

Case Report

Successful pregnancy outcome following treatment for extensive maxillary mucoepidermoid carcinoma with metastasis –A case report

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Abstract:

Mucoepidermoid carcinoma (MEC) is a locally invasive tumour of the salivary glands and accounts for nearly one third of all malignancies of the major and minor salivary glands. It has a female preponderance and (3:2) common after the third decade of life. Here we report a case of a 32-year-old woman who had successful pregnancy outcome following treatment for extensive maxillary mucoepidermoid carcinoma with metastasis.

Keywords

Mucoepidermoid carcinoma, salivary glands, ulcer, antenatal care, Multidisciplinary team care (MDT)

Introduction

Salivary gland tumours are rare (3%) head and neck tumours. (1) One third of salivary gland malignant tumours are mucoepidermoid carcinoma (MEC) arising from the pluripotent cells of excretory ducts of salivary gland epithelium. (2)

It has a female preponderance and (3:2) common after the third decade of life. (3) Radiation exposure, tobacco use, viral infections, environmental chemicals, and gene mutations are associated with MEC. (2)

Mucoepidermoid carcinoma affects mainly the parotid glands. Glandular enlargement is soft, painless when involves minor salivary glands. Advanced tumour is associated with pain, pus discharge, ulceration, resorption of palatal bones and tumour spreading into adjacent cavities. (4) High grade MEC metastases to regional lymph nodes. (5)

Case history

A 22-year-old patient was diagnosed with suppurative MEC of maxillary antrum extending to parapharyngeal space and defaulted follow-up and treatment. She was symptomatic since the age of 16 years with an ulcer on the palate. At the age of 21 years, she became pregnant resulting in a term uncomplicated vaginal delivery.

At the age of 26 years, she was seen by ENT team in another

hospital for hearing problems and referred to Oro Maxilla Facial unit for further management. She defaulted treatment again.

One year later she attended antenatal clinic for her second pregnancy with a facial asymmetry along with large malignant looking palatal ulcer with a TNM stage of pT₂pN_{1b}pM_x (Stage III) (7).

After having a multidisciplinary team approach, a treatment plan was devised along with detailed patient counselling. The treatment was initiated after medical termination of her ongoing pregnancy.

After a surgical excision and correction of the defect with a palatal prosthesis, she was treated with radiotherapy and was on regular follow-up with contraception for 2 years.

At her age of 32, after complete remission of disease, she conceived spontaneously and had specialist led antenatal care. Her labour was induced at 38 weeks for fetal growth restriction but delivered by caesarean section due to intrapartum fetal distress. Mother and baby were discharged in good condition. Text Box 1 summarizes the timeline of events.

Text box 1: Timeline of events

2004 - (Age 16): Ulcer on hard palate noted by patient. medical advice not sought.

2009 (Age 21): Delivered her first baby

2010 (Age 22): Investigated for ulcer on hard palate for the first time and mucoepidermoid carcinoma diagnosed. Treatment planned but defaulted.

2014 (Age 26): Investigated by ENT team for hearing problem and transferred to oro maxillary facial (OMF) unit for further management and defaulted again.

2015 (Age 27): - Facial asymmetry and palatal ulcer detected during antenatal booking in her second pregnancy. Multidisciplinary team management initiated consisting of surgery and radiotherapy.

2020 (Age 32): Spontaneous conception and delivery after complete remission of disease.



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Figure 1: Extensive ulcer involving left palate

Discussion

Though this patient had a palatal ulcer for 5 years before her first pregnancy, she went through a pregnancy and an uncomplicated delivery without being noticed as the mucoepidermoid carcinoma is usually asymptomatic and slow growing in nature.

When the diagnoses of MEC was made for the first time the patient was having symptoms of advanced tumor and the treatment was further delayed due to poor patient compliance. Eventually when the patient accepted the treatment it was almost 6 years from onset of symptoms and 2 years from the diagnosis.

Though the patient's TMN staging of the disease was pT₂pN_{1b}pM_x (Stage III), with intensive multi-disciplinary treatment approach, she recovered completely and had a successful pregnancy.

Conclusions

Though mucoepidermoid carcinoma has no causal relationship with pregnancy, a wholistic antenatal care would detect unrelated conditions in otherwise a healthy and young population.

Despite the treatment was unacceptably delayed in our patient

due to poor compliance and resilience of the patient, she was successfully followed up during her pregnancy. This shows our well established primary antenatal health care system in Sri Lanka.

Conflicts of interests

There are no conflicts of interest.

Acknowledgements

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