CERVICAL CANCER IN PREGNANCY: A CASE REPORT

Dr. Macit Arvas¹, Dr. Murat M. Naki², Dr. Fuat Demirkiran¹, Dr. Tugan Beşer¹, Dr. Derin Kösebay¹

INTRODUCTION

Carcinoma of the cervix is the most frequently diagnosed gynaecological malignancy in pregnancy with incidences varying from 0.24 to 0.45 per 1000 pregnancies (1). Many patients with cervical cancer are completely asymptomatic, and their disease is detected on routine bimanual pelvic examination or cervical cytology screening, which must be components of early antenatal visit (2). However, 15-87% of patients may have bleeding in pregnancy (3). Cervical carcinoma with pregnancy represents a complex situation with medical and ethical issues. Delayed diagnosis occurs when symptoms are attributed to pregnancy. Once cervical pregnancy is diagnosed, gestational age becomes important in further management. Magnetic Resonance Imaging (MRI) is safe in pregnancy and can be used for staging purposes. Maternal counseling is of paramount importance in decision making.

CASE REPORT

A 33 year-old, gravida 3, para 2 woman was admitted to hospital with abnormal vaginal bleeding of 2-month duration at 32 weeks of gestation. Gynaecological examination revealed about 3 cm fragile, exophytic lesion originating from the cervix protruding into the vagina. No invasion of the parametrium was observed. A cervical punch biopsy was performed. Histopathological finding was consistent with moderately differentiated cervical squamous cell carcinoma. On abdomino-pelvic magnetic resonance imaging, there was no evidence of dissemination of disease. With these findings, the patient was described as Stage Ib1 according to the FIGO classification. After termination of pregnancy at 36 weeks of gestation by caesarean section, type III hysterectomy and systematic pelvic, para-aortic lymphadenectomy was performed in September 2006. Macroscopically, the hysterectomy specimen revealed an exophytic,
papillary mass measuring 3.5x3.8x2.3 cm in diameters and occupying the endo and ecto-cervix by protruding into the vagina (Figure 1). Histologically, cervical tumor was composed of large cell keratinized type of invasive squamous cell carcinoma with lymphatic invasion and endometrium was disease-free. None of the 43 pelvic and para-aortic lymph nodes were invaded and borders of the specimen were tumor free. After an uneventful post-operative period, she was discharged from the hospital. No adjuvant therapy was applied to the patient and during follow up for 27 months; the patient has shown no evidence of recurrence.

**DISCUSSION**

Cervical carcinoma is an important cancer-related cause of death in women worldwide, also during pregnancy. Especially in the undeveloped countries, it is the leading cause of cancer-related death in women of reproductive age. The predominant histological cell type is squamous cell carcinoma (80-85%), followed by adeno-carcinoma (15-20%). Of the 3% cervical cancers are diagnosed in pregnancy (4). During the pregnancy the symptoms are often misinterpreted, resulting in delayed diagnosis. This could be prevented by routine speculum inspection of the cervix and a Pap smear test at each antenatal visit (1). In the present case, the patient was complaining with an abnormal vaginal bleeding for 2 months and she was not taken an antenatal care. Diagnostic evaluation of cervical carcinoma in pregnancy includes clinical and cytological assessment, colposcopy, if necessary with directed biopsy, conization and radiographic imaging (5). In our case there was a clinical apparent exophytic and papillary tumor. Therefore, we carried out a directed biopsy for histopathological diagnosis. In pregnant women with cancer, imaging tests for staging purposes should be limited to those associated with the lowest exposure to ionizing radiation. X rays, isotope scans and computerized tomography should be avoided. MRI can be used for staging procedures during pregnancy (6). But in pregnant patients with more than bulky FIGO stage IB2 disease or those with high-risk histology (small cell carcinoma); a chest X ray with abdominal shielding for evaluation of pulmonary metastatic disease is warranted (7). We performed an abdomino-pelvic MRI and chest X ray for our patient and there was no evidence of metastases.

Therapy for invasive cervical cancer in pregnant women will depend on; stage of the disease, duration of pregnancy, institutional preference and expertise available and the wishes of the patient and her family. Radical hysterectomy and systematic pelvic lymphadenectomy is the preferred method for stage IB and early stage IIA disease (8). Before 20 weeks of pregnancy, radical surgery and lymphadenectomy can be carried out with the fetus in utero (1). Those between 20 to 32 weeks’ gestation, present a difficult problem; in such situation treatment may be delayed until the fetus has a better chance of survival. No adverse maternal outcomes were observed when delays of 11 to 17 weeks were allowed (9); however, a report of progression of the disease if therapy was delayed is worth noting (10). Once the fetus has reached sufficient maturity, delivery via a high classical caesarean section would be advisable prior to radical hysterectomy and lymphadenectomy (1). In the present case, pregnancy was terminated at 36 weeks of gestation by caesarean section, following by radical hysterectomy and pelvic, para-aortic lymphadenectomy. Vaginal delivery in the presence of an invasive cancer of the cervix carries risk of; dissemination of malignant cells into lymphatic or vascular channels (8), hemorrhage, sepsis, cervical laceration, tumor

![Figure 1](image-url)
implantation at episiotomy sites (11). For this reason, we preferred caesarean section for our patient.

It appears that pregnancy-associated cervical carcinoma has a better prognosis than in the non-pregnant population due to the relatively high proportion of patients with early-stage disease. However, after stratifying for stage, no differences between the pregnant and the non-pregnant group could be observed with regard to tumor characteristics, the course of disease, survival analyses and complication rates of treatment (5). Although there does not appear to be a difference in maternal survival between women who have a vaginal delivery or caesarean section, the potential for recurrence in the episiotomy site should be kept in mind (11). During follow up, our patient has no evidence of recurrence for 27 months.

In conclusion, pregnancy offers an ideal opportunity for cervical cytologic screening. A patient with carcinoma in situ and micro-invasive carcinoma can be followed and delivered vaginally, with follow up and treatment done at 6 weeks postpartum. The treatment of invasive carcinoma in pregnancy is tailored to the patient according to her wishes, the gestational age, and the extent of the lesion.

**REFERENCES**