AP11-PP-0002  Free Paper (Poster)

GYNECOLOGIC PATHOLOGY

Histologic Characteristics Associated with Lymph Node Metastasis in Patients with Endometrial Adenocarcinoma: A Three-Year Retrospective Study

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Background: Endometrial cancer is the third most common malignancy of the female genital tract in the Philippines. Complete lymphadenectomy (pelvic and para-aortic lymph node sampling) is still routinely performed in the local setting, despite the risks associated with the procedure. This study aims to identify histologic characteristics associated with lymph node metastasis in patients diagnosed with endometrial adenocarcinoma at the Philippine General Hospital. Methods: Surgical pathology records and slides of patients who underwent surgical management for endometrial adenocarcinoma from 2009 to 2011 were reviewed for the following histologic characteristics: tumor size, histologic type, histologic grade, myometrial invasion, lymphovascular space invasion, and the presence of a background of hyperestrogenism. Univariate and multivariate analyses were performed to determine whether these were correlated with pelvic and/or para-aortic lymph node metastasis. Results: The study population consisted of 278 patients, of which 42 (15.1%) had positive pelvic and/or para-aortic lymph nodes. Univariate analysis showed that histologic type, histologic grade, lymphovascular space invasion, myometrial invasion, and hyperestrogenism were significantly associated with lymph node metastasis. Multivariate analysis revealed that only lymphovascular space invasion was a significant predictor of positive lymph node status (odds ratio, 4.27). Conclusions: There is no sufficient evidence to omit routine lymphadenectomy in patients undergoing surgery for endometrial adenocarcinoma in our local setting, since lymphovascular space invasion is difficult to evaluate pre- and intraoperatively. It is possible that other factors (hormone status genetic and molecular alterations) are better correlated with tumor behavior.

Key Words: Endometrial neoplasms; Neoplasms; Endometrial neoplasms

AP11-PP-0004

Clinical Relevance of Mutant p53 Protein with Gain-of-function in Ovarian High Grade Serous Carcinoma

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Background: Inactivation of TP53 by predominant missense mutation in exons 4-9 is a major genetic alteration in human cancers. In spite of growing evidence for additional oncogenic activity in mutant p53 protein (mutp53), namely gain-of-function (GOF), little is known about the clinical evidence of GOF mutp53 in patients. Methods: We evaluated clinicopathological features of patients with GOF mutp53 using comprehensive somatic mutation profile form the whole exome sequencing, mRNA, and protein expression profiles in ovarian high-grade serous carcinoma (Ov-HGSC) obtained from The Cancer Genome Atlas data portal. Results: Patients with GOF mutp53 showed higher mRNA and protein expression level than in patients with no evidence of GOF (NE-GOF). GOF mutation was associated with hotspot mutation, mutation at CpG site, and higher functional severity score of mutp53. Clinically, patients with GOF mutation showed higher frequency of platinum resistance (22/58, 37.9%) than that of patients with NE-GOF mutation (12/56, 21.4%), whereas patients with NE-GOF mutation (44/56, 78.6%) showed higher frequency of platinum sensitive than that of patients with GOF mutation (36/58, 62.1%). Furthermore there was different recurrence pattern between patient with GOF and patient with NE-GOF. Patients with GOF was associated with distant metastasis in recurrence pattern (36/55, 65.5%) than local recurrence (19/55, 34.5%), whereas patients with NE-GOF mutation showed higher frequency of locoregional recurrence (26/47, 55.3%) than distant metastasis (21/47, 44.7%).

AP11-PP-0003

Combined Serous Carcinoma and Neuroendocrine Carcinoma of the Fallopian Tube

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Primary fallopian tube carcinomas are rare, amounting to 0.3-1.1% of gynecological malignancies. Combined serous carcinoma and neuroendocrine carcinoma of the fallopian tube has not been reported. Here, we report a case of combined serous carcinoma and neuroendocrine carcinoma of the fallopian tube. A 57-year-old postmenopausal woman was admitted to our hospital for pelvic pain and frequency. The computed tomography showed a 7.6×6.2 cm-sized, irregular mass in the left adnexal site and seeding nodules in the peritoneum. During the exploratory laparotomy, a solid tubal mass was found at the left fallopian tube, with normal left ovary and right adnexa. Microscopically, an area of papillary serous adenocarcinoma was present, surrounded by the undifferentiated tumor component. The undifferentiated component was characterized by solid sheets of medium to large polygonal cells with abundant mitotic figures, apoptotic bodies, and foci of necrosis. The tumor cells were densely packed, with scant cytoplasm, finely granular chromatin and inconspicuous nucleoli. The serous carcinoma tumor cells were positive for keratin 7 and epithelial membrane antigen (EMA), but were negative for estrogen receptor, synaptophysin, and CD56. The tumor cells in undifferentiated component were positive for synaptophysin and CD56, whereas they were negative for keratin 7 and EMA. However, strong and diffuse expression of TP53 and p16 was seen in both serous carcinoma and undifferentiated tumor. A final diagnosis of combined serous carcinoma and neuroendocrine carcinoma was made. We present an unusual case of combined serous carcinoma and neuroendocrine carcinoma of the fallopian tube.

Key Words: Serous carcinoma; Carcinoma, neuroendocrine; Fallopian tubes
There were no differences in overall survival between them. Conclusions: We first demonstrate the clinical significances in patients with GOF mutp53 in Ov-HGSC that characterized by high platinum treatment resistance and metastatic property.

Key Words: Tumor suppressor protein p53; Mutant; Carcinoma; Ovary

The introduction of p57 immunohistochemistry has aided the distinction between early complete mole (CM) and hydropic abortion (HA), but have no role for the distinction between early partial mole (PM) and HA. The ancillary testing is often required for a definitive diagnosis. Methods: Archival paraffin blocks from molar and non-molar gestations were retrieved. p57 immunohistochemistry was examined in 30 HA, 24 PM, and 24 CM cases. The CEP17/HER-2 fluorescence in situ hybridization (FISH) detection were performed in 5 HA, 5 PM, and 5 CM cases which showed classical morphologic features. Thirty nuclei of the villous stromal cells per sample were scored for the copy number of CEP17 and HER-2 signals. Results: The positive staining of p57 in hydropic abortion and partial hydatidiform mole were 30/30 and 24/24 in the nuclei of villous cytotrophoblasts and stromal cells, with no significant difference between them (p > 0.05). However, 22 CM cases exhibited p57 negative staining in cytotrophoblasts and stromal cells. Only 2 CM cases showed <15% cytotrophoblasts and stromal cells positivity. There was a significant difference between PM and CM (p < 0.05) in p57 immunostaining. FISH analysis showed diploid, triploid and diploid in 5 HA, 5 PM, and 5 CM cases, respectively. Conclusions: The combination of p57 immunostaining and CEP17/HER2 FISH detection seems to be a very useful testing strategy for the differential diagnosis of HA, PM, and CM. Villous stromal cells is suitable cell for counting copy numbers. Further study is required to validate this study.

Key Words: Hydatidiform mole; p57 serine proteinase; CEP17/HER-2; Diagnosis, differential

Human Papillomavirus Genotyping in Adenocarcinoma of the Uterine Cervix in Thailand
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Background: To determine the distribution of human papillomavirus (HPV) genotypes in cervical adenocarcinoma in Thailand and compare the clinicopathologic characteristics of the common HPV genotypes. Methods: Formalin-fixed, paraffin-embedded tissues from 150 cases of cervical adenocarcinoma were collected from 4 parts of Thailand. HPV infection was detected by nested polymerase chain reaction (PCR) with primers MY09/11 and GP5+/6+. HPV genotyping was performed using the Linear Array Genotyping test, followed by type-specific PCR targeting the E6/E7 region of HPV16/18/52 if the Linear Array test was negative. Results: HPV DNA was detected in 145 cases (97%), including 132 with single HPV infection, 11 with multiple HPV infections, and 2 with undetermined HPV type. Among the HPV-positive cases, HPV18 was detected in 66%, followed by HPV16 (30%) and HPV45 (3%). Infection with only HPV16 and/or HPV18 accounted for 88% of the HPV-positive cases. Patients with HPV18 infection had a significantly younger mean age and higher tumor grades than those with HPV16 infection. Conclusions: HPV detection rate in cervical adenocarcinoma in Thailand was very high. HPV18 was the predominant genotype, being twice as common as HPV16. Difference in HPV genotypes was associated with patient age and tumor grading. Vaccination against HPV-16/18 may potentially prevent almost 90% of this tumor.

Key Words: Human papillomavirus DNA tests; Cervix uteri; Adenocarcinoma; Genotyping techniques; Prevalence
Small Cell Carcinoma Arising in a Mature Cystic Teratoma of the Ovary: A Case Report

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Small cell carcinoma arising from a mature cystic teratoma in ovary is extremely rare. A 74-year-old woman had a large ovarian cystic mass incidentally discovered by abdomen ultrasonography. The ovarian mass was suspected of collision tumor (mucinous adenocarcinoma and teratoma) in the computed tomography scan. An investigation of her tumor marker levels showed that serum cancer antigen 125 level (37 U/mL; normal, 0 to 35 U/mL) was slightly elevated. Total hysterectomy, bilateral salpingo-oophorectomy, and omentectomy were performed. The resected ovarian mass showed a multilocular cystic lesion, measuring 14×13×10 cm and containing sebum and dark brown fluid. At the periphery, a 4.7×4.5 cm nodule was noted. Histologically, the tumor cells were closely packed and displayed neuroendocrine morphologies and mature cystic teratoma was observed in the cystic lesion. Immunohistochemical staining revealed positive staining for epithelial membrane antigen, CD56 and synaptophysin, focal positive staining for pan-cytokeratin and WT1, but negative for thyroid transcription factor-1, cytokeratin 20, α-inhibin and chromogranin A. The tumor was compatible with pulmonary type small cell carcinoma. The tumor was confined not invades uterus and omentum. We reported an exceptional case of pulmonary type small cell carcinoma arising in a mature cystic teratoma of the ovary.

Key Words: Carcinoma, small cell; Mature cystic teratoma; Ovary

Primitive Neuroectodermal Tumor of the Uterus: A Case Report

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Primitive neuroectodermal tumor (PNET) is a very rare and highly aggressive sarcoma in female genital tract that mostly occur in fifties. Approximately fifty cases are described. We report a case of a 19-year-old female, nulligravid, single, presented with a rapidly growing, firm, nonmovable, tender hypegastric mass measuring 15 cm in widest diameter. Associated symptom was profuse vaginal bleeding. Ultrasonography showed a diffusely enlarged uterus with multiple echogenic masses. Subsequently, she underwent total abdominal hysterectomy. Pathologic evaluation revealed an ill-defined, solid, white brown, friable to firm, intramural mass in the anterior uterine corpus with significant foci of necrosis and hemorrhage. Microscopically, there were solid islands and sheets of monotonous small round blue cells with focal Homer-Wright rosettes, perivascular rosettes, prominent vascular network and myometrial invasion. High nucleocytoplasmic ratio with scant cytoplasm, vesicular to speckled nuclei and occasional distinct nucleoli were observed. The tumor cells were diffusely and strongly positive to CD99, however, negative to CD10, actin and desmin. To conclude, PNET can also occur in young patients. Diagnostic evaluation is through light microscopy, immunohistochemistry can differentiate PNET from other malignant small round blue cells, electron microscopy and molecular studies.

Key Words: Neuroectodermal tumors, primitive; Sarcoma; Homer-Wright rosettes; Small round blue cells

A Rare Case of Endometrioid Borderline Tumor Arising in Endometriosis

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Endometrioid borderline tumors are uncommon and there is no agreement on the criteria for the diagnosis. By World Health Organization (WHO) criteria, these tumors exhibit glands or cysts lined by atypical or histologically malignant endometrioid type cells without stromal invasion. We present a case of endometrioid borderline tumor in a 43-year-old woman with chronic pelvic pain. She was received total laparoscopic hysterectomy with right salpingo-oophorectomy under the assumption of endometriosis. Transvaginal ultrasonography revealed 5 cm right ovary with cystic and tubular feature. Grossly, right ovary showed grey-white cut surface with foci of hemorrhage and consisted of cysts a few millimeters in size. Microscopically, right ovary composed of endometriosis mostly, but arising within, there was a 1 cm tumor nodule. The tumor showed a predominantly adenofibromatous architecture. The tumor struma was cellular and endometrioid type epithelium lined glands were densely packed. The glands had mild to moderate atypia and occasional mitosis. Squamous metaplasia (morule) with central necrosis was seen. The tumor cells showed immunopositivity for β-catenin and CD10. The uterus showed adenomyosis and there was no involvement of the ipsilateral fallopian tube. The ovary is the most common site where precancerous lesion or malignancy arises in association with endometriosis. We present a rare case of endometrioid borderline tumor within ovarian endometriosis. Awareness of this rare neoplasm and association with endometriosis allows to avoid misdiagnosis.

Key Words: Endometrioid borderline tumor; Ovary; Endometriosis

A Case of Vaginal Smooth Muscle Tumour

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Leiomyomas are benign smooth muscle tumours, which are rare in the vagina but are common in the myometrium of the uterus. Leiomyomas can affect any region of the vagina but more commonly arise from its anterior wall. This tumour usually presents in adults in the age group ranging from 30-50 years old. In this case a female patient presented with a left sided vaginal wall nodule. We received four pieces of tissue,
which were firm in consistency and light brown in colour. On microscopic examination, the tumour showed interlacing bundles and interconnecting fascicles of elongated spindle smooth muscle cells. No pleomorphism, necrosis or mitoses were seen. The surrounding stroma showed connective tissue. This case of vaginal leiomyoma presented as a vaginal nodule and was surgically removed. These tumours have been reported in the vagina but they are rare.

Key Words: Vaginal leiomyoma; Smooth muscle tumor; Vaginal neoplasms

AP11-PP-0013
Endometrial Intestinal Metaplasia Accompanied by Uterine Adenomyoma of Endocervical Type with Intestinal Metaplasia
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Endometrial intestinal metaplasia is a rare finding, which is characterized by the presence of intestinal-type epithelium containing goblet cells and cells with abundant intracytoplasmic mucin. We report the first case of endometrial intestinal metaplasia associated with uterine adenomyoma of endocervical type. The patient was a 42-year-old woman presented with an increasing uterine mass on follow-up ultrasonography. Computed tomography demonstrated a 10.5×9.5×8.5 cm sized mass with a heterogeneous density in uterus. The patient underwent a laparoscopic hysterectomy. On gross examination, the uterine tissue was fragmented into several pieces. Histologically, the tumor was composed of smooth muscle bundles and randomly oriented endocervical type mucinous glands containing scattered goblet cells. The intestinal-type epithelium was positive with CDX2, cytokeratin (CK) 7, CK20 and chromogranin immunostaining. The endometrium was partly replaced by intestinal type epithelium, but the endocervix was covered by intact mucinous epithelium without metaplasia.

Key Words: Adenomyoma; Metaplasia; Intestinal mucosa

AP11-PP-0014
Ovarian Clear Cell Adenocarcinoma Arising in Borderline Clear Cell Adenofibromatous Tumor: A Case Report
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This report presents a case of ovarian clear cell adenocarcinoma arising in borderline clear cell adenofibromatous tumor, which is a rare variant of an ovarian epithelial tumor. Clear cell tumors are characterized by clear cells containing abundant cytoplasmic glycogen and hobnail (peg-shaped) cells, either alone or in combination. Clear cell adenocarcinomas comprise 5-10% of all ovarian cancers in Western countries. A 71-year-old Korean female presented with vaginal bleeding. Pelvic magnetic resonance imaging showed about 17.8×11.7 cm-sized large multi-septated cystic and solid mass from left ovary. Pre-operative serum cancer antigen (CA) 19-9 and CA 125 level was 226 IU/mL and 435 IU/mL, respectively. The patient underwent a total abdominal hysterectomy and bilateral adnexectomy with mass excision. The diameter of tumor was 15 cm. The tumor had solid portion and multiloculated cystic portion containing mucinous fluid. Microscopically, round gland, many of which were dilated and contain secretions, proliferate in a fibrous stroma. The tumor has a solid and tubular pattern and was composed of polygonal cells with abundant cytoplasm, focally. Nuclei were round but exhibit irregular nuclear membranes, nucleoli and abnormal chromatin patterns.

Key Words: Ovarian neoplasms; Adenocarcinoma, clear cell; Adenofibroma

AP11-PP-0015
p53 Immunohistochemical Patterns Can Serve as a Surrogate for p53 Mutations in High-Grade Serous Carcinomas of the Ovary
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Background: High-grade serous carcinomas have frequent p53 mutations and these mutations appeared to be powerful molecular markers categorizing high-grade serous carcinomas as well as prognostic markers. However, its application in pathology practice is limited. Methods: We have investigated the p53 gene status of the axons 4-9 and correlation between p53 mutations and immunohistochemical expression patterns in 32 ovarian high-grade serous carcinomas to establish the immunohistochemical cut-off point compatible with p53 mutation. Results: Twenty-six of 32 tumors (81.3%) contained functional mutations of the p53 gene; three frameshift, four nonsense, and 20 missense mutations. In 18 of 19 cases with missence mutations, ≥ 60% of tumor cells were strongly positive for p53 immunostaining. All seven tumors with frameshift or nonsense mutations were completely negative for immunostaining. In tumors harboring mutations, missense mutation was correlated with diffuse and strong immunoreaction and frameshift or nonsense mutation was correlated with complete lack of immunoreaction (p=0.000). Tumors with wild-type p53 revealed wide range of immunostaining pattern. Conclusions: Immunohistochemical staining for p53 can be used as a surrogate for mutational analysis in high-grade ovarian serous carcinomas, and can be interpreted as compatible with mutation if tumor cells are diffusely and strongly positive or completely negative.

Key Words: High-grade serous carcinomas; Tumor suppressor protein p53; Mutation; Immunostaining

AP11-PP-0016
Mature Cystic Teratoma of the Uterosacral Ligament
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This report presents a case of ovarian clear cell adenocarcinoma arising in borderline clear cell adenofibromatous tumor, which is a rare variant of an ovarian epithelial tumor. Clear cell tumors are characterized by clear cells containing abundant cytoplasmic glycogen and hobnail (peg-shaped) cells, either alone or in combination. Clear cell adenocarcinomas comprise 5-10% of all ovarian cancers in Western countries. A 71-year-old Korean female presented with vaginal bleeding. Pelvic magnetic resonance imaging showed about 17.8×11.7 cm-sized large multi-septated cystic and solid mass from left ovary. Pre-operative serum cancer antigen (CA) 19-9 and CA 125 level was 226 IU/mL and 435 IU/mL, respectively. The patient underwent a total abdominal hysterectomy and bilateral adnexectomy with mass excision. The diameter of tumor was 15 cm. The tumor had solid portion and multiloculated cystic portion containing mucinous fluid. Microscopically, round gland, many of which were dilated and contain secretions, proliferate in a fibrous stroma. The tumor has a solid and tubular pattern and was composed of polygonal cells with abundant cytoplasm, focally. Nuclei were round but exhibit irregular nuclear membranes, nucleoli and abnormal chromatin patterns.

Key Words: Ovarian neoplasms; Adenocarcinoma, clear cell; Adenofibroma
Endometrial clear cell carcinomas (ECCCs) have been considered to be type II endometrial carcinoma, like uterine serous adenoacarcinoma (SCA), and aggressive clinical management has been indicated. However, according to the limited clinical, immunohistochemical and molecular data in the literature, ECCCs showed overlapping features of both SCA and endometroid adenocarcinomas (ECA), thus a question regarding the type II carcinoma has been raised.

**Background:** Endometriosis is a benign disorder, but may be complicated by malignant transformation. However, there has been no enough information about the morphologic, immunohistochemical and molecular changes which occur during neoplastic transformation. Methods: The endometriosis-associated ovarian lesions were collected; 16 clear cell (4 atypical, 2 borderline, and 10 malignant), 7 endometrioid, 2 serous (1 proliferative and 1 malignant), and 2 seromucinous (1 benign and 1 borderline) types. Immunohistochemical stains for estrogen receptor (ER), PTEN, ARID1A, HNF-1β, MLH1, and WT-1, and mutational analysis for K-RAS, BRAF, and PIK3CA were performed. Results: Atypical endometriosis in clear cell tumor was characterized by flat or papillary tufting of polygonal or hobnail cells with nuclear enlargement, hyperchromatism and clear cytoplasm, whereas atypical endometrioid tumor was characterized by the crowded glands with round and vesicular nuclei. Clear cell lesions had the immunophenotype of ER−/HNF-1β+/WT-1− with occasional loss of PTEN, and one loss of ARID1A. PIK3CA mutation was found in 2 malignant lesions, without K-RAS and BRAF mutation. Endometrioid carcinomas had the phenotype of ER+/HNF-1β+/WT-1− with frequent loss of PTEN, but without loss of ARID1A. One tumor had K-RAS mutation in only malignant tumor without mutation of BRAF and PIK3CA. Serous tumors were characterized by ER+/HNF-1β+/WT-1− without loss of PTEN, ARID1A and MLH1, and seromucinous tumors had the immunophenotype of ER+/HNF-1β+/PTEN+. Conclusions: The characteristic immunohistochemical findings were seen in the different histologic types, and recapitulated in the respective atypical endometriosis, however, loss of ARID1A and molecular changes occurred during malignant transformation than in benign and atypical endometriosis.

**Key Words:** Endometriosis; Ovary; Atypical endometriosis; Clear cell tumor; Endometrioid tumor
The Significance of Sox10 Expression in the Ovarian Epithelial Tumors

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Background: The transcription factor Sox10 is a member of the Sry-related HMG-Box gene family. Sox10 is reportedly not expressed in the carcinomas of many solid organs, including ovary. However, our previous study showed that Sox10 was upregulated in chemoresistant serous carcinomas of ovary. The aim of this study is to investigate the expression pattern of Sox10 in ovarian epithelial tumors, and to assess its clinical implication. Methods: The immunohistochemical stain for Sox10 was performed on tissue microarrays containing 126 ovarian serous tumors (benign, 17; borderline, 25; malignancy, 84), 73 mucinous tumors (benign, 19; borderline, 44; malignancy, 10), 16 endometriotic cysts, 16 endometrioid adenocarcinomas, and 7 clear cell carcinomas. The expression of Sox10 was interpreted as positive when >20% of tumor cells were stained. Results: The positive cytoplasmic expression was seen in 86% (72/84), 50% (5/10), 75% (12/16), and 12% (1/8) of serous, mucinous, endometrioid, and clear cell carcinomas, respectively. On the contrary, 41% (7/17), 32% (8/25), 5.2% (1/19), 9.1% (4/44), 31.3% (5/16) of serous benign, serous borderline, mucinous benign, mucinous borderline tumors, and endometriotic cysts showed positive staining. The nuclear positivity was seen in 24% (20/84) of serous carcinoma and 63% (5/8) of clear cell carcinoma, whereas no nuclear staining was seen in any benign or borderline tumors, mucinous and endometrioid carcinomas. The cytoplasmic positivity was associated with distant metastasis (p=0.036), and the nuclear positivity was associated with poor overall survival in patients with serous carcinomas (p<0.001). Conclusions: Sox10 was expressed in various types of ovarian carcinomas, and the nuclear expression of Sox10 was associated with poor prognosis.

Key Words: Ovary; Ovarian epithelial tumor; Sox10

Difference of Subcellular Localization of Survivin in Uterine Cervix: Correlation with Tumor Progression

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Background: Survivin is an inhibitor of apoptosis protein. Under normal circumstances, survivin is expressed in embryonic and fetal tissues, but completely downregulated in normal adult tissues. Interestingly, this protein is found to be prominently re-expressed in a variety of human malignant tumor. The present study was designed to evaluate the possible role of survivin in tumorigenesis of cervical intraepithelial neoplasia and invasive squamous cell carcinoma (SCC) of the uterine cervix and to determine whether the nuclear or cytoplasmic expression of survivin is related to tumor progression. Methods: We obtained 71 samples of cervical squamous tissue, including 15 normal, 225 high-grade squamous intraepithelial lesions (HSILs), and 31 SCCs from cone biopsy and hysterectomy specimens, and stained for survivin by immunohistochemistry. Results: Intensity of survivin expression tended to increase along with tumor progression; (normal mucosa, 60%; HSIL 76.0%; SCC 82.1%). However, no statistical significance is found. There is statistical significance in difference of subcellular localization of survivin among the normal mucosa, HSIL, and SCC (p<0.001). 72% (18/25 cases) of HSIL and 54.8% (17/31 cases) of SCC expressed cytoplasmic staining in contrast to nuclear staining of all of normal mucosa. Sixty-four percent (16/25 cases) of HSIL and 42% (13/31) of SCC show coexpression in nucleus and cytoplasm. Positive correlation between decrement of nuclear expression of survivin and tumor progression was not statistically significant (p=0.08). Conclusions: These results indicate that the analysis of the subcellular expression of survivin (especially, cytoplasmic expression) is a determining factor to define the tumor progression of uterine cervix.

Key Words: Survivin; Cervix uteri; Carcinoma, squamous cell; High-grade squamous intraepithelial lesion

Visual Inspection Using Acetic Acid and Pap’s Smear as a Method of Cervical Cancer Screening: An Experience of Dhaka Medical College Hospital, Dhaka, Bangladesh

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Background: National screening program for cervical cancer has been running in Bangladesh since 2004 through visual inspection using acetic acid (VIA). However, Pap’s smear is also used for the same where it is available. Methods: This prospective study was done on 600 women who attended the outpatient gynaecology clinic and cervical cancer screening program underwent both VIA and Pap’s smear cytology. Histopathology was taken as gold standard to compare the performance of VIA and cytology (Pap’s smear). Hence, positive cases were further subjected to colposcopy directed biopsies. Then the sensitivity and specificity of VIA and Pap’s smear were compared. The study was done in Dhaka Medical College Hospital, Dhaka, between July and December 2012. Results: On VIA, 46 had aceto-white lesions and on Pap’s smear, 28 had atypical squamous cells of undetermined significance or worse lesions out of 600 women screened. Twenty-two were positive on both VIA and cytology; 24 were positive on VIA only; and 6 were positive on cytology only. Histological diagnosis of cervical intraepithelial neoplasia/carcinoma cervix was found in 36 positive cases, who underwent biopsy (n=52). Among them, 20 were picked up from Pap’s smear positive cases, whereas, 34 were VIA positive cases. VIA was found more sensitive (94.44%) than Pap’s smear (55.55%), which was statistically significant (p<0.001). However, the specificity of VIA was slightly lower (97.87%) than that of cytology (98.58%). Positive predictive value of VIA was 73.91% and 71.42% for Pap’s smear. Conclusions: VIA has got much more sensitivity and less specificity than that of Pap’s smear in cervical cancer screening.

Key Words: Cervical cancer screening; Visual inspection using acetic acid; Pap’s smear; VIA; Cytology; Colposcopy
Granulosa Cell Tumor of the Ovary with a ‘Papillary Pattern’: A Case Report
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Granulosa cell tumor of the ovary with a ‘pseudopapillary’ pattern is a recently described, very rare morphologic variant. The pseudopapillae projecting into cystic space lack true fibrovascular stromal core and are considered as a secondary or degenerative phenomenon. However, the ‘true papillary pattern’ in ovarian granulosa cell tumors has not been reported. Recently we experienced a cystic granulosa cell tumor of the ovary with a true papillary pattern in a 10-year-old girl. She had a 5 cm-sized, unilocular cystic mass at the right ovary and massive ascites. Under the impression of ovarian tumor torsion, laparoscopic salpingo-oophorectomy was done. Grossly, a cystic tumor with numerous papillary projections was seen. Microscopically, the papillae were composed of fibrovascular stromal core covered by several layers of neoplastic granulosa cells. The fibrovascular core contained many luteinized theca cells. There was no appreciable necrosis accompanied. This is the first case report of a granulosa cell tumor of the ovary with a papillary pattern. It is uncertain whether the papillary pattern is owing to cystic degeneration or a genuine growth variant. Transitional cell neoplasms and other papillary ovarian tumors should enter into differential diagnosis.

Key Words: Granulosa cell tumor; Ovary; Papillary

Adenoid Cystic Carcinoma in Uterine Cervix: A Case Report
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Adenoid cystic carcinoma (ACC) of the female tract represents 3% of all primary cervical adenocarcinomas, and the overall prognosis is worse than that of squamous cell carcinoma or pure adenocarcinoma of the cervix. We describe a rare case of a solid variant of ACC (SACC) in a 62-year-old woman. She complained of vaginal bleeding for 10 days. She had history of hormone replacement therapy for last four years. A protruded hard fixed isoechoic mass, 4.2 × 3.1 cm, was noted in uterine cervix. She underwent total hysterectomy with both salpingo-oophorectomy. Grossly, the posterior cervix and lower uterine segment showed a demarcated mass, measuring 5 cm in diameter. The cut surface was white gray lobulated and firm with necrosis. Microscopically, the tumor invaded deep stroma closed to pericervical region with infiltrative margin. The tumor was composed of small round cells having hyperchromatic nuclei, inconspicuous nucleoli and scanty cytoplasm. They were arranged in predominantly solid sheets and nests (80-90%), and partly cribriform glands (10-20%) with hyaline or mucous material in the microcystic spaces. Focally, squamous differentiation with keratinization was apparent. Mitotic figures were frequently seen. The tumor cells were positive for cytokeratin, epithelial membrane antigen, p63, and the hyaline or mucous material showed positive reaction to periodic acid-Schiff, alcian-blue and collagen IV. In uterine cervix, ACCs show a less common cribriform picture, but SACCs are more frequently neoplasms. Unlike tumors of salivary glands, the cervical ACCs lack myoepithelial cells and have fewer propensities for perineural invasion.

Key Words: Carcinoma, adenoid cystic; Cervix uteri; Uterus

Xanthogranulomatous Inflammation of the Ovary: Two Cases Report and Review of the Literature
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Xanthogranulomatous oophoritis is form of chronic inflammation that is destructive to affected organs. We describe two cases and provide a review of the literature. Retrospective analysis of the medical records of two patients diagnosed with xanthogranulomatous oophoritis, and admitted at Nanfang Hospital (Guangzhou, China). Two cases suffered from abdominal pain and distension with 32- and 25-year-old respectively. Ultrasonography showed a pelvic mass in each case. One involving the fallopian tube and one confined to the ovary. Histological examination revealed extensive replacement of the ovary by a chronic inflammatory exudate composed foamy macrophages admixed with variable amount of plasma cells, lymphocytes, and neutrophils. Immunohistochemistry showed positive staining for CD68 in foamy macrophages. Xanthogranulomatous oophoritis is an unusual lesion and only a few cases have been reported. Clinically forms mass-like lesion in the pelvic cavity involving adjacent organs may mimic malignancy. Although a correct diagnosis is made mainly through pathological examination, a suggestive preoperative diagnosis of xanthogranulomatous oophoritis could give rise to less invasive surgery.

Key Words: Xanthogranulomatous; Inflammation; Oophoritis