

Mucinous adenocarcinoma of the tail of the pancreas presenting with a choroidal metastasis

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Abstract

- **AIM:** To report a case of mucinous adenocarcinoma of the tail of the pancreas presenting with a solitary choroidal metastasis.

- **METHODS:** A 57 years old female patient presented with central metamorphosis in the right eye. Fundoscopy showed a solitary pale raised lesion in the central right macula about 6 disc diameters in length. Her past ocular and medical history was unremarkable. A B-scan confirmed a raised solid lesion in the posterior pole within the macula while fluorescein angiography revealed a central lesion with no areas of leakage.

- **RESULTS:** In view of the history and the clinical findings a FBC, ESR, LFT, Chest X-ray, and abdominal CT were requested. The chest X-ray revealed multiple opaque lesions in both lung fields suggestive of metastatic pulmonary nodules. The CT revealed multiple nodules in the liver and a 3.5cm x 2.6cm lesion in the tail of the pancreas. A CT guided liver biopsy was performed and it revealed moderately differentiated metastatic mucinous adenocarcinoma. Subsequent blood analysis revealed an elevated CA19-9. The primary tumour site was identified as the tail of the pancreas and was decided to instigate palliative treatment.

- **CONCLUSION:** There are few reports that demonstrate the significance of a solitary choroidal lesion as the initial clinical sign of cancer of the tail of the pancreas. This case highlights the importance of performing detailed abdominal imaging studies in cases where a solid choroidal lesion of unknown origin is identified.

- **KEYWORDS:** mucinous adenocarcinoma; tail of the pancreas; choroidal metastasis

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CASE REPORT

A 57 years old female patient presented as an emergency with a 2 day history of distortion of the vision in the right eye. On examination her vision was 6/60 in the right eye and 6/6 in the left eye. Her anterior segments were normal. Amsler grid testing confirmed central metamorphosis in the right eye. On fundoscopy there was a solitary pale raised lesion in the central right macula about 6 disc diameters in length (Figure 1). There was no associated exudation or areas of serous detachment. Her past ocular history was unremarkable. Her past medical history was also unremarkable. She was otherwise fit and well.

A B-scan was performed which confirmed a raised solid lesion in the posterior pole within the macula (Figure 2). Fluorescein angiography was performed and this revealed a central lesion with no areas of leakage (Figure 3A,B).

In view of the history and the clinical findings a FBC, ESR, LFT, Chest X-ray, and abdominal CT were requested. The blood tests were normal. The Chest X-ray revealed multiple opaque lesions in both lung fields suggestive of metastatic pulmonary nodules. The CT revealed multiple nodules in the liver and a 3.5cm x 2.6cm lesion in the tail of the pancreas (Figure 4). A CT guided liver biopsy was performed and it revealed moderately differentiated metastatic mucinous adenocarcinoma. Subsequent blood analysis revealed an elevated CA19-9. The primary tumour site was identified as the tail of the pancreas.

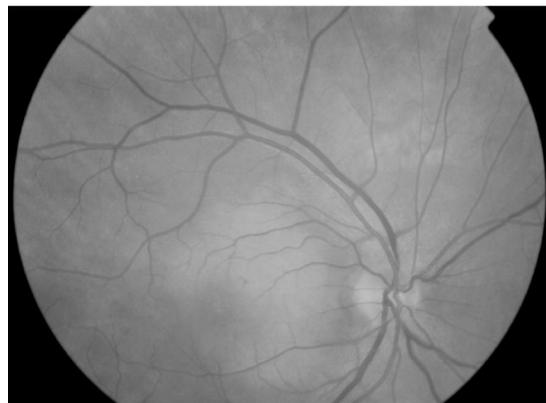


Figure 1 Color fundus photograph of the right eye showing the pale raised lesion in the macula



Figure 2 B-scan ultrasound indicating the raised echodense lesion in the posterior pole measuring 4.1mm×4.7mm×1.4mm. There is a broad acoustic shadow behind the lesion



Figure 3 A: Fluorescein angiogram of the right eye showing hypofluorescence in the early phase of the angiogram; B: Diffuse hyperfluorescence delineates the lesion in the late phase

DISCUSSION

Intraocular metastases from tumours of the gastro-intestinal tract are uncommon. Tumours of pancreatic origin are especially rare. Mucinous adenocarcinoma of the tail of the pancreas had been reported as a cause of choroidal metastasis [1]. There were small number of other reported cases in the literature [2,3].

Metastatic tumours were the most common malignant neoplasms of the eye [4]. The choroid is the most common

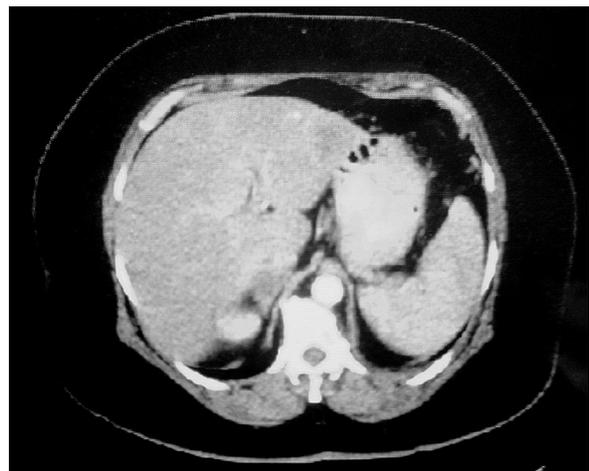


Figure 4 Abdominal CT showing multiple metastatic nodules in the liver. In the tail of the pancreas, there is a 3.5cm × 2.6 cm hypodense lesion abutting the spleen

location for tumour growth. The breast is the most common primary site and the lung is the second most common site.

The most frequent presenting symptom of intraocular metastasis is blurred vision. Other presenting symptoms include flashes, floaters and ocular pain. Pain was rarely reported with primary uveal malignancies [5].

There are few reports that demonstrate the significance of a solitary choroidal lesion as the initial clinical sign of pancreatic cancer. Cancer of the tail of the pancreas is often remains asymptomatic before metastasizing. In this case the patient was totally asymptomatic and the gastrointestinal malignancy was diagnosed through the extensive investigation of the choroidal lesion. This case therefore highlighted the importance of performing detailed abdominal imaging studies in cases where a solid choroidal lesion of unknown origin was identified.

Due to the extensive nature of the metastatic disease, it was decided to instigate palliative treatment with a combination of systemic chemotherapy with Mitomycin C and Capecitabine.

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