

CASE REPORT

CHOROIDAL METASTASIS SECONDARY TO PANCREATIC CARCINOMA: A CASE REPORT

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Choroidal metastases are important because in as many as 50% of cases they may be the first indication of a systemic malignancy¹.

Owing to its vascularity and high blood flow, the uvea is the most common site for ocular metastases. The posterior choroid and especially the macular region have relatively larger vessels thus becoming the most frequently affected sites². Most tumors metastasizing to the choroid are carcinomas; sarcomas being extremely rare³. Malignant melanomas of the skin rarely metastasize to the choroid.

Stephens and Shields² found that carcinoma of breast accounted for about 65% of choroidal metastases, lung being the second most common (14%). In 9% the location of the primary was unknown despite investigations. Less commonly the primary tumor was found in the gastrointestinal tract (4%), skin (*melanoma*) (4%), kidney (1%) or pancreas (1%). Similar figures were also found by Jeddi et al⁴, with the exception that no primary tumor in the pancreas was reported.

Carcinoid tumors, which can originate from the pancreas or other organs derived from the embryonic foregut may very rarely metastasise to the choroid⁵. Benign uveal melanocytic proliferation in the choroid associated with an undifferentiated adenocarcinoma originating in pancreas have also been reported⁶.

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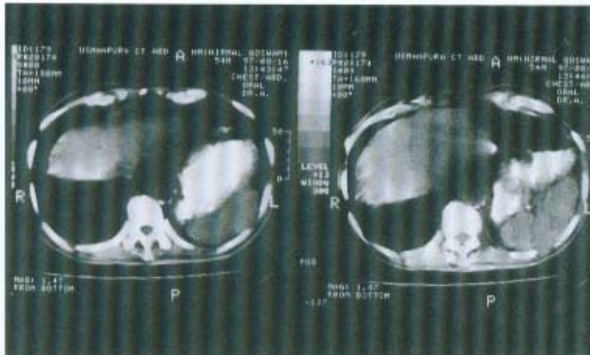
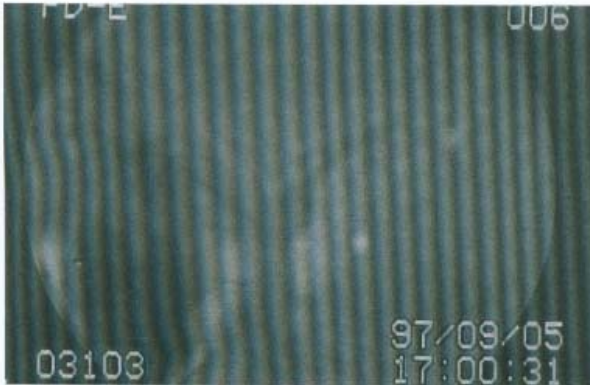


Fig. 1 CT Scan of abdomen showing a pancreatic mass



Fig. 2 and 3 Fundus photograph of left eye showing a large mass with exudative and haemorrhagic detachment



CASE- REPORT

A 59 year old male who was a known case of pancreatic carcinoma (Fig.1) with detected secondaries in lungs and larynx was referred by an oncologist for ophthalmological assessment.

He complained of blurring of vision and a visual field loss on the temporal aspect of left eye.

He was a known case of pancreatic carcinoma with detected secondaries in lungs and larynx. CT Scan of the abdomen showed a pancreatic mass (Fig 1). He also complained of field loss on the temporal aspect of the left eye. On examination his vision was RE : 6/6 and LE : 6/9. Anterior segment examination was essentially within normal limits apart from minimal lenticular nuclear sclerosis. His intraocular pressure was RE : 16mm and LE : 18mm Hg on applanation tonometry. On posterior segment examination RE was found to be within normal limits but LE showed a large mass nasal to the disc with associated exudative and haemorrhagic detachment (Figs 2 and 3). It extended from the nasal disc margin to the whole of the inferonasal periphery of retina. The macular region was clinically normal.

On ultrasonography, a well defined mass was confirmed along with an associated fluid collection under the retina, corresponding to the clinical appearance of exudative and haemorrhagic detachment (Fig 4). Fluorescein angiography was not done due to the patient's debilitated state, and his refusal to take any intravenous injection since being on chemotherapy.

We reviewed the patient after 15 days and the ocular condition was essentially the same. The patient succumbed to the disease ten days subsequently.

Jeddi et al⁴ reported in their study that 82% of patients with choroidal metastases died in a mean period of 6.5 months. Palliative chemotherapy or radiotherapy are the treatments of choice and may preserve or restore vision until the patient succumbs. It has been emphasized that the left eye is more commonly involved as the left common carotid artery arises directly from the aorta on the left side, provides a more direct vascular route to the choroid, but various studies have found an equal incidence of laterality^{3,1} not infrequently choroidal metastases are bilateral. Even though there is disposition to posterior pole one must always examine the peripheral fundus by indirect ophthalmoscopy to rule out a more painful metastasis in any patient having a malignancy anywhere in the body who presents

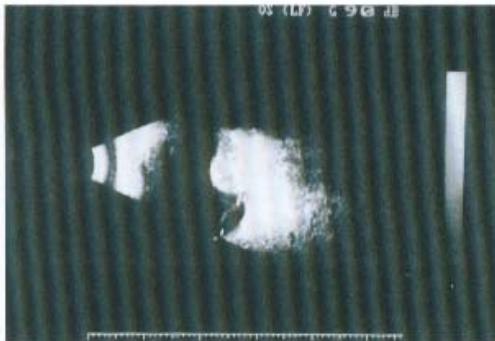


Fig. 4 Ultrasonography showing choroidal mass with surrounding exudative detachment

with visual symptoms.

BIBLIOGRAPHY

1. Ferry AP, and Font, RL: Carcinoma metastatic to the eye and orbit. I. A Clinicopathologic study of 227 cases, Arch Ophthalmol, 92 :276 - 286, 1974
2. Stephens RF and Shields J : Diagnosis and management of cancer metastatic to uvea ; a study of 70 cases, Ophthalmology 86 : 1336 - 1349, 1979
3. Rootman J, Carvounis EP, Dolman CL and Dimmick JE : Congenital fibrosarcoma metastatic to the choroid, Am J Ophthalmol 87 : 632 - 638, 1979
4. Jeddi A, Bouguila H, Mezlini A, Daghfous F, Kaouche M, Ben-Ayed F, Ayed S : Choroid metastasis, Journal of Fr Ophthalmol, 1994 ; 17 (11) : 657 - 663
5. Wertheimer R, Maier M, Hofmann HM, Stanowsky A, Weiss M : Carcinoid tumour of the lung. An unusual form of ocular metastasis ; Ophthalmologie. 90(5) : 522 - 527 , 1993.
6. Vorrud FX, Othenin GP, Uffer S, Othenin GB, Regli F, Hurlimann J : Natural history of diffuse uveal melanocytic proliferation. Case report ; Ophthalmology 99(11) : 1698 - 1704 , 1992
7. Hart WM : Metastatic carcinoma to the eye and orbit. Int Ophthalmol Clin 2 :465 ; 1962
8. Bourgoignie K, De Laey JJ : Diagnosis of choroidal metastasis ; Bull. Soc. Belge. Ophthalmol. ; 248 : 37 - 45 ; 1993

Correction

Missing author: In the article titled: "Geographical choroiditis" published in the April issue of the Asia Pacific J Ophthalmol (1998; Vol 10.2:18-22), one of the authors, Dr Noora Al-Kobaisi, was inadvertently omitted.

We apologise to Dr Al-Kobaisi for the omission of his name.

The title and authorship should have read:

Geographical choroiditis

Mohinder Singh, Noora Al-Kobaisi

