Symptomatic intracranial metastasis in penile carcinoma

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ABSTRACT

Distant metastases in penile cancers are rare, especially metachronous symptomatic intracranial metastasis. A middle-aged patient presented to us with an intracranial mass 2 years after being treated for penile cancer. Given the rarity of metastasis and the diagnostic dilemma along with the need for relief of neurological symptoms, it was excised and found to be a metastatic deposit. We discuss the case and review the relevant literature.

Key words: Brain metastasis, intracranial metastasis, penile cancers

INTRODUCTION

Penile cancer is primarily a locoregional disease. Treatment is focused toward the control of the primary and nodal disease. Systemic metastases occur in advanced cases, the commonest sites being lung, liver, and bone.[1,2] Intracranial metastases from carcinoma penis are extremely rare. The exact incidence is unknown probably because of underdiagnosis and under-reporting. Presence of an intracranial mass is often life-threatening and warrants prompt treatment to relieve the raised intracranial pressure. Surgery remains the mainstay of treatment of large symptomatic intracranial, metastases especially if the histological diagnosis is unsure, as is the case in penile cancers where intracranial metastases are uncommon.

CASE REPORT

A middle-aged male presented with a 10-day history of significantly discomforting headaches associated with progressive right upper limb weakness. Two years ago, he had been diagnosed with penile carcinoma and had undergone a partial penectomy with right groin node dissection at another hospital. Details of histology were unfortunately not available. He had remained asymptomatic till his current illness. On examination, he had papilloedema and right upper limb monoparesis. The penile stump was clean. There was an 1-cm left inguinal node which on fine-needle-aspiration yielded metastatic cells. CT abdomen-pelvis and chest X-ray were normal. MRI brain revealed a well-circumscribed, lobulated intra-axial mass in the left perisylvian area [Figure 1]. Differentials of a secondary versus a malignant primary tumor were considered. In view of his progressive neurological deterioration and reasonable diagnostic dilemma (given the rarity of symptomatic cerebral metastases in penile cancers), the mass was excised. He had a transient postoperative deterioration, which improved over 2 weeks. Histology revealed metastasis from squamous cell carcinoma [Figure 2].

He subsequently received whole brain radiotherapy (30 Gy/10 fractions) and palliative external beam radiotherapy to the left groin. At the 3-month follow-up, he remained clinically controlled.

DISCUSSION

Clinically symptomatic cerebral metastases in penile cancers are extremely uncommon. Our search of literature revealed only three reports. Lutterbach et al.[3] reported a case of right frontal metastasis developing in a patient with initially diagnosed early penile cancer. After treatment of the primary, he developed local recurrence which was salvaged. This was followed by pulmonary and subsequently liver and
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Our patient with penile cancer had a 2-year disease-free interval prior to presenting with the intracranial mass. In such cases, tissue diagnosis becomes essential unless the patient is severely disabled or has disseminated disease. Symptomatic and large, solitary intracranial metastases should generally be excised if accessible and safe. Not only does it provide tissue for diagnosis, it also relieves symptoms of raised pressure and can relieve neurological deficits, besides prolonging survival. Metastases are generally well circumscribed, noninfiltrating, and amenable to safe complete resection.

Although our patient did not have a PET scan (in view of logistical issues), his abdominal CT scan and chest X-ray were normal. Progressive neurological symptoms and a reasonable diagnostic dilemma warranted surgery with an acceptable neurological outcome. How much this would translate into a survival advantage remains a matter of conjecture. Role of chemotherapy in advanced cases is still to be established.[1,2,8]

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