excluded. The number of dispensed VE prescriptions was used to categorize women into 3 groups: "4 or more," "1-3," and "0".
Results: Approximately 450,000-530,000 women in each year were included. The mean number per year of patients that dispensed "4 or more" was 11,327, "1-3" was 30,376, and "0" was 454,516. The overall average yearly disease incidence of endometrial hyperplasia/cancer in the "4 or more," "1-3," and "0" groups was 9.96, 10.25, and 9.96 (per 10,000 women), respectively.
Conclusions: The data suggests using unopposed topical vaginal estrogen is not associated with an increased risk of endometrial hyperplasia or cancer.

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Poster #45

Synchronous cervical and vulvar dysplasia – High likelihood in women who are immunocompromised

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Objectives: Dysplastic lesions of the cervix and vulva have similar risk factors. However, the incidence of cervical dysplasia is 10 times more than that of vulvar dysplasia suggesting high risk HPV induced transformation of the vulvar epithelium occurs less often than cervical epithelium. This implies there are novel factors required for the progression normal vulvar to dysplasia. The aim of this study was to evaluate the clinicopathologic characteristics that predispose patients to synchronous cervical and vulvar dysplasia/cancer.
Methods: We performed a case-control study on patients seen from January 2010 to October 2013 and diagnosed with cervical intraepithelial neoplasia (CIN) or cancer on excisional biopsy (cold knife cone or loop electrosurgical excision procedure) who also developed synchronous vulvar intraepithelial neoplasia or cancer. Clinical variables predisposing women to cervical and/or vulva dysplasia were evaluated. Number of lifetime sexual partners and age at coitarche were not readily available for statistical analysis. SPSS software was used to calculate the odds ratio (OR) for binary dependent variables.
Results: The average age was 37 year old in both subgroups of women with synchronous lesions as well as those with cervical dysplasia alone. Approximately 43% of the women who had cervical dysplasia alone had a BMI > 30kg/m2 compared with 25% in those with synchronous lesions. There was no difference in the odds ratio of smoking, alcohol use, illicit drug use, OCP use, parity, hypertension, hyperlipidemia, diabetes and depression between women with cervical dysplasia alone versus those with cervical and vulvar dysplasia/cancer. The only statistically significant findings were found in those with immunosuppression or an HIV infection with an odds ratio of 18.9 (95% CI 7.9676 to 44.7392 with P value < 0.001).
Conclusions: Immunocompromised patients have a significantly higher likelihood of developing synchronous cervical and vulvar dysplasia. Our findings underscore the necessity of a complete examination of the lower genital tract especially in those who are immunocompromised.

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Poster #46

Invasive vulvar Extramammary Paget's Disease in the United States

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Objectives: Extramammary Paget's disease (EMPD) is an intraepithelial neoplasm commonly found in the vulva. Large national databases are useful due to disease rarity, particularly for invasive forms of EMPD. We sought to assess the incidence, treatment modality, and outcomes in patients with invasive vulvar EMPD.
Methods: The National Cancer Institute's (NCI) Surveillance, Epidemiology and End Results (SEER) population-based cancer registries was searched for patients diagnosed with invasive Extramammary Paget's disease (ICD-O-3 histology code: 8542) of the vulva (ICD-O-3 topography code: C51.0-51.9) between 1992-2014. Incidence rate, demographics, survival, synchronous and secondary malignancies were analyzed.
Results: From 1992-2014, 1110 patients were diagnosed with invasive vulvar EMPD: of those, 74.0% had localized disease, 13.2% regional disease, 1.5% distant disease and 11.3% were unstaged. The overall annual incidence of invasive vulvar EMPD was 0.35 per 100,000 person years: rates have increased more than 2-fold since 1992 (1992: 0.19 per 100,000 person years to 0.50 per 100,000 person years in 2014). Surgery was the primary treatment for most (n=898, 80.9%) patients, with 24 (2.2%) having surgery and radiation. In 4 cases (0.4%) radiation alone was used: 184 (16.6%) did not undergo radiation or surgery. Five-year cancer specific survival (CSS) overall was 94.2% and was closely related to stage. Patients with localized disease or those who were unstaged had the best survival (P<0.0001). Patients who presented with distant disease had significantly worse outcomes vs. local disease (HR: 85.911 (29.8-248) p<0.0001). CSS was 95.7% in patients undergoing surgery alone, 90.0% observation, and 57.9% surgery and radiation (p<0.0001). Synchronous cancers (diagnosed within 12 months of EMPD) were observed in 30 cases (2.7%), and 161 patients (14.5%) developed a secondary malignancy (diagnosed >12 months from EMPD) malignancy. The most common synchronous and secondary cancers were gastrointestinal, breast, or genitourinary.
Conclusions: The incidence of invasive vulvar EMPD has increased over time. Cancer specific survival is excellent for localized disease, but those with metastatic disease are in need of novel therapies: radiation appears to have limited benefit. A large number of EMPD patients (14.5%) will develop a secondary malignancy and should undergo site specific preventative health screens during recurrence surveillance.

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Poster #47

Primary chemoradiation therapy for locally advanced cervical cancer: Outcomes and disparities

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Objectives: To identify disparities in timely receipt of primary chemoradiation in patients with locally invasive cervical cancer.
Methods: The National Cancer Database (NCDB) was queried to identify stage II-IVA cervical cancer patients diagnosed in the United States between 2004 to 2015 and receiving chemoradiation (CRT) as primary treatment. Patients were divided into those whose duration of CRT treatment was <=8 weeks and >8 weeks. The primary outcome was overall survival. Patients were stratified by demographic factors including age, race/ethnicity, insurance status, distance from hospital, and hospital setting, as well as clinical factors including stage and grade.
Results: We identified 21,579 women. 11,265 women (52.2%) completed chemoradiation therapy in <=8 weeks. The median OS was longer for patients who completed CRT in <=8 weeks (95.1 vs 73.7 months, p $63,000. Patients with Medicaid/Medicare insurance (OR 0.85, 95% CI 0.80-0.90) were also less likely to complete CRT in <=8 weeks compared to those with private insurance. Patients with stage III disease (OR 0.81, 95% CI 0.77-0.85) were less likely to complete CRT in <=8 weeks than those with stage II disease. Age, distance from