas conflicting data exist on the prognostic role of hsp27 expression and the prognostic significance of hsp70 and hsp90 expression still remains unknown in these tumours. The purpose of this study was to investigate whether hsp27, hsp70 and hsp90 expression were associated with survival in 52 epithelial ovarian carcinomas. Hsp70 and hsp90 positivities failed to detect survival. However, the overall survival rates of patients with hsp27 expression was 13%, which was significantly worse than that of patients without hsp27 expression (47%) ($P < 0.006$). The prognosis was also adversely affected by FigO stage ($P < 0.001$) and the presence of ascites ($P < 0.009$). In multivariate analysis hsp27 expression and FigO stage were independent prognostic variables. These results indicate that hsp70 and hsp90 expression have no prognostic relevance in epithelial ovarian carcinomas. However the evaluation of hsp27 expression and FigO stage in these tumours could be reliable indicators of prognosis.

P.02.456

Female adnexal tumour of probable wolffian origin: case report with immunohistochemistry and 10-year follow-up

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Since the first report in 1973 by Kariminejad and Scully about 100 cases of this rare tumour have been reported, including malignant variants with metastases to other organs. We present another case of

this entity with 10-year follow-up and want to further evaluate the typical immunohistochemical findings. While the majority of our immunohistochemical findings (positivity for CK7, Inhibin, Vimentin, negative results for CK20, EMA, CEA) are in agreement with published data, calretinin positivity in our case was patchy and not diffuse as in the cases reported by Devouassoux-Shisheboran *et al.* (1). In addition we also used a monoclonal antibody GZ-1 (kindly provided by Gottfried Dohr, Inst.f. Histologie und Embryologie, Karl-Franzens Universität Graz). This antibody showed weak positivity in the majority of the tumour cells.

Reference

1. Devouassoux-Shisheboran M, Silver SA, Tavassoli FA. Wolffian adnexal tumour, so-called female adnexal tumour of probable Wolffian origin (FATWO): immunohistochemical evidence in support of a Wolffian origin. *Hum Pathol* 1999; 30; 56-63.

P.02.484

Mechanism of interaction between placental proteins and immunoregulatory cells of women with physiological pregnancy and fetal asphyxia

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To study mechanisms of interaction between placental proteins and immunoregulatory cells of pregnant women with foetal asphyxia. 201 pregnant women were surveyed: 156 with foetal asphyxia and 45 with physiological pregnancy. Mononuclear cells and polymorphonuclear neutrophils were isolated by centrifuging in double Ficoll-Verograffm gradient. T-lymphocytes were separated by theophylline sensitivity. Cells reacting with trophoblastic a1-glycoprotein (TBG) and placental a-microglobulins (PAMG) were detected according to Sotnikova. All immunoregulatory cells populations possess structures reacting with placental proteins TBG and PAMG on their surface. The highest number of cells reacting with placental proteins in the third trimester of physiological pregnancy was observed among neutrophils. Development of foetal asphyxia was accompanied by changes in amount of reactive cells carrying on receptors to pregnancy proteins. These changes depended on the severity of foetal asphyxia, duration of gestation, type of protein, and cells subpopulation. Presumably, differences in amount of cells reacting with TBG and PAMG determine mechanisms of development foetal asphyxia. Study of changes in expression of structures reacting with placental proteins helps to define criteria of diagnostics and prediction of foetal asphyxia and predict the child's status at birth.

P.02.568

Detection of human papillomavirus in early stage cervical carcinoma: comparison of conventional and catalysed reporter deposition *in situ* hybridizationN Basheska¹, K Kubelka-Sabith², G Yashar², I Prodanova², G Zografski²¹Radiotherapy and Oncology, Skopje, Macedonia, ²Department of Histopathology and Clinical Cytology, Skopje, Macedonia

Introduction: Recently, alternative techniques have been developed to overcome the sensitivity limitation of conventional *in situ* hybridization (ISH), by signal amplification, which can be performed in diagnostic laboratories without the need for expensive equipment.

Aims: The purpose of this study was to compare the efficiency and applicability of catalysed reporter deposition (CARD) ISH, with conventional ISH in detection of human papillomavirus (HPV) in early stage cervical carcinomas.

Materials and methods: Seventy-seven routinely processed specimens previously tested by conventional streptavidin-biotin-alkaline phosphatase ISH (PathoGene, Enzo Diagnostics), were re-examined by CARD-ISH performed by a biotinyl-tyramide-based detection system (GenPoint, DAKO). ISH was performed using commercial mixed biotinylated probes for HPV 6/11, 16/18, and 31/33/51 or 31/33.

Discussion and conclusion: The application of CARD-ISH increased the HPV detection rate from 33.8% (26/77) to 58.4% (45/77), the signal intensity, as well as the number of positive cells. CARD-ISH detection also enabled demonstration of multiple HPV infection in four cervical carcinomas. Diffuse and mixed staining patterns were more prevalent in conventional ISH, while a dot signal pattern presumably indicating viral integration, was highly predominant among CARD-ISH positive cases. CARD-ISH proved to be simple, fast, sensitive and effective at detecting low-copy of HPV in cervical carcinomas.

P.02.591

Mullerianosis of inguinal node: a case report

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We report a case of mullerianosis (benign glandular inclusions) involving inguinal lymph node mimicking metastatic adenocarcinoma. The patient was 45-year-old woman who had endometrioid cyst of left ovary. She underwent laparotomy with left salpingo-oophorectomy and excision enlarged inguinal lymph node. Histological examination demonstrated dilated glands surrounded by ovarian-like stroma. The glands were lined by endometrioid and endocervical-like epithelium without cytologic atypia. Some cystically dilated glands were contained abundant mucin. Mucin was observed in cytoplasm in some columnar cells. Immunohistochemistry was performed with following antibodies: vimentin, desmin, smooth muscle actin, cytokeratins (mixed cocktail), oestrogen and progesterone receptor, Ca-125, CEA and LCA. It is important that the occasional presence of lymph node inclusions can lead to a diagnostic error. Mullerianosis can be distinguished from metastatic adenocarcinoma on the basis of a variety of architectural and cytologic features. To our knowledge we describe the second case of mullerianosis at this site in the gynaecological literature.

P.02.598

Scrape cytology of the ovaries: potential role in intraoperative consultation of ovarian lesions

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Introduction: Intraoperative diagnosis of ovarian lesions can be achieved by gross examination aided by frozen section and/or cytologic examination.

Aims: To examine the application of scrape cytology in the diagnosis of ovarian lesions and the accuracy of this technique.

Materials and methods: The fresh tissue from 116 ovarian lesions were studied by scrape cytology. The cytologic evaluation was

primarily based on the findings in the Diff Quick-stained, air-dried smears. The cytologic diagnosis with an attempt to predict the histologic subtype was compared to the final histologic diagnosis.

Discussion and conclusion: Of 116 ovarian lesions, 12 were non-neoplastic lesions; 41, benign tumours; 13 epithelial tumours of low malignant potential (LMP); and 50 malignant tumours (32 primary, 1 leukaemia, 17 metastases). Scrape cytology distinguished the LMP and malignant tumours from the benign lesions with sensitivity of 96.8% and specificity of 94.3%. The categories of the benign, the LMP, and the malignant lesions were identified as such in 94.3, 61.5, and 98%, respectively. There was no misdiagnosis between the benign category and the frankly malignant group. Scrape cytology is a simple and rapid adjunctive technique that should be used in intraoperative consultation of ovarian lesions.

P.02.601

Variations in the pattern of practice of cervical cytology

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Introduction: Cervical cytology (CC) interpretation is highly subjective and differences in practice occur.

Aims: The spectrum of CC diagnoses originating from two hospitals was compared.

Materials and methods: The percentages of abnormal cervical smears and the percentages of AGUS, ASCUS, LSIL, HSIL and carcinomas were determined for each hospital for two 6-month periods.

Discussion and conclusion: During the first half of 2001, the abnormal cytology rate (ACR) was 5.69% at Hospital 'A' (HA) and 6.15% at Hospital 'B' (HB). For HA, the relative contribution of AGUS, ASCUS, LSIL, HSIL and carcinoma to the ACR was 1.96, 26.96, 52.94, 17.65 and 0.49%, respectively. For HB, the corresponding data was 2.00, 54.20, 32.8, 11.00 and 0.00%. During the second half of 2001, the HA ACR was 5.99% and the HB ACR was 7.02%. For HA, the relative contribution to the ACR of these diagnostic categories was 3.41, 29.27, 46.34, 17.56 and 3.41%, respectively. For HB, the corresponding data was 2.34, 57.31, 34.04, 6.2 and 0.12%. HSIL rates were consistently higher at HA than HB. The 56.3% decrease in HSIL rate at HB during the second half of 2001 could be due to a sudden alteration in diagnostic criteria at HB.

P.02.638

Massive ovarian oedema: report of two cases associated with advanced carcinoma of the cervix

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Introduction: Massive ovarian oedema is rare tumour-like condition.

Aim: Two cases of massive ovarian oedema, both in patients with advanced carcinoma of the cervix, are reported.

Materials and methods: Case 1. A 49-year-old woman presented with a 3-month history of irregular vaginal bleeding and malaise. A complete work up, revealed squamous cell carcinoma of the cervix, clinical stage IIB (FigO). In addition both ovaries were enlarged. Case 2. A 73-year-old woman was admitted to hospital for evaluation the