cancer is infrequent, corresponding to 1–2% of all female genital tract cancer diagnoses. Treatment for vaginal cancer varies depending on tumor histology, size, location, and staging and may include one or more of the following: surgical excision, radiation therapy and/or chemotherapy. All treatments negatively affect fertility/pregnancy outcomes. Pelvic radiation therapy, even in doses < 2 Gy, may extinguish up to 50% of immature oocytes. In addition, radiotherapy may cause modifications in cervical length, loss of uterine junctional zone anatomy and lead to myometrial atrophy and fibrosis, increasing the risk for adverse pregnancy outcomes.

Methods We reviewed the medical charts of a patient who carried a pregnancy to term after surgery and brachytherapy for vaginal cancer.

Results A 28 year-old woman, presented with a 3 cm right vaginal wall tumor, diagnosed as grade 3, vaginal squamous cell carcinoma -FIGO 2009, stage IB. Computed tomography showed no evidence of lymph node spread or distant metastasis. The patient underwent surgery followed by 4 sessions of vaginal brachytherapy totaling a dose of 6 Gy at a 5 mm depth. One year and 9 months after treatment, the patient gave birth to a healthy child at 40 weeks. A C-section was needed due functional dystocia during labor.

Conclusions This is the first case report of a successful pregnancy carried to term after surgery and brachytherapy for vaginal cancer.

EP417/#795 VALUE OF SURGICAL LYMPH NODE ASSESSMENT FOR PATIENTS WITH VULVAR MELANOMA

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Objective Investigate the utilization and outcomes of lymphadenectomy (LND) for patients with vulvar melanoma.

Methods Patients with vulvar melanoma, known depth of tumor invasion, no distant metastases, with/without inguinal lymph node sampling/dissection (LND) were identified. Median overall survival (OS) was compared with log-rank test. A Cox model was constructed to control for confounders.

Results 1286 patients were included; 808 (62.8%) underwent LND. 8.6% of patients had chemotherapy and/or radiation therapy. Performance of LND was associated with younger age (median 66 vs 76 years, p<0.001), private insurance (42.9% vs 27.8%, p<0.001), tumor ulceration (65.9% vs 58.6%, p=0.01), deeper tumor invasion (p<0.001) and >4.0 mm (median OS 31.93 vs 21.32 months, p<0.001), and >2.0 mm (median OS 83.32 vs 44.45 months, p<0.001). Rate of LND was 55.9% when invasion 1.01–2.0 mm, 35.9% when >4.0 mm and 64.3% when >4 mm. LN metastases were found in 288 patients (35.6%); 26.3% when depth of invasion ≤1 mm, 20.8% when 1.01–2.0 mm, 35.9% when 2.01–4.0 mm and 50.5% when >4 mm (p<0.001). Patients with LND had better OS than those who did not (median OS 49.08 vs 35.91 months, p<0.001). Following stratification by Breslow thickness, patients with LND had better OS with invasion 1.01–2.0 mm (median OS 83.32 vs 44.45 months, p<0.001), 2.01–4.0 mm (median OS 52.57 vs 28.16 months, p<0.001) and >4.0 mm (median OS 31.93 vs 21.32 months, p<0.001) but not <1 mm (p=0.44). After multivariable analysis, LND was associated with better OS (HR: 0.78, 95% CI: 0.67, 0.92).

Conclusions For patients with vulvar melanoma with at least 1 mm invasion, LND is associated with better OS.