Orofacial Pain and Numb Chin Syndrome as the Presenting Symptoms of a Metastatic Prostate Cancer

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Abstract:
We describe a patient with orofacial pain as the presenting symptom caused by a mandibular metastasis from a previously undiagnosed cancer of the prostate. This possibility should be considered in the differential diagnosis of male patients presenting with orofacial pain. (J Postgrad Med 2002;48:283-284)

Key Words: Mandible metastasis, prostate carcinoma, orofacial pain

Temporomandibular disorders causing orofacial pain are common in primary care settings. Most of these conditions are of a chronic and benign nature. Orofacial pain may, however, be caused by a primary or secondary malignant process in the bone. The most common malignant bone tumor is metastatic carcinoma and tumors arising in the breast, prostate, thyroid, lung, and kidney have a special propensity to spread to bone. Yet metastases to the jaws are rare: less than 1% of all tumors metastatise to the maxillofacial area.

We describe a patient who presented with a rare manifestation of the most common cancer in males: a metastasis to the mandible manifested by orofacial pain as the presenting symptom of a previously undiagnosed cancer of the prostate.

Case History
A 73-year-old man was seen by his family physician for the complaint of pain anterior to his right ear. He also had a history of hypertension, dyslipidaemia and cholelithiasis. The pain was relieved by non-steroidal anti-inflammatory drugs.

On a repeat visit one month later he again complained of pain in his right lower jaw and lower teeth, as well as of numbness of the chin and of the right side of his lower lip. He also mentioned constipation as an after complaint this time. His dental examination was normal.

He was referred to a neurologist and to a maxillofacial surgeon. Physical examination and panoramic radiogram of the teeth were normal. A panoramic radiogram of the mandible and a computerised tomogram of the oral region showed lytic lesions of the ascending ramus of the right mandible with partial destruction of the cortex, involving the mandibular angle and the posterior segment of the bone, the foramen and the mandibular canal (Figures 1-3). A blood test revealed elevated levels of Prostate Specific Antigen (PSA, 68 ng/ml; normal 0-4 ng/ml). On biopsy of the lesion metastatic carcinoma was found. Immunohistochemical staining for PSA indicated that the metastasis originated in the prostate.

Computerised tomogram of the abdomen and pelvis showed a soft tissue mass partially destroying the sacrum. At the level of the pubic bones an enlarged prostate was demonstrated, compressing both bladder and rectum. This was apparently the cause of the recent constipation. Computerised tomogram of the chest was normal.

A transrectal biopsy of the prostate confirmed the presence of adenocarcinoma of the prostate. A bone scan showed no other metastases than the ones reported. The patient was referred to an oncologist, and treatment was started with flutamide and goselerin.

Discussion
Temporomandibular disorders are common in clinical practice. They present with three cardinal features, orofacial pain is one of them; the other two being joint noises and restricted jaw function. The symptoms most often encountered are myofascial pain and dysfunction, due to habits of clenching...
or bruxism. These habits are sometimes related to stress or anxiety. Other causes are internal derangement, (mechanical interference due to an abnormal position of the articular disc) or osteoarthritis of the temporomandibular joint. Further causes are internal derangement, (mechanical interference due to an abnormal position of the articular disc) or osteoarthritis of the temporomandibular joint.

Metastatic tumours of the jaws are rare: less than 1% of all tumours metastasise to the maxillofacial area. Reports of these rare cases have been mainly published in oral surgery journals or in the oncological literature. Lately, a similar case report has been published in Urology.

General physicians, who, even in the internet access era, read mainly general medicine journals, may not be familiar with these reports. The patient reported here with orofacial pain proved to have a metastasis to the mandible from a previously undiagnosed prostate carcinoma. We found reports of only seven patients who had jaw symptoms as the presenting feature of a previously undiagnosed malignant tumor.

In our case, the patient also presented with another rare symptom: mental nerve neuropathy, causing unilateral numbness of the chin and lower lip. Sensory neuropathy confined to the chin and lower lip indicates a lesion involving only the mental or inferior alveolar branches of the mandibular division of the trigeminal nerve. Though rare, it is considered an ominous sign for relapsed or progressive malignant skeletal disease. The pathogenesis in most cases, as it was probably in our patient, is a bone metastasis directly affecting the nerve branch. Lossos and Siegal found a metastatic aetiology in 89% of their patients with the numb chin syndrome. Therefore, mental nerve neuropathy combined with orofacial pain, is an alarming combination that should make clinicians suspect a jaw metastasis.

Family physicians, who frequently advice patients with complaints of orofacial pain, should bear in mind, that whereas most of these symptoms are of a chronic and benign nature, metastasis to the mandible from a malignant tumour should be included in the differential diagnosis.

References