

A case of cervical cancer diagnosed during pregnancy

M. Englert-Golon¹, N. Smolarek², B. Burchardt³, R. Słopień⁴, S. Sajdak¹

¹Department of Operative Gynecology, ²Department of Mother's and Child's Health, ³Forensic Medicine Department, ⁴Department of Gynecological Endocrinology, University of Medical Sciences of Poznań, Poznań (Poland)

Summary

The authors present a case of cervical cancer diagnosed at 27 weeks of pregnancy. After cervical biopsy invasive squamous cell carcinoma G1 was diagnosed and the patient qualified for radical hysterectomy with pelvic lymphadenectomy. After hysterectomy with pelvic lymphadenectomy, invasive squamous cell carcinoma G3 with metastases to left inguinal lymph nodes was diagnosed. The patient qualified for three courses of cisplatin chemotherapy and subsequent radiotherapy.

Key words: Cervical cancer; Pregnancy; Chemotherapy.

Introduction

Malignancies during pregnancy are infrequent with an approximate incidence from 1 in 1,000 to 1 in 10,000 pregnancies. Cervical cancer is the most common malignancy diagnosed during pregnancy, and the incidence rates vary from 1 in 1,200 to 1 in 2,500, but only 20% of these are found in the prenatal period. Therapeutic options include surgery with or without adjuvant treatment, concurrent chemoradiation, and neoadjuvant chemotherapy connected with radical surgery. For women diagnosed with more advanced cervical cancer than Stage IB1, standard management is with chemoradiotherapy, however some cases of Stages IB2 and IIA cervical cancer may be suitable for surgical treatment [1, 2].

Case Report

A 34-years old patient was admitted to the Department of Operative Gynecology Poznań University of Medical Sciences because of stillbirth and vaginal bleeding at 27 weeks of a seventh pregnancy. Patient history included six spontaneous deliveries, five full term pregnancies, and one premature labor. A child from the third pregnancy was born with polydactyly, a child from the sixth pregnancy was at 33 weeks with a birth weight of 1,920 grams with cleft lip and palate. She smoked 20 cigarettes a day, she did not remember when she had last cytological examination, she had no chronic diseases, and her father had stomach cancer.

After cervical biopsy, invasive squamous cell carcinoma G1 was diagnosed and the patient qualified for radical hysterectomy with pelvic lymphadenectomy. After hysterectomy with pelvic lymphadenectomy, invasive squamous cell carcinoma G3 with metastases to left inguinal lymph nodes was diagnosed. The tumor was classified as FIGO Stage IIB. The patient qualified for three courses of cisplatin chemotherapy and subsequent radiotherapy. Eight months later due to the elevated levels of creatinine and the

presence of left-sided hydronephrosis, percutaneous nephrostomy was performed, resulting in normal diuresis. Fourteen months postoperatively, patient was hospitalized due to a recurrence confirmed with a CT scan, which showed a 48×38-mm mass on the posterior left-side pelvic wall, infiltrating the pear-shaped muscle, the sigmoidal wall at the length of 25 mm, the left ureter, and the bladder wall at a length of 10 mm. After presenting the clinical situation and possible therapeutic options, the patient refused further treatment.

Discussion

Cancer during pregnancy represents a rare coincidence which demands intensive interdisciplinary care. Gynecologic cancer during pregnancy is a special challenge because both the cancer and treatment may affect both mother and fetus. Currently, there are no guidelines on how to deal with this special coincidence. The scientific basis for the management of gynecological cancers during pregnancy is largely drawn from retrospective studies, case reports, personal experience, or from management of the non-pregnant patients [3].

Treatment options regarding cervical cancer during pregnancy depend mainly on the stage of the disease and the gestational age at the time of diagnosis. During the third trimester, fetal maturity is awaited and a cesarean section followed by standard treatment is proposed [4].

The usual method of treatment of cervical cancer more advanced than Stage IB1 is chemoradiotherapy. However some cases of Stages IB2 and IIA may be suitable for surgical treatment. Women diagnosed with cervical cancer Stage IIB should deliver by cesarean section immediately followed by radical hysterectomy with lymphadenectomy [3, 4].

Positive nodal status has implications on further management and can also alter the outcome of pregnancy. For more advanced stages, usually suggested chemoradiotherapy includes cisplatin administration with external beam radiotherapy, followed by brachytherapy. Cisplatin is thought to be safe in the second and third trimesters of pregnancy, but pelvic radiotherapy should be avoided during pregnancy. Only few cases of Stages IB1 to IIB cervical cancer during pregnancy treated with neoadjuvant chemotherapy followed by radical surgery have been reported in the literature. About 50% of such patients developed recurrence located in pelvis, para-aortic lymph nodes, abdominal wall, and peritoneal cavity [3, 5].

The authors describe a case of cervical cancer Stage IIB during pregnancy with after therapy free of disease interval lasting about 12 months. Because of positive lymph nodes, the present patient was treated with postoperative adjuvant chemotherapy and radiotherapy to reduce risk of recurrence.

References

- [1] Morice P., Uzan C., Gouy S., Verschraegen C., Haie-Meder C.: "Gynaecological cancers in pregnancy". *Lancet*, 2012, 379, 558.
- [2] Takushi M., Moromizato H., Sakumoto K., Kanazawa K.: "Management of invasive carcinoma of the uterine cervix associated with pregnancy: outcome of international delay in treatment". *Gynecol. Oncol.*, 2002, 87, 185.
- [3] China S., Sinha Y., Sinha D., Hillaby K.: "Management of gynaecological cancer in pregnancy". *The Obstetrician & Gynaecologist*, 2017, 19, 139.
- [4] Han S.N., Mhallem Gziri M., Van Calsteren K., Amant F.: "Cervical cancer in pregnant women: treat, wait or interrupt? Assessment of current clinical guidelines, innovations and controversies". *Ther. Adv. Med. Oncol.*, 2013, 5, 211.
- [5] Bader A.A., Petru E., Winter R.: "Long-term follow-up after neoadjuvant chemotherapy for high-risk cervical cancer during pregnancy". *Gynecol. Oncol.*, 2007, 105, 269.

Corresponding Author:

R. STOPIEŃ, M.D.

Department of Gynecological Endocrinology

Ul. Polna 33

60-535 Poznań (Poland)

e-mail: asrs@wp.pl