CARCINOMA OF THE BREAST METASTATIC TO THE ORAL MUCOSA OF THE LOWER LIP

*Richard Pilcher BSc, FDSRCPS, FRCS
**Aisling Byrne (Miss), BDS, MFDSRCS
***Michael JC Davidson FDSRCS, FRCS
****Muhammad Israr MSC, FDSRCS

ABSTRACT

A case of breast carcinoma metastatic to the lower lip is reported. Histopathology demonstrated characteristic immunostaining and features of the primary tumour. It responded to a selective non steroidal aromatase inhibitor used for advanced breast carcinoma.

INTRODUCTION

Metastases to the lower lip from a distant primary source are uncommon. When they do occur they may not be recognised by the clinician or pathologist because of their rarity. If suspected it may prove difficult to prove their diagnosis with routine histopathology alone. Methods for confirming the diagnosis illustrated here are selective stains including immunostaining, comparison with the histopathology of the original tumour and the response to chemotherapy appropriate for the primary pathology.

CASE REPORT

A 71 year old caucasian female presented with an asymptomatic six week swelling of the lower lip. She was a non-smoker and consumed minimal alcohol. Disseminated carcinoma in situ of the breast had been diagnosed 16 years previously and was treated with wide local excision. 10 years later she developed bilateral lobular adenocarcinoma of the breast for which she underwent bilateral mastectomy. Adjuvant chemotherapy and radiotherapy were declined by the patient due to the potential side effects. Tamoxifen was considered contraindicated due to a previous deep vein thrombosis.

Examination revealed swelling and erythema of the lower lip on the left side with no palpable lymphadenopathy (figure 1). Intraorally there was a friable exophytic non-ulcerated mass 3-4 cm in diameter which involved the lower left alveolus, extending to the midline and the inner surface of the lower lip (figure 2).

The swelling was investigated with an incisional biopsy and diagnostic imaging. Plain radiographs taken showed no bony involvement of the mandible and no chest deposits. An MRI scan of the head and neck region confirmed the tumour to be confined to the soft tissues. There was no nodal involvement and no intracranial metastasis. Histopathology of the tumour within the lip (figures 3-6) was similar to the morphology of the grade 2 lobular adenocarcinoma of the breast diagnosed 10 years previously. It was oestrogen and progesterone receptor positive and tumour markers were identical. The patient was managed with a course of non steroidal aromatase inhibitor anastrazole which resulted in shrinkage of the tumour (figures 7 & 8).

Address for correspondence:
Dept of Oral and Maxillofacial Surgery, Taunton and Somerset Hospital, Musgrove Park, Taunton, Somerset TA15DA. e-mail: pilcher@freewire.co.uk
Figs 1 & 2. Appearance of lip swelling at initial presentation.

Figs 3 & 4. H & E showing infiltrating carcinoma with "Indian file" pattern, characteristic of lobular carcinoma of breast. Adnexal structures are also present.
Fig 5. Positive immunostaining for the epithelial marker Cam 5.2 in the tumour cells.

Fig 6. PASD (Periodic Acid Schiff after Diastase) staining demonstrating mucin (magenta) in some tumour cells.

Figs 7 & 8. Response of lip swelling to course of anastrazole.
DISCUSSION

Malignant metastatic neoplasms to the lower lip are uncommon and there are few reported cases in the literature. They account for approximately 1% of all oral malignancies. Most involve the mandible, lung, liver, breasts, prostate, kidney, adrenal gland, thyroid, ovary and colorectum. These are the most common areas of primary malignancy. Metastatic deposits to the oral soft tissues are rare. Metastatic breast carcinoma to the lip has previously been reported on only one occasion. Other malignancies reported as being metastatic to the lip are hypernephroma of the kidney, carcinoma of the lung, carcinoma of the stomach and carcinoma of the oesophagus.

Breast cancer accounts for 18% of all cancers worldwide and affects one in every nine females in the United Kingdom. There are various risk factors and these include sex (99% female), increasing age, family history, previous benign breast disease, geographical location, increased age at first birth, early menarche, late menopause, lifestyle (diet and obesity). Breast cancer most commonly metastasizes to the bone, brain, lung and liver.

Our patient was treated with a selective non-steroidal aromatase inhibitor (anastrazole) indicated in the treatment of advanced breast cancer and metastatic disease in post-menopausal females. Many breast cancers have oestrogen receptors and their growth is stimulated by oestrogen. In post-menopausal females, oestrogen is produced predominantly in the peripheral tissues by the aromatisation of adrenal androgens. Anastrazole works by inhibiting this process and so reducing the amount of oestrogen available, thereby decreasing/inhibiting the growth of the tumour.

A medline search reveals this to be the second reported case of breast metastasis to the lip in the English literature. It serves as a reminder that the differential diagnosis of a swelling of the oral soft tissues must include any previously diagnosed malignancy and this necessitates a thorough medical history. The side effects of any adjuvant therapy must always be balanced against the potential benefits and long term follow up must be arranged.

REFERENCES