

the remaining 58 cases had negative diagnostic interpretation. The liquid-based cytology was in agreement with histology in 81% of the biopsies in comparison to the conventional cytology which was in agreement with histology in 61% of the biopsies.

**Conclusions:** In conclusion, the results of our study suggest that the liquid-based cytology is a more sensitive (80%) and specific (83%) technique than the conventional cytology (sensitivity=57%, specificity=65%) in comparison to histology as a gold standard.

### PS-03-06

Correlation between cytopathology and histopathology in women with squamous cell abnormalities of the uterine cervix

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**Objective:** The objective of our study was to investigate the correlation between cytology and cervical biopsy findings in women with squamous cell abnormalities on cervical cytology.

**Material and Methods:** A comparative retrospective study was conducted in the period from September 2015 to March 2016 in a series of 184 sexually active women, aged from 20 to 60 years, with squamous cell abnormalities in the liquid-based cytology test. In all women, cervical biopsy with endocervical curettage was performed colposcopically for histopathological analysis.

Results: Cytologically, there were 118 (64.13%) atypical squamous cells of undetermined significance (ASC-US), 22 (11.96%) low-grade squamous intraepithelial lesions (LSIL), 38 (20.65%) high-grade squamous intraepithelial lesions (HSIL) and 6 (3.26%) invasive squamous cell carcinoma cases. According to the histopathological findings in the cervical biopsy and/or endocervical curettage material in 108 (58.70%) women only nonneoplastic lesions were diagnosed. Twenty-four (13.04%) women had histologically confirmed LSIL, 42 (22.83%) had HSIL and in 10 (5.43%) cases invasive SCC was confirmed. For all squamous cell abnormalities, the sensitivity of the liquid-based cytology test in LSIL and higher grade lesions was 58.70% (108/184) and false positivity was 41.30% (76/184). Excluding ASC-US lesions, the sensitivity of the liquid-based cytology test was 78.80% (52/66) and the false positivity was 21.21% (14/66). The positive predictive value was 100% (6/6) for invasive SCC, 68.42% (26/38) for HSIL and 31.82% (7/22) for LSIL.

**Conclusions:** The high sensitivity of the liquid-based cytology test for HSILs shows that it is an effective screening test for cervical cancer and its precursor lesions.

# PS-03-07

# Strumal carcinoid of the ovary - a case report

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**Objective:** Primary ovarian carcinoids comprise 0.1% of all ovarian malignancies and approximately 0.5-1.7% of all carcinoid tumors. Strumal carcinoid (SC) is a type of germ cell tumor characterised by

an intimate mixture of thyroid tissue and carcinoid with other teratomatous elements.

**Material and Methods:** A 47-years-old woman was referred to gynecology department with complex bilateral adnexal masses for surgery. On gross examination, the right ovary was 11x10x7 cm, yellowish brown in color, with a polynodular surface, and the left ovary was 8x7.5x7 cm with a smooth surface. Cut sections revealed predominantly cystic multilocular masses, partially filled with greasy content with hair and smooth solid areas.

Results: On histopathologic examination the cystic spaces of the right ovary were lined by squamous epithelium with underlying adnexal structures, glandular epithelium and thyroid follicles containing colloid. All tissue components were mature. Among the thyroid follicles there was a population of monomorphic cells with moderate amount of eosinophilic cytoplasm, arranged in solid, trabecular and rosetoid patterns suggestive of a carcinoid. The suspicion has been confirmed by the immunoprofile of the tumor cells, which were diffusely immunopositive for CKAE1/AE3, synaptophysin, chromogranin, NSE and CD57, and the thyroid follicles including the central colloid were immunopositive for thyroglobulin, TTF-1 and thyroid peroxidase (TPO). The left ovarian cyst was a dermoid cyst.

**Conclusions:** The differential diagnosis of SC includes other entities, such as granulosa-cell tumor and Sertoli-Leydig-cell tumor. However, characteristic histological pattern, immunoprofile, and in some cases the clinical manifestations due to the neuroendocrine activity of the tumor, are usually conclusive for the diagnosis.

### PS-03-08

### Ovarian Leydig cell tumor (hilus cell tumor): a case report

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**Objective:** Leydig cell tumor is a rare ovarian tumor that belongs to the group of sex-cord stromal tumors. They produce testosterone leading to hyperandrogenism. As a subtype of steroid cell tumors of the ovary characterized by the presence of Reinke crystals, it comprises 19% and affects mainly young women.

**Material and Methods:** A 24-year old nulliparous patient clinically presented with hirsutism, oligomenorrhea, and infertility. Ultrasonography showed a left ovarian tumor mass with the greatest diameter of 4.3cm. The patient underwent a laparoscopic tumorectomy followed by gradual withdrawal of the symptoms at the first check-up after 6 months follow-up.

Results: The laparoscopically obtained material consisted of 15 yellow to orange-tanned, soft and solid fragments with a diameter ranging from 0.5 to 5.5cm. Microscopically, the tumor was solid, relatively well circumscribed, and composed of cellular areas with clustering of nuclei separated by eosinophilic anuclear zones. Some of the tumor cells had scant and others abundant eosinophilic or clear cytoplasm with lipid-rich, oil Red O-positive vacuoles and oval, hyperchromatic or bizarre nuclei. Mitotic figures were scarce, while Reinke crystals were found after a prolonged search. Immunohistochemically, tumor cells showed diffuse positivity for vimentin, focal for cytokeratin AE1/AE3, alfa-smooth muscle actin, S100, CD99, calretinin, inhibin-alpha, melan A, CD56 and were steroid hormone receptor negative.