Unusual presentation of more common disease/injury

Lower lip numbness in a patient with colorectal cancer

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Summary

Metastatic lesions to the mandible are rare, comprising less than 1% of all malignancies. A 75-year-old gentleman presented to ENT outpatient with a 3-week history of numbness over his lower lip on the right side followed by a rapidly growing swelling in his right mandibular region. The patient was diagnosed with an obstructing sigmoid tumour with metastasis to the liver and retroperitoneal adenopathy, 5 months ago. A colonic stent was inserted for the sigmoid tumour and patient was undergoing palliative chemotherapy. CT scan of the mandibular region showed mass lesion invading the ascending ramus of mandible and involving the right inferior alveolar nerve. Trucut biopsy confirmed metastatic adenocarcinoma.

BACKGROUND

Metastatic lesions to the mandible are rare, comprising less than 1% of all malignancies.

CASE PRESENTATION

This 75-year-old gentleman presented to the colorectal outpatient department with 2–3 months history of an increased frequency of loose stools with occasional blood spotting. There were no other significant presenting complaints. Abdominal and rectal examination was unremarkable. He had a colonoscopy done which showed a biopsy proven sigmoid adenocarcinoma. Staging CT scan showed metastatic liver disease, aortic adenopathy and left adrenal gland metastasis. A stent was placed to bypass the tumour prior to starting chemotherapy. He had four cycles of Xelox chemotherapy over a period of 12 weeks. Five months after he was diagnosed to have disseminated sigmoid tumour, he developed a sensation of numbness over his lower lip and jaw on the right side, followed by a swelling in the right mandibular region. At first he was treated by the dentist as a dental infection. As his symptoms persisted, he was referred to the ENT surgeons. On examination, there was a mildly tender, hard mass in the right mandibular region. There was no facial nerve palsy but there was right mental nerve anaesthesia noted.

INVESTIGATIONS

He had a CT scan of his facial region and a trucut biopsy from the mandibular mass.

OUTCOME AND FOLLOW-UP

CT scan of his facial region showed a 33.0 mm mass with destruction of the lingual and buccal cortex of the ascending ramus of mandible on the right side which extended to involve the region of the inferior alveolar canal involving the inferior alveolar nerve (figure 1). Histology from the trucut biopsy was focally positive for CK20 and monoclonal carcinoembryonic antigen. The appearances were

those of metastatic adenocarcinoma suggestive of an origin from a primary colorectal cancer.

DISCUSSION

Colorectal cancer is the second most common malignancy in Western societies. It is the second leading cause of death. 35 000 new cases of colorectal cancer are detected every year in the UK and is responsible for 19 000 deaths per year. Most common site of distant metastasis is the liver. Up to 30% of patients will have occult liver metastasis at the time of presentation. Pulmonary metastasis occurs in 5% of cases. Adrenal glands, kidney and bones are involved in 10% of cases.¹ Metastasis of colorectal adenocarcinoma to the mandible is very rare and very few cases have been reported in literature.

In this case, the patient was known to have disseminated colorectal cancer and he had presented to the dentist with numbness over his lower lip on the right side followed by a swelling in his right mandibular region. He was initially treated with antibiotics, suspecting it to be a dental infection. When the symptoms persisted, he was then referred to the ENT surgeons. A CT scan of the facial area and a trucut biopsy of the mass over the right mandibular region revealed it to be metastasis from the sigmoid tumour. He was then referred for palliative radiotherapy.

Metastatic lesions to the mandible are rare, comprising less than 1% of all malignancies.² The most common site of the primary tumour in females is the breast followed by the adrenal glands, colon, tumours involving the female genital tract and the thyroid glands. In men, the most common primary tumour site is the lung followed by prostate, kidney, bone and adrenal gland.³ Xelox seems to be effective and well tolerated as first line treatment for older patients with metastatic colorectal cancer. The prognosis is poor, with the mean survival rate, after diagnosis being only about 6–7 months.⁴ Metastasis to mandible from adenocarcinoma of the colon is quite rare and represents an incurable disseminated disease.

Figure 1 Mass in the right mandibular region.

Mental nerve neuropathy is also known as numb chin syndrome. It is characterised by facial numbness along the distribution of the mental branch of the trigeminal nerve. Most cases of this syndrome that are not dental in origin have been associated with malignant tumours or diffuse metastatic disease.⁵ The sign of mental nerve neuropathy should be considered as a significant sinister symptom and clinicians should be aware of mandible being a potential site of metastasis in colorectal cancer and such cases should be further investigated accordingly.

Learning points

- Colorectal cancer is a common malignancy but can metastasise to rare sites.
- Mental nerve neuropathy is not always dental in origin and can be associated with diffuse metastatic disease.
- The cause of mandibular swelling is not always local malignancy and appropriate investigations should be done to look for the primary site.

Competing interests None.

Patient consent Obtained.

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