Laparoscopic Hemicolectomy for Cutaneous Malignant Melanoma Metastasis to the Ileocaecal Valve

Abstract:

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Abstract

Colonic tumours are most frequently primary and lesions secondary to metastasis are uncommon. Malignant melanoma is an aggressive cancer, with a tendency to metastasize and recur. This report describes the case of a 66-year-old man who underwent wide local excision and adjuvant therapy for malignant melanoma three years prior to presentation with loose stools, abdominal cramps and iron deficiency anaemia. CT colonography showed a 6cm ileocaecal mass, and following a laparoscopic right hemicolectomy, histological examination revealed a metastatic melanoma to the ileocaecal valve. Subsequent positron emission tomography showed no residual metastatic disease. Malignant melanoma metastasis to the colon is a rare clinical entity. Metastectomy via laparoscopic right hemicolectomy is an appropriate and effective treatment.

Introduction

Colonic tumours are most frequently primary, with lesions secondary to metastasis uncommon. Malignant melanoma is an aggressive cancer, with a tendency to metastasize and recur.

Case Report

We present the case of a 66-year-old male who was referred with a 4 week history of loose stools, occasional abdominal cramps and iron deficiency anaemia. His background history was significant for undergoing a shave biopsy of a 7mm lesion on his left eyebrow three years previously. Histological examination revealed an invasive malignant melanoma (Clarkâ s level IV, Breslow 1.5mm, ulcerated) and he underwent a wide local excision at that time. Subsequent histology demonstrated a complete excision with clear margins. He received one year of adjuvant Interferon therapy and surveillance computed tomography (CT) of the thorax, abdomen and pelvis demonstrated no recurrent disease.

On initial colonoscopy, the large bowel was visualized to the ascending colon. However the caecum was not identified due to a long, tortuous colon and patient discomfort. Subsequent CT colonography showed an irregular, 6 cm intraluminal mass at the ileocaecal valve. The patient went on to have a laparoscopic right hemi-colectomy for presumed colonic adenocarcinoma. Gross examination of the excised specimen demonstrated an 8cm polypoid, ulcerated, non-pigmented lesion on the ileocaecal valve. Microscopic analysis showed malignant cells with vesicular nuclei, prominent nucleoli and pigment deposition. Immunohistochemistry showed the cells to be positive for S100, Melan A and HMB45, and negative for AE1/AE3, CAM5.2 and CD45. This profile indicated the melanocytic nature of the cells, confirming a diagnosis of metastatic malignant melanoma. There was no lymphovascular space or perineural invasion, and the resection margins were clear. Twenty nine lymph nodes were identified, all were negative for metastasis. The patientâ s post-operative course was uneventful and he was discharged on day 5. At latest follow-up he is doing well, with no complications. Subsequent positron emission tomography demonstrated no evidence of persistent neoplastic disease. Following multidisciplinary team review and discussion of risks and benefits, he did not proceed with adjuvant chemotherapy.

Discussion

In Western Europe, the estimated mortality rate from melanoma is 1.8 in 100,000[1]. Metastatic melanoma has a poor prognosis, with the median survival for patients with stage IV melanoma ranging from 8 to 18 months after diagnosis, depending on substage[2]. However, over half of stage IV patients are candidates for metastasectomy and exhibit improved survival over non-surgical therapy, regardless of the site and number of metastases[3]. Autopsy studies suggest that the gastrointestinal (GI) system is second only to the lung in frequency of metastatic disease[4]. However, clinical symptoms associated with GI tract involvement in melanoma are rare and represent advanced, disseminated disease[5]. In a series of 124 patients with melanoma metastasis to the GI tract, the median survival in those undergoing curative resection is 48.9 months, indicating that surgery should be strongly considered for this subgroup of patients[6]. There are few published case reports of melanoma metastasis to colonic mucosa, usually arising in an existing polyp or colonic adenocarcinoma[7]. To our knowledge there are no previous reports of metastasis to the ileocaecal valve.

This report describes a rare case of melanoma metastasis to the ileocaecal valve and highlights the necessity to consider gastrointestinal metastasis in those with a history of melanoma. Surgical resection of metastasis can be the best management strategy to improve survival.

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