

Late recurrence of malignant melanoma mimicking ovarian malignancy

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Summary

Background: Malignant melanoma (MM) is an extremely malignant tumor with an unpredictable profile of spread and variable periods of remission. **Case:** We describe an unusual case of malignant melanoma metastatic to the omentum occurring seven years after diagnosis and treatment of cutaneous malignant melanoma in the patient's arm. She received surgery and chemoimmunotherapy. To date, nine months after detection of malignant melanoma metastatic to the omentum, the patient is alive with no clinical and radiological metastatic disease. **Conclusions:** The diagnosis of omentum malignant melanoma in a living patient is uncommon, thus very few individuals and referral centers can build up an adequate experience of handling this disease. Optimal management has been a challenge and a subject of debate and has not yet been established.

Key words: Malignant melanoma; Ovarian malignancy; Omentum.

Introduction

Malignant melanoma is an extremely malignant tumor with an unpredictable profile of spread and variable periods of remission. Primary cutaneous melanoma lesions may precede gastrointestinal (GI) sites of metastasis by many years and may be difficult to diagnose.

Between 1% and 4% of all patients with malignant melanoma will have clinically apparent GI involvement diagnosed ante mortem, with up to 60% of patients with melanoma found to have metastases at autopsy [1].

Metastases of malignant melanoma may be discovered many years after the diagnosis of the primary lesion. We describe an unusual case of malignant melanoma metastatic to the omentum occurring seven years after diagnosis and treatment of cutaneous malignant melanoma in the patient's arm.

We believe that this case of multinodal omental metastasis arising from malignant melanoma deserves some comment from the point of view of practical management and appropriate choice of the imaging technique.

Case Report

A 56-year-old postmenopausal woman was admitted to our department because of lower abdominal pain and palpable left pelvic mass. She gave no significant gynecologic history. At the age of 49, a nodular-type cutaneous malignant melanoma originating in a giant pigmented nevus had been detected on the patient's left arm and treated by wide local excision. Histopathologic examination had demonstrated tumor-free surgical margins and microstaging had revealed Breslow depth of 0.78 mm and Clark level of III. The patient had not received adjuvant therapy and her course had been uneventful for the follow-

ing seven years. On admission, physical examination disclosed an essentially healthy appearance and normal vital signs.

Ultrasound scan revealed a solid mass inferior to the left ovary measuring approximately 78 x 58 x 76 mm with a probable diagnosis of an ovarian tumor and a normal-sized uterus.

Serum CA-125 level was within normal range (21 U/ml) and level of CA 19-9 was also normal.

Intraoperative findings were multinodal omental tumors with the size ranging from 2 to 10 cm in the maximal diameter (Figure 1). Ascites were present and both the ovaries and uterine tube were normal. No other abnormalities were seen on inspection of the abdomen and pelvis. Radical omentectomy and gastrocolic lig resection were performed.

Histology of the omentum showed malignant melanoma of metastatic origin.

Immunohistochemistry was positive for S100, HMB45, and Melan-A protein (Figure 2).

Postoperative magnetic resonance imaging (MRI) of the abdomen and pelvis demonstrated no metastatic lesion.

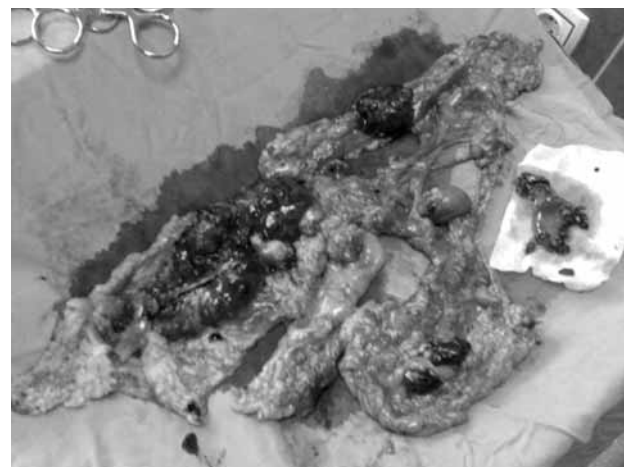
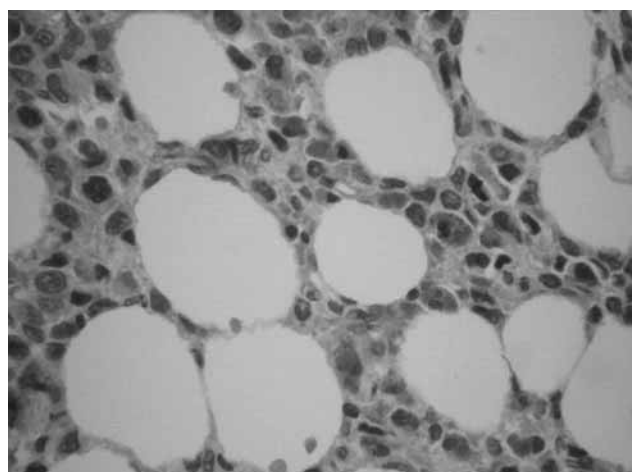


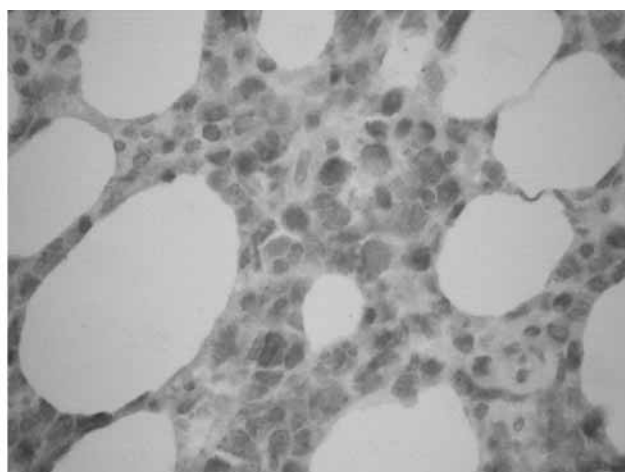
Figure 1. — Omentum with multinodal tumors - melanoma metastasis.

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H&E stain x400.

Figure 2. — Omentum showing a typical melanoma with pigment.



Melan A x400.

After the surgical treatment the patient received one cycle of chemoimmunotherapy according to our protocol for malignant melanoma consisting of three days of chemotherapy (BCNU, day 1; DTIC, days 1-3; and cisplatin, days 1-3) followed by five days of immunotherapy (interleukin-2 [IL-2] and interferon [IFN], days 4-8).

To date, nine months after detection of malignant melanoma metastatic to the omentum, the patient is alive with no clinical and radiological metastatic disease.

Discussion

The vast majority of omental neoplasms are metastatic carcinomas arising from the ovary, gastrointestinal tract, or pancreas and these are often associated with abdominal ascites.

Primary and secondary tumors of the omentum, when sufficiently large, present with a palpable abdominal mass or diffuse distention requiring surgical excision.

Malignant primary and secondary omental tumors are highly invasive and often present late with involvement of adjacent organs. Radical surgical excision of both the omentum and the involved organs may be required but often palliative surgery is the only treatment option [2].

Analysis of the case notes show that the cutaneous lesion was microstaged with Breslow depth of 0.78 mm and Clark level of III with no evidence of invasion, according to the staging prevalent prior to the current American Joint Committee on Cancer (AJCC) staging [3].

Review of the case notes shows that the clinical decision was to treat with wide excision of the lesion and not to proceed to regional lymph node dissection. There were no clinically enlarged lymph nodes and an elective lymph node dissection was not performed. Elective lymph node dissection is controversial in tumors between 1 and 4 mm thick, as a result of increased morbidity and no documented increased survival.

When a patient has a past history of malignant melanoma with an abdominal mass, a thorough physical examination and radiologic surveillance is essential to exclude multiorgan involvement.

As part of metastatic localizations, a total body computed tomography (CT) scan and positron emission tomography (PET) are recommended. Unfortunately we are not in the position to perform PET scan imaging. Postoperative MRI of the abdomen and pelvis demonstrated no metastatic lesion in this case.

In our case, the diagnosis of malignant melanoma metastatic to the omentum was established only after the explorative laparotomy. It is noteworthy that although the primary lesion on the patient's back invaded to Clark's level III, metastatic disease was found after seven years, much later than usually expected.

As the period of remission is unpredictable and possibly long, an adequate history is essential to arrive at the correct differential diagnosis. Ultrasound was unable to characterize the lesion in our patient.

Ben-David *et al.* [4] have described a rare case of malignant melanoma metastatic to the ovary and to the omentum 25 years after enucleation of one eye for malignant melanoma of the choroid.

Metastatic melanoma is associated with poor prognosis, Stage III with 45% 5-year survival rate and Stage IV disease with 11% 5-year survival [5]. Postoperative adjuvant radiotherapy could improve long-term disease control.

In recent years, adjuvant chemoimmunotherapy has been applied for patients with malignant melanoma metastatic to the ovary. However, there is no definitive evidence that adjuvant chemoimmunotherapy is beneficial.

Biochemotherapy uses chemotherapeutic agents in combination with interferon alpha and interleukin-2, and shows an improved response rate compared to chemotherapy alone [5].

Since the diagnosis of omentum malignant melanoma in a living patient is uncommon and since, consequently, very few individuals or even referral centers can build up an adequate experience of handling this disease, its optimal management has been a challenge and a subject of debate and has not yet been established.

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