

**Results:** Intraoperative study revealed absence of myometrial invasion in 19 cases, invasion of the inner half (IH) in 61 and of the outer half (OH) in 13. Definitive study showed absence of myometrial invasion in 9 cases, invasion of the IH in 68 and invasion of the OH in 16. The positive predictive value was 47% (95% CI: 25–70%) for absence of invasion, 93% (83–98%) for IH invasion, and 92% (82–100%) for OH invasion. In 10 cases intraoperative study was of absence of invasion and the definitive study revealed myometrial invasion (nine of them smaller than 2 mm). In four cases intraoperative study diagnosed invasion of the IH of the myometrium whereas the definitive diagnosis was of invasion of the outer myometrial half. In all of these cases the uterus showed myomas and the tumor extensive necrosis. In one case the intraoperative diagnosis was of invasion of the OH and in definitive study only IH invasion could be demonstrated. In this case an endometrial ablation was done three weeks before. Myometrial invasion showed statistically significant relationship with age, histological grade and lymph node involvement.

**Conclusions:** Intraoperative assessment of myometrial invasion is a useful tool to establish the involvement of the inner or outer half. The absence of myometrial invasion by frozen section is less accurate.

#### P-76

##### **Coexistence of a mature cystic teratoma and a serous cystadenoma in the same ovary**

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**AIM:** To describe a rare coexistence of two different benign cystic tumors in the same ovary, i.e. a mature cystic teratoma and a serous cystadenoma.

**MATERIALS AND METHODS:** A 32 year old female presented with a cystic tumor in the right adnexa. The tumor excision followed. We received a cystic specimen which measured 7.6×6×3 cm with two separated cystic lesions. Its surface was smooth. Ovarian tissue measuring 2.5×1×0.3 cm was also recognized. The first cyst was filled by serous fluid and had micropapillary architecture in limited regions of the inner surface. The mural thickness measured 0.2 cm. The second cyst was filled by sebum and hairs and its mural thickness measured between 0.2 to 0.4 cm. Multiple sections were taken, embedded in paraffin and stained with hematoxylin-eosin.

**RESULTS:** The microscopical examination showed the presence of two cystic tumors. The first was a serous cystadenoma and the second was a mature teratoma. In the

latter, skin, sebaceous and eccrine glands, hair follicles, intestinal and respiratory epithelium, cartilage, smooth muscle and adipose tissue were detected. No specific changes were identified in the excised ovarian tissue.

**CONCLUSION:** We believe that due to the rarity of this coexistence, after an exhaustive search of the literature, the pathologist should have it in mind.

#### P-77

##### **The implementation of prognostic index and risk grouping in surgically treated cervical carcinoma patients: A prospective validation study**

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**BACKGROUND:** The objective of this prospective study was to validate the prognostic criteria defined by the results of our previous study in an independent population of surgically treated cervical carcinoma patients. **METHOD:** The study group consisted of 340 patients who underwent abdominal hysterectomy with pelvic lymphadenectomy as primary therapy between 2000 and 2005. Based on the scores of the variables (blood vessel invasion, lymph node metastases, tumor diameter, degree of inflammatory reaction at the invasive front, and minimum thickness of uninvolved cervical stroma/parametrial extension) and calculated prognostic index (PI) values, the patients were divided into three prognostic groups. **RESULTS:** During the follow-up period (range, 1.6–89.7, mean, 39.7±22.2 months) recurrences were observed in 1% (1/97), 12.2% (16/131) and 23.2% (26/112) of the low-, intermediate-, or high-risk group patients, respectively. The 5-year disease-free survival (DFS) rates of the low, intermediate, and high-risk groups were 98.82%, 84.57%, and 74.01%, respectively. The differences in DFS rates were statistically significant ( $P < 0.0001$ ). In order to validate the model from our previous study, we have compared DFS rates between the groups. There was no difference in DFS rate between low-risk groups, in spite of the fact that majority of the patients in this study were not irradiated, while radiotherapy was administered invariably to all the patients included in the original study. Similarly, DFS did not differ significantly between the intermediate-risk groups from both studies, which could be expected since radiotherapy was administered to majority of the patients (125/131) in this study. In contrast, the high-risk group patients in this study had significantly higher DFS rate (74.01% vs. 44.24,  $P = 0.0010$ ), probably as the result of

the adjuvant chemotherapy administrated to 69% of them. **CONCLUSION:** PI could be a sound and reliable basis for an appropriate planning of the following therapeutical strategy of the surgically treated cervical cancer patients.

#### P-78

##### **Extraovarian granulosa cell tumor: first case report from Colombia**

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**Objective:** To describe the case of an extra ovarian GCT in a Colombian woman and to discuss about these malignancies.

**Case Report:** 69 years old female Patient, who came to the doctor with an abdominal pain, vomiting and no depositions, with 8 days of evolution. The woman presented pre existing conditions of hysterectomy with bilateral salpingoophorectomy for placental accretism. At physical examination a mass was identified, located in the hypochondrium and left flank of 10×15 cm. This was confirmed in the echogram and tomogram studies. Therefore the patient was taken to surgery, and a encapsulated retroperitoneal tumour was found.

**Pathological Study:** The pathology service received a 12×11.5×10 cm. and 950 gr. solid-cystic mass. The heterogenic surface cut was well encapsulated, with a solid area (70%) and a cystic area with hemorrhagic content (30%). The cut was stained with hematoxylin and eosin were identified neoplastic lesion formed by round-nucleus cells with longitudinal cleft and few eosinophil cytoplasm, arranged in nests, trabeculae and solid sheets with plenty Call-Exner corpus formation. Immunohistochemistry was positive for inhibin and negative for Melan A and Calretinin. Making an extraovarian adult type GCT diagnosis.

**Conclusions:** The GCT can be originated from extraovarian tissues in extremely rare cases, only 8 cases reported globally. These cases have been informed in the broad ligament, adrenal glands, uterus and retro peritoneum. This case was originated in the retro peritoneum. It is believed that the origin from ectopic gonadal tissue, or directly from the mesonephron.

#### P-79

##### **BNIP-3-EXPRESSION AND ITS ASSOCIATION TO PATTERN OF INVASION AND PERITUMORAL STROMAL RESPONSE IN CARCINOMA OF THE CERVIX UTERI**

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**Background:** Finger-like and spray-like pattern of invasion represent the most common types of tumoral growth patterns in carcinoma of the cervix uteri (CX) invading host tissue (Horn et al. 2006). Infiltrative growth usually induce new matrix formation by activating the peritumoral stromal cells; that is, desmoplastic stromal reaction (DSR) at the front of invasion (juxtatumoral stroma). Infiltrative growth and peritumoral stromal remodelling might be involved by apoptosis of tumor cells. BNIP3 is a mitochondrial protein and a proapoptotic member of the Bcl-2 family and expressed in different types of human cancer. Nothing is known regarding the association of BNIP-3 expression in CX and parameters of infiltrative growth.

**Method:** Biopsies of 50 cervical cancers (FIGO stage IB to IV) were stained with an anti-BNIP3 antibody. In accordance to own previous studies (Leo et al. 2006), cytoplasmic as well as nuclear staining results were counted as positive. Staining was counted performing an immunoreactive score (IRS = staining intensity (0–3) × calculated percentage of positive stained tumor cells (1–4)). The IRS was correlated to pattern of invasion (finger-like and spray-like) and the grade of DSR. DSR was scored as none/weak and moderate/strong.

**Results:** Spray-like pattern of invasion was associated with high expression of BNIP-3 (mean-IRS 5.8 vs. 3.2;  $p=0.17$ ). High juxtatumoral stromal remodelling, characterised by strong desmoplastic change was also associated with BNIP-3 overexpression (mean IRS 3.6 vs. 5.7;  $p=0.082$ ).

**Conclusions:** The results suggest that alteration of the mitochondrial pro-apoptotic BNIP-3 is involved in the mode of pattern of invasion (representing the grade of tumor cell dissociation) and juxtatumoral stromal remodelling in carcinoma of the cervix uteri.