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Tongue Cancer during Pregnancy: A Case Report

Sima Giti[1], Khadijeh Abadian[2, 3*]

1. *Perinatology Fellowship, Sarem Fertility and Infertility Research Center, Sarem Women's Hospital, Tehran, Iran.*
2. *PhD Candidate of Reproductive Health, Department of Midwifery and Reproductive Health, Shahid Beheshti University of Medical Sciences, Tehran, Iran*
3. *Sarem Fertility and Infertility Research Center, Sarem Women's Hospital, Tehran, Iran*

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Corresponding Information:
Khadijeh Abadian, PhD Candidate of Reproductive Health, Department of Midwifery and Reproductive Health, Shahid Beheshti University of Medical Sciences, Tehran, Iran
Sarem Fertility and Infertility Research Center, Sarem Women's Hospital, Tehran, Iran
Email: *kh_abadian@yahoo.com*
Tel: 09125106790

ABSTRACT

Background & Objective: Despite the rarity of head and neck squamous cell carcinoma during pregnancy, the outbreak of its various malignant types is probable during pregnancy due to the increased maternal age and decreased age of cancer occurrence. Therefore, paying attention to any abnormal symptoms in any period, such as pregnancy, seems necessary. This study aimed to report a case of tongue cancer diagnosed during pregnancy.

Case Report: A 31-year-old woman who was at 18 weeks of her first pregnancy noticed an Aphthous stomatitis on her tongue. Since the routine Aphthous stomatitis treatment failed to treat the lesion and it developed and swelled in the neck and mouth region, the patient referred to her physician again. After carrying out a biopsy of the lesion, squamous cell carcinoma of the tongue was diagnosed. The patient underwent chemotherapy and radiotherapy after terminating the pregnancy by a cesarean section, and the malignant tumor shrank.

Conclusion: It seems that a complete multidisciplinary study is needed to minimize fetal health risks and to optimize maternal treatment outcomes.

Keywords: Aphthous, Pregnancy, Squamos cell carcinoma, Tongue cancer

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Introduction

Head and neck squamous cell carcinoma (SCC) is very rare during pregnancy **(1,2)**. It is usually difficult to manage a malignancy detected during pregnancy. There is almost always a difference between proper and complete maternal treatment and fetal health. Given the diagnosis of cancer during pregnancy, considering prospective randomized clinical trials that may be recognized as gold standards for the treatment of the disease is impossible **(3)**. Malignant tumors have been reported to occur in one case per 1,000 pregnancies **(4,5)**. Due to the increased maternal age and decreased age of cancer occurrence, malignant tumors are more likely to occur during pregnancy **(6)**. When malignant tumors are diagnosed during pregnancy, the maternal or fetal prognosis depends on the method of treatment used **(4,5)**. Understanding the specific features of the tumor during pregnancy is very important; however, there are few reports of oral cancer management during pregnancy **(5,6)**. The current study aimed to report a case of tongue cancer diagnosed during pregnancy.

Case Report

A 31-year-old G1P0A0 woman referred to the hospital for prenatal care. Everything was normal in preliminary examinations, including first and second trimester of fetal screening, fetal anomaly scan, and maternal physical conditions. At 18 weeks of gestation, the patient referred with a complaint about an Aphthous stomatitis on her tongue and received routine treatment. At 28 weeks of gestation, the patient referred with a worse condition while the right side of her mouth and neck was severely swollen and painful. The patient was unable to swallow and speak. She had lost weight and was communicating with her physician through writing. To control her condition, she was referred to a maxillofacial surgeon at a private center and injectable nutritional supplements were prescribed.

At the time of referral to the maxillofacial surgeon, the patient underwent a biopsy of the tongue and throat by accepting the risk of a biopsy under complete anesthesia. At this point, the patient was 31 weeks pregnant.

After 10 days, the pathologic result with the diagnosis of squamous cell carcinoma (SCC), poorly-differentiated (G3), was reported to the referring physician and the patient. The patient was immediately referred to an oncologist. Since the patient was at her 33 weeks of gestation, the physician decided to terminate her pregnancy so that she could begin chemotherapy as soon as possible. The patient was hospitalized for cesarean section and hydrocortisone was prescribed for fetal lung development. After conducting the cesarean section, a healthy infant was born and was discharged with the mother after routine care. 10 days after the cesarean section, chemotherapy and radiotherapy were simultaneously initiated. After finishing the course of treatment, the tumor became quite small such that there was no need for surgery or removal of the tongue or larynx. The patient was able to talk again so that she could communicate with others without the need to write. The patient is currently undergoing the follow-up after the treatment and, fortunately, her current condition is satisfactory.

Discussion

Oral cancer is usually considered a disease that occurs in the late stages of life. However, tongue cancer is also found among young patients of childbearing age. These women often have risk factors for developing oral malignancies. Numerous cases of oral cancer have been reported in association with systemic lupus erythematosus **(7)**. Other risk factors for this issue include smoking and abusing alcohol, as well as having a history of cancer in first-degree family members **(8–10)**.

Effective cancer treatment can pose a great risk to the fetus. Chemotherapy and radiotherapy prescribed in the first trimester increase the risk of fetal impairments or spontaneous abortion **(8,9)**. However, this may take a different form at the end of pregnancy. In such a circumstance, optimal delivery time at 34 weeks of gestation can be brought forward due to recent advances in perinatal and neonatal medicine. The mortality rate at and after 30 weeks of gestation is only 1% **(10)**. Managing tongue carcinoma during pregnancy is complicated; its treatment is primarily based on oncological and surgical evaluations of the malignancy, which raise emotional and ethical challenges. Available data emphasize the delicate balance between fetal and maternal health in this situation. When planning the treatment, the best decision should be taken to ensure maternal and fetal health. In this case, since the diagnosis was ultimately made in the late stages of pregnancy, the decision to terminate the pregnancy and maintain fetal health was not difficult and the patient received the appropriate treatment. It seems that a complete multidisciplinary study, with a thorough and straightforward discussion, is needed to minimize fetal health risks and to optimize maternal treatment outcomes.

Conclusion

In this particular case, consulting the oncologist at the appropriate time led to appropriate treatment, and given the patient's specific circumstances, the best treatment for the patient occurred.

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Conflict of Interest

The authors declared no conflict of interest regarding the publication of this article.

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