

Metastatic Melanoma to Stomach and Lungs

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Abstract

A case of metastatic melanoma is reported with a rare bronchoscopic and gastroscopic finding. An elderly gentleman presented with gradual onset productive cough, breathlessness, anorexia, and abdominal distension. Past history revealed curative amputation of melanoma in the right heel 5 years ago. A bronchoscopy followed by gastroscopy revealed multiple black pigmented polypoidal masses along the left lung and gastric antrum, and their biopsies confirmed them as melanomatous deposits which could have metastasized from the original tumor. Metastases occurring in the stomach after such a long time are a rare phenomenon and our patient had a fatal outcome. If appropriately followed up, early identification could have been possible, and there would be a chance of extend the mortality. We highlight the importance of following up these patients with necessary investigations on a long-term. We empathize gastric metastases can occur.

Key words: Bronchoscopy, Gastroscopy, Metastatic melanoma, Melanoma lungs, Melanoma stomach

INTRODUCTION

Simultaneous metastatic spread to the lungs and stomach are very rare presentation of malignant melanoma. Metastases to lungs are the most common presentations of cutaneous primary malignant melanoma and may manifest either as a typical multiple pulmonary nodules or as a solitary nodule, occurring in almost 70% of cases. Metastasis occurring in gastrointestinal tract (GIT) accounts for 2%, among which small bowel is the most common site followed by large intestine, stomach, and esophagus. Cutaneous primary is the most common source of metastases to the gastrointestinal tract, however, they can arise *de novo*.

We report a rare case in whom both gastroscopy and bronchoscopy simultaneously revealed metastatic melanoma to the lungs and antrum of the stomach.^[1-10]

CASE REPORT

A 73-year-old gentleman presented with gradual onset breathlessness, productive cough, anorexia, and weight

loss since the past few months. Almost 10 years ago, he underwent surgical excision of right heel malignant melanoma followed by plantar flap cover and was lost to follow-up. The patient reports that he was symptom-free until about 10 days ago. Abdominal examination revealed a tender hard and nodular hepatomegaly with mild ascites, and auscultation of chest revealed left upper lobe rhonchi.

Baseline blood investigations revealed anemia, leukocytosis, elevated erythrocyte sedimentation rate, mild conjugated hyperbilirubinemia, and mild hepatic transaminase elevation. Chest X-ray revealed non-homogenous haziness along the left upper zone, and a subsequent computed tomography scan of the thorax and abdomen revealed well-defined mass lesions along the left lower lung zones with multiple metastatic deposits in the liver and left adrenal gland without any obvious enlargement of nodes, or biliary obstruction [Figure 1].

He underwent a bronchoscopy which revealed multiple black-pigmented nodular lesions measuring around 5 mm along the left upper lobe bronchus [Figure 2], from where multiple bits of tissue taken for biopsy. A gastroscopy done subsequently revealed similar ulcerated nodules with blackish slough along the gastric antrum and duodenum [Figure 3] and the tissue was sampled for biopsy.

Histopathological examination of the tissue taken from the nodules from both sites revealed submucosal dark pigmented deposits, containing melanin pigment-laden

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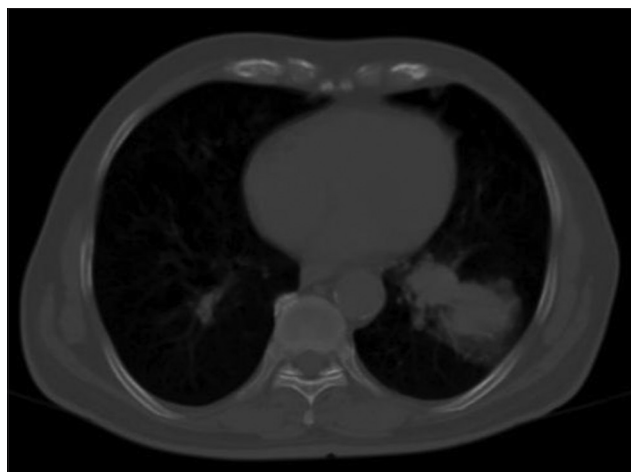


Figure 1: Computed tomography chest showing a mixed density space occupying lesion along the left lower lobe

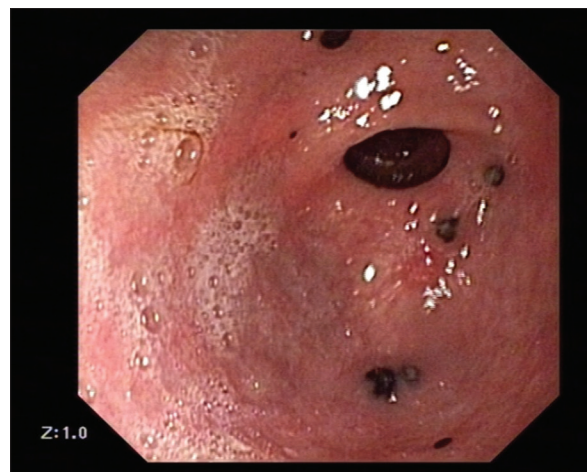


Figure 3: Multiple darkly pigmented nodular lesions in the gastric antrum

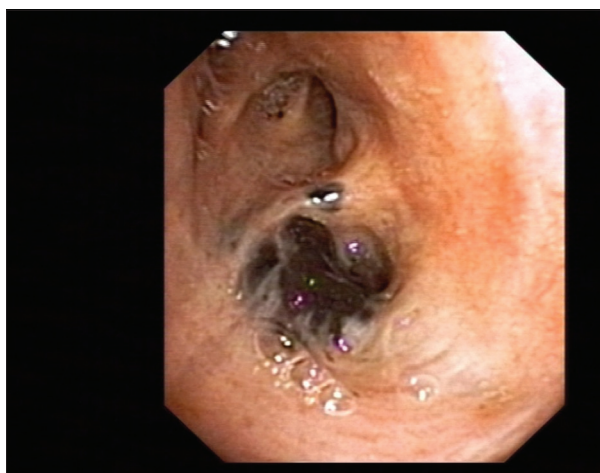


Figure 2: A black-pigmented nodular lesion in the left main bronchus

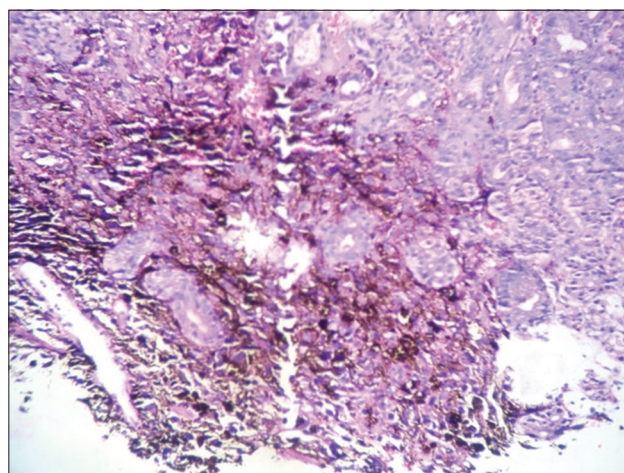


Figure 3: HPE stain exhibiting mitosis, cytoplasmic, and nuclear pleomorphism. Melanin pigment seen at the submucosal level

macrophages which confirmed them as melanomatous metastatic deposits [Figure 4].

A plan was done to give palliative chemotherapy as the disease was widespread but the general condition deteriorated in a short period of time and the patient died.

DISCUSSION

In general, whether primary or secondary, GIT melanoma is rare.^[2] Early patient mortality and some loss in follow-up also contribute to its rarity.^[6]

The usual survival rate of the patients with metastatic melanoma is <1 year. Involvement of gastric mucosa is less common than small bowel. Most often melanoma is asymptomatic unless a complication occurs such as obstruction, bleeding, and perforation.^[16]

Endoscopically viewed gastric metastasis is of three types. Metastatic nodules are the most common variety. The less common manifestations include sub-mucosal variety, presenting as an elevated nodule with ulcerations in the apex appearing as “bull’s eye,” and lastly mass lesions.^[14]

A case series from Tessier *et al.* has revealed an average interval time of 7.47 year between the primary and the metastatic disease. In their series, the metastatic spot was in the colon. Nonoperative patients had mean survival of 1 year and the operated candidates had survival rate of 37 and 21% at 1 and 5 year, respectively.^[19]

Another study of 30 patients from Patel *et al.* shows the average time of GI metastases was 52 months (4.9–139.8 months) for those with known primary. In their series, the site of metastasis was small and large bowel. Re-resection in some of their patients showed significant survival benefit.

Rest of the case reports shows the median survival of <1 year, and most of the patients had cutaneous primary. In comparison with above-mentioned studies, though our case also had survival of <1 year, the metastatic spot being stomach was unique.

To conclude that metastasis to the stomach is rare. Non-specific symptoms, late presentation and the yield of routine GI imaging are real diagnostic challenge. If gastric metastasis occur, fatal outcome seems inevitable with survival <1 year.^[11-19]

CONCLUSION

Metastasis to the stomach is rare. Non-specific symptoms, late presentation and the yield of routine GI imaging are real diagnostic challenge. If gastric metastasis occur, fatal outcome seems inevitable with survival <1 year.

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