

## **TITLE**

Management and outcome of cervical cancer diagnosed in pregnancy

## **AUTHORS**

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## **ABSTRACT**

**OBJECTIVE:** To describe the management of patients with cervical cancer diagnosed in pregnancy and compare their outcomes to non-pregnant women with similar baseline characteristics.

**METHODS:** We conducted a retrospective chart review of all patients diagnosed with cervical cancer in pregnancy and matched them 1:2 with contemporaneous non-pregnant women of the same age diagnosed with cervical cancer of the same stage. Patients were identified using ICD-9 codes and the Dana-Farber/MGH Cancer Registry. Data were analyzed using STATA version 10.1.

**RESULTS:** Twenty-eight cases of cervical cancer diagnosed in pregnancy were identified from 1997-2013. The majority were Stage IBI. 25% (7/28) of women terminated the pregnancy; these women were more likely to be diagnosed earlier in pregnancy (10.9 vs. 19.7 weeks, p =

0.006). For those who did not terminate, mean gestational age at delivery was 36.1 weeks. Pregnancy complications were uncommon. In comparison to non-pregnant women, women undergoing radical hysterectomy in pregnancy or postpartum were more likely to receive a transfusion (25% vs. 50%,  $p=0.09$ ); complication rates were otherwise similar, as were survival rates. Women who underwent gravid radical hysterectomy had a significantly higher EBL than those who had a radical hysterectomy in the postpartum period (2033 cc vs. 425 cc,  $p=0.0064$ ), but operative characteristics were otherwise similar. None of the pregnant women who died delayed treatment due to pregnancy.

**CONCLUSION:** Gestational age at diagnosis is an important determinant of management of cervical cancer in pregnancy, underscoring the need for expeditious workup of abnormal cervical cytology. Of women who choose to continue the pregnancy, most delivered in the late preterm period without significant obstetric complications. For women undergoing radical hysterectomy in the peripartum period, other than an increased risk of transfusion, complication rates are similar to non-pregnant women undergoing this procedure. Women who died were more likely to be of advanced stage at the time of diagnosis. This information may be useful in counseling women facing the diagnosis of cervical cancer in pregnancy.