Case Report
JCAM

Cesarean Delivery with Bilateral Ovarian Transposition for Locally Advanced Cervical Cancer

Lokal İleri Evre Serviks Kanserinde Sezeryan Doğumda Bilateral Ovaryan Transpozisyon

Locally Advenced Cervical Cancer in Pregnancy

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Özet

Biz vakamızda özellikle 3. trimestırda lokal ileri evre serviks kanserinin, sezeryan ile doğum esnasında ovaryan transpozisyon uygulama yöntemi hakkında tartışmayı amaçladık. Hastamız 26 yaşında gebeliğinin 29 haftasında olup 9 gündür amnios sızıntısı devam etmektedir. Steril spekulum incelemesi sırasında geniş servikal lezyon saptandı. Servikal Biyopsi sonucu invaziv servikal kanser olarak rapor edildi. Manyetik rezonans görüntülemede şüpheli sağ parametriyal katılımı ile nodal tutulumu olmayan (MRG) 55X 63X 68 mm servikal lezyon, tutulum gösterilmiştir. Non-reaktif fetal durum ve şüpheli koryoamnionit ön tanısı ile elektif sezeryan planlandı. Otuzuncu gebelik haftasında elektif sezeryan ve bilateral ovaryan transpozisyon uygulandı. Pelvik radyasyon, eksternal brakiterapi ileri evre serviks kanseri için standart tedavi olarak uygulandı. Genç kadınlarda gebeliğin 3. trimestırında fetal matürite sağlandığında sezeryan uygulamasına ilave ovaryan transpozisyon uygulanması önerilmelidir.

Anahtar Kelimeler

Servikal Kanser; Ovaryan Transpozisyon; Gebelik

Abstract

We aimed to discuss about management of pregnancy with locally advanced cervical cancer, especially at the third trimester with ovarian transposition concomittant with cesarean delivery.A 26 year old patient who was at the 29th week of gestation had amniotic leakage for 9 days. During the sterile speculum examination, a large cervical lesion was detected.The cervical biopsy revealed invasive squamous cervical cancer. An magnetic resonance imaging(MRI) showed 55X63X68mm cervical lesion with suspicious right parametrial involvement, and no nodal involvement.An elective cesarean delivery decision was taken due to non-reassuring fetal status and suspicious chorioamnionitis.At 30th week of gestation, an elective cesarean delivery with bilateral ovarian transposition was performed.Pelvic radiation, including external beam and brachytherapy, has been the standard treatment of advanced cervical cancer.During the third trimester, fetal maturity is awaited and a caesarean section followed by standard treatment is proposed and the ovaries can be preserved with ovarian transposition in young women.

Keywords

Cervical Cancer; Ovarian Transposition; Pregnancy

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Introduction

Cervical cancer is relatively uncommon during pregnancy, however, it is the most commonly diagnosed gynaecological malignancy during pregnancy: incidence rates vary from 0.1 to 12 per 100,000 pregnancies[1,2]. The managament is difficult and some individualized factors such as diagnosed time of gestational age, patient desire, tumor size, diseases stage, histology, maternal and fetal risks can effect management. We present a case who had pregnancy with cervical cancer that was diagnosed at the third trimester. We aimed to discuss about management of pregnancy with locally advanced cervical cancer, especially at the third trimester with ovarian transposition concomittant with cesarean delivery

Case Report

A 26 year old patient who was at the 29 th week of gestation had amniotic leakage for 9 days. During the sterile speculum examination, a large cervical lesion was detected. The cervical biopsy revealed invasive squamous cervical cancer. She was referred to our clinic for follow-up and treatment. Speculum and pelvic examination revealed a 5 cm cervical mass on the anterior lip of the cervix, upper vaginal involvement and suspicious right parametrial involvement. The rupture of membranes (PPROM; preterm premature rupture of membrane) was confirmed. An magnetic resonance imaging (MRI) showed 55X 63X 68 mm cervical lesion with suspicious right parametrial involvement, and no nodal involvement (Figure1-2).

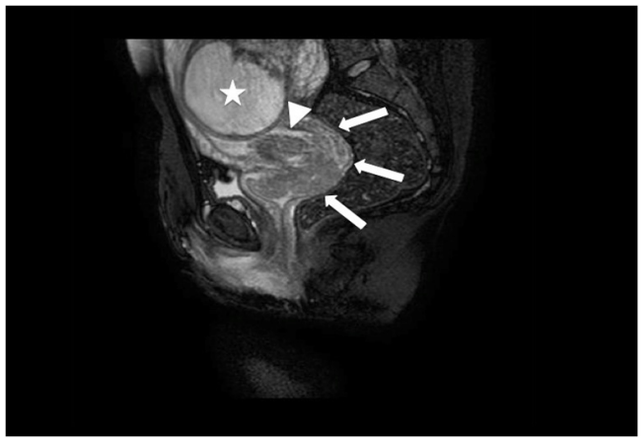

Figure 1. Sagittal T2 weighted MR image shows cervical carcinoma invading the cervical stroma and posterior fornix of the vagina (arrows). Upper part of the cervical canal (arrow head) can be normally seen. Fetal head (asterix) is located beside the cervix

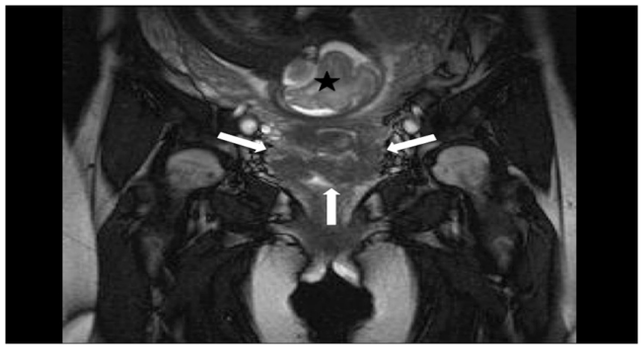

Figure 2. Coronal T2 weighted MR image shows cervical carcinoma invading the cervical stroma and minimally parametrium (arrows). Fetal head (asterix) is located above the cervix.

The fetal biometry and well being was evalauted. Delaying treatment to gain time for fetal maturity was choosen. A single course antenatal corticosteriod was given. The fetus and maternal status were evaluated regularly. The white blood and erythrocyte sedimentation rate (ESR) were 9000/ mm3, and 96 mm/h, respectively. An elective Cesarean delivery decision was taken due to non-reassuring fetal status and suspicious chorioamnionitis. At 30 th week of gestation, an elective cesarean delivery with bilateral ovarian transposition was performed. The patient was referred to radiotherapy after postpartum period. The baby had no abnormalities with follow-up ranging from birth to 10 months. The patient was still undergoing treatment when her case was reported.

Discusson

Cervical cancer is the most commonly diagnosed gynaecological malignancy during pregnancy. 70% of cervical cancers during pregnancy are diagnosed at stage I [3]. The most common symptom is vaginal bleeding, as well as vaginal discharge. Symptoms can be mistaken for complications of pregnancy, and diagnosis delay occurs if the level of suspicion is low. The diagnostic approach to cervical cancer during pregnancy is similar to that of nonpregnant women. Cervical cancer is staged clinically by clinical examination, in pregnant women, especially after the second trimester and beyond, clinical examination can be difficult[1,4]. Also, during pregnancy physiological cervical changes at cervical tissue such as oedem, increased vascularity, and hypertrophy may change tumor size, as well as stage.

For diagnosing and staging MRI can be used. MRI does not subject the fetus to ionizing radiation and may play an important role in the initial evaluation of the pregnant patient with cervical cancer. MRI can help determine tumour size in three dimensions, stromal invasion, vaginal and parametrial invasion, and also lymph node infiltration[5].

Multidisciplinary approach is recommended for treating a pregnant patient with cervical cancer. If pregnancy preservation is not aimed, management is similar to nonpregnant women. If pregnancy preservation is desired, the tretament choices can depend on before diagnosed 20- 22 weeks or after. For pregnant women with early stage disease (FIGO: IA2, IB1, 2A) diagnosed after 20 weeks of gestation, treatment may be delayed until the fetus has gain maturity[1,4]. An individualized treatment plan should be determined, regarding fetal maturity, however, delaying treatment beyond 32-34 weeks is not recommended. A Caesarean section may be chosen instead of vaginal delivery due to potential for haemorrhage, and the possibility of tumour implantation at episiotomy sites[6,7]. During pregnancy, surgery can be performed safely by skilled surgeons and anaesthetists. We started the operation with pfannenstiel incision and after cesarian section, peduncle of over was freed and was sutured outside the pelvis (Figure3).

When the pregnancy is terminated, the patient can be treated according to the stage of the disease. Pelvic radiation, including external beam and brachytherapy, has been the standard treatment of advanced cervical cancer. In younger women who referred to irradiation or radical hysterectomy, the ovaries can be preserved both hormonal and surrogate-assisted reproductive function[8]. Ovarian transposition is proposed as a way to

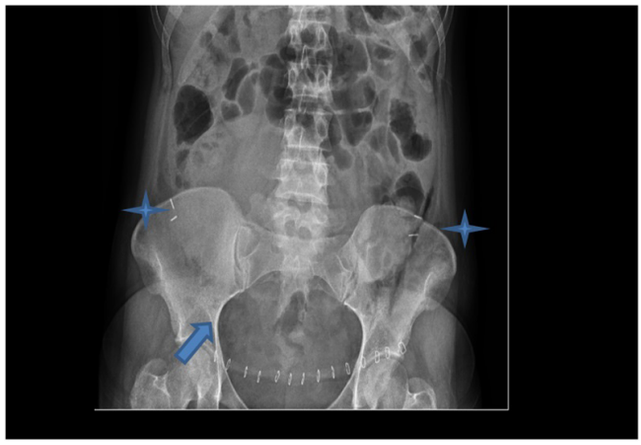

Figure. 3. The level of bilateral ovarian tansposition by marked metal clips at inferior ovarian edge.

preserve ovarian function in patients receiving pelvic radiation therapy.

The gestational week is the most important factor to decide for management of cervical cancer during pregnancy. During the third trimester, fetal maturity is awaited and a caesarean section followed by standard treatment is proposed. Multidisciplinary approach is mandatory regarding obstetrician, gynecologic oncology expert, radiation oncologist, neonatal specialist, oncologist, as well as with the patient and her relatives. There are no specific guidelines for the treatment of locally advanced cervical cancer during third trimester pregnancy. In young patients ovarian transposition during cesarean section is proposed as a way to preserve ovarian function in patients receiving pelvic radiation therapy.

Competing interests

The authors declare that they have no competing interests.

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