

Follow-Up of Tongue Cancer Diagnosed During Pregnancy: A Case Report

Khadige Abadian ^{1*}, Sima Giti ²

¹ Assistant Professor, Department of Midwifery and Reproductive Health, School of Nursing and Midwifery, Shahroud University of Medical Sciences, Shahroud, Iran.

² Perinatology Fellowship, Sarem Fertility and Infertility Research Center, Sarem Women's, Hospital, Tehran, Iran.

***Corresponding Author:** Khadige Abadian, Assistant Professor, Department of Midwifery and Reproductive Health, School of Nursing and Midwifery, Shahroud University of Medical Sciences, Shahroud, Iran.

Received date: September 08, 2022; Accepted date: September 14, 2022; Published date: September 26, 2022

Citation: Abadian K., Giti S. (2022). Follow-Up of Tongue Cancer Diagnosed During Pregnancy: A Case Report. *Clinical Gynaecology and Breast*. 1(1); DOI:10.31579/2834-8427/001

Copyright: © 2022 Khadige Abadian, This is an open access article distributed under the Creative Commons Attribution License, which permits unrestricted use, distribution, and reproduction in any medium, provided the original work is properly cited.

Abstract

Oral cancer is one of the most common malignancies in the head and neck area, which can also be seen during pregnancy. This study was conducted with the aim of following the report of a case of tongue cancer diagnosed during pregnancy. In this study, a 34-year-old woman who was in the 18th week of her first pregnancy noticed an aphthous lesion on her tongue and then developed pain and swelling in her neck and mouth. After biopsy of the lesion, squamous cell carcinoma of the tongue was diagnosed. For this patient, it was decided to undergo chemotherapy and radiotherapy after cesarean section in the 33rd week of pregnancy. The treatment for the patient resulted in iodine and the malignant tumor was reduced. 3 years after the completion of the treatment and with follow-up at regular intervals, there is still no sign of disease recurrence in the individual. Therefore, in addition to more investigations in this field and obtaining more results, it seems that follow-up at regular intervals can be a suitable solution to prevent the recurrence of the disease.

Keywords: pregnancy, tongue cancer, follow-up

Introduction

Oral cancer is one of the most common malignancies in the head and neck region [1]. And according to the World Cancer Observatory, the number of people suffering from it is increasing, so that it is possible to reach more than 29 million people in the whole world by 2030 [1,2].

The risk factors of this disease include low consumption of fruits and vegetables, tobacco consumption, alcohol consumption, smoking, betel nut consumption, and bad eating habits in general and because these behaviors are commonly seen in men, this type of cancer is more common in men than women [3].

Of course, researchers have studied risk factors such as chronic mucosal trauma, poor oral hygiene, or poor dental condition, and the role of human papilloma virus in the occurrence of this disease in young people [1,4]. On the other hand, it should be said that the incidence of head and neck squamous cell carcinoma (SCC) during pregnancy is also very rare [5].

On the other hand, it should be said that the incidence of head and neck squamous cell carcinoma (SCC) during pregnancy is also very rare [7]. Due to the special conditions during pregnancy, it is difficult to manage this malignancy that was diagnosed during pregnancy, and all aspects regarding the correct and complete treatment of the mother and the health of the fetus should always be considered [5,6].

In such situations, the prognosis of the mother or the fetus depends on the treatment method used, and there are few reports of the follow-up of oral cancer diagnosed during pregnancy [5,7]. For this reason, the present study was conducted with the aim of following the report of a case of tongue cancer diagnosed during pregnancy.

Case Report

The patient was a 34-year-old G1P0A0 woman who was referred to a Korean hospital for prenatal care. In the examination of all cases, including the screening of the first and second trimester of the fetus and the physical condition of the mother, it was normal. In the 18th week of pregnancy, the patient presented with symptoms of aphthous stomatitis on her tongue and received initial treatment, but in the 28th week of pregnancy, the patient's symptoms intensified. He presented with a severely swollen and painful mouth and neck on the right side. To control her condition, she was referred to a maxillofacial surgeon and the patient underwent a biopsy of the tongue and pharynx under full anesthesia while she was in the 31st week of pregnancy. The pathology result was a diagnosis of squamous cell carcinoma (SCC), with differentiation (G3), and as a result, the patient was referred to an oncologist. Because the patient was in her 33rd week of pregnancy, the therapists decided to end the pregnancy by caesarean section with all the arrangements for treating the fetal lung so that she could start chemotherapy. 10 days after caesarean section, the patient was treated with a combination

of chemotherapy and radiotherapy. The tumor responded to the treatment and became very small, his clinical problems disappeared and he returned to his normal life. The patient was re-examined 3 years after the completion of his successful treatment while being followed up at regular intervals. During these 3 years, the patient modified his lifestyle, used fresh fruits and vegetables on a daily basis, exercised regularly, and performed tests regularly according to the doctor's orders, and fortunately, his current condition is satisfactory.

Discussion

Despite its common age, oral cancer can also be seen in reproductive age [8]. In the history of these people, tobacco and cigarette consumption, alcohol abuse, and having a history of cancer in the first degree family members are usually seen [1, 8]. Due to the rarity of tongue cancer during pregnancy, it is possible to diagnose this disease with a low level of clinical suspicion, misdiagnosis and delay in treatment. On the other hand, due to the rarity of this type of cancer during pregnancy, the treatment methods, prognosis and long-term effect on fetal growth are not well known [9]. Unfortunately, until now, there are no international guidelines available for the treatment of oral tongue cancer during pregnancy [10-12].

In one of the investigations, it was found that in three cases of tongue cancer during pregnancy and for whom standard treatment was not followed, one person developed the disease and two died after a short period of time [10]. Fortunately, regarding the patient of this study, after 3 years of completion of the treatment, considering that the patient has regular visits to the doctor and performs follow-up tests, so far, there is no sign of relapse of the disease.

Of course, it is necessary to conduct more studies to identify the etiological factors of oral cancer, to help prevent, improve treatment and prevent the recurrence of the disease [10].

Conclusion

Considering the present study, it seems that if you pay attention to the smallest abnormal symptoms in the mouth and teeth that do not heal easily, and prompt and timely treatment and follow-up at regular intervals after completing the treatment process and lifestyle modification Patients suffering from this type of cancer can be saved from early death.

Acknowledgment

The authors would like to thank the staff of Sarem Women's Hospital.

Conflict of Interest

This study has no conflict of interest regarding the publication.

References

1. Su, J., Lu, S., Jiang, S., Li, B., Liu, B et al. (2021). Engineered protein photo-thermal hydrogels for outstanding in situ tongue cancer therapy. *Advanced Materials*, 33(21), 2100619.
2. Tagliabue, M., Belloni, P., De Berardinis, R., Gandini, S., Chu, F. et al. (2021). A systematic review and meta-analysis of the prognostic role of age in oral tongue cancer. *Cancer Medicine*, 10(8), 2566-2578.
3. Chuang, S. T., Chen, C. C., Yang, S. F., Chan, L. P., Kao et al. (2020). Tumor histologic grade as a risk factor for neck recurrence in patients with T1-2N0 early tongue cancer. *Oral Oncology*, 106, 104706.
4. Pickering CR, Zhang J, Neskey DM et al. (2014). Squamous cell carcinoma of the oral tongue in young non-smokers is genomically similar to tumors in older smokers. *Clin Cancer Res*. 20(14): 3842-3848.
5. Giti, S., & Abadian, K. (2019). Tongue Cancer during Pregnancy: A Case Report. *Journal of Obstetrics, Gynecology and Cancer Research (JOGCR)*, 4(2), 75-77.
6. Alramadhan, S. A., Fitzpatrick, S. G., Kim, K., Cohen, D. M., Bhattacharyya, I et al. (2021). Case of squamous cell carcinoma of the tongue in a pregnant woman, with literature review. *Quintessence International*, 52(4).
7. Wenneker, E., Xu, Y., & Hernandez, D. J. (2022). Two Cases of Beta-Human Chorionic Gonadotropin-Positive Oral Tongue Cancer Resulting in False-Positive Pregnancy Tests. *Otolaryngology-head and Neck Surgery: Official Journal of American Academy of Otolaryngology-head and Neck Surgery*, 1945998221095391-1945998221095391.
8. Tsikouras, P., Paraskevopoulos, K., Bothou, A., Pastelli, N., Anthoulaki, X et al. (2020). Tongue cancer and pregnancy: Report of two cases in association with HPV infection and literature review. Is HPV vaccination necessary to prevent of tongue cancer?. *J Syst Integr Neurosci*.
9. Alramadhan, S. A., Fitzpatrick, S. G., Kim, K., Cohen, D. M., Bhattacharyya, I et al. (2021). Case of squamous cell carcinoma of the tongue in a pregnant woman, with literature review. *Quintessence International*, 52(4).
10. Tagliabue, M., Elrefaey, S. H., Peccatori, F., Favia, G., Navach, V et al. (2016). Tongue cancer during pregnancy: surgery and more, a multidisciplinary challenge. *Critical Reviews in Oncology/Hematology*, 98, 1-11.
11. Tsikouras, P., Paraskevopoulos, K., Bothou, A., Pastelli, N., Anthoulaki, X et al. (2020). Tongue cancer and pregnancy: Report of two cases in association with HPV infection and literature review. Is HPV vaccination necessary to prevent of tongue cancer?. *J Syst Integr Neurosci*.
12. Murphy, J., Berman, D. R., Edwards, S. P., Prisciandaro, J., Eisbruch, A et al. (2016). Squamous cell carcinoma of the tongue during pregnancy: a case report and review of the literature. *Journal of Oral and Maxillofacial Surgery*, 74(12), 2557-2566.

Ready to submit your research? Choose ClinicSearch and benefit from:

- fast, convenient online submission
- rigorous peer review by experienced research in your field
- rapid publication on acceptance
- authors retain copyrights
- unique DOI for all articles
- immediate, unrestricted online access

At ClinicSearch, research is always in progress.

Learn more <https://clinicsearchonline.org/journals/clinical-gynaecology-and-breast>



© The Author(s) 2022. **Open Access** This article is licensed under a Creative Commons Attribution 4.0 International License, which permits use, sharing, adaptation, distribution and reproduction in any medium or format, as long as you give appropriate credit to the original author(s) and the source, provide a link to the Creative Commons licence, and indicate if changes were made. The images or other third party material in this article are included in the article's Creative Commons licence, unless indicated otherwise in a credit line to the material. If material is not included in the article's Creative Commons licence and your intended use is not permitted by statutory regulation or exceeds the permitted use, you will need to obtain permission directly from the copyright holder. To view a copy of this licence, visit <http://creativecommons.org/licenses/by/4.0/>. The Creative Commons Public Domain Dedication waiver (<http://creativecommons.org/publicdomain/zero/1.0/>) applies to the data made available in this article, unless otherwise stated in a credit line to the data.