

these patients should be offered surgery, especially when there is a prominent vitreous component.

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### Intraocular Metastasis of Pancreatic Cancer: Report of Two Cases

#### Dear Editor:

We read with interest the brief report published by Lin et al,<sup>1</sup> concerning two cases of intraocular metastasis associated with pancreatic cancer. The report of one such case has previously been published by us.<sup>2</sup> Metastatic carcinoma has been suggested as the most common malignant tumor of the eye, and in as many as 50% of cases, it may be the first indication of a systemic malignancy.<sup>3</sup> Occurrence of this condition is also crucial regarding prognostication of the patient's morbidity. The posterior choroid, which contains the greatest number of blood vessels, is the most frequent location of metastatic disease.

We agree with the authors that intraocular metastasis from a pancreatic malignancy is an extremely rare condition. The case reported by us was of a 59-year-old male patient, who had a known case of pancreatic carcinoma, with detected secondary tumors in the larynx and lungs. He had healthy anterior segments and normal intraocular pressures in both eyes. Fundus examination of the right eye was unremarkable, but the left eye was found to have a large choroidal mass, nasal to the disk, with associated exudative and hemorrhagic retinal detachment. The detachment extended from the nasal margin of the disk to the inferonasal periphery of the retina. Ultrasound confirmed the presence of a well-defined mass with associated subretinal fluid collection. The patient was on chemotherapy. He died of his disease within 1 month of first being examined by us.

Both patients described by Lin et al<sup>1</sup> and the patient reported by us died due to pancreatic cancer soon following detection of the choroidal metastasis. Our case had maintained a vision of 20/30 in his left eye, because the macula was not involved. This is unlike the marked, early loss of vision in the two cases described by Lin et al (hand motion perception and no light perception in Cases 1 and 2, respectively). They found posterior pole involvement in Case 1 and optic disk involvement in Case 2. The chief presenting complaint of our patient was temporal visual field loss, which could be attributed to the nasal mass and retinal detachment. In Case 1, Lin et al<sup>1</sup> described a subsequent increase in the thickness of the choroidal lesion with possible extraocular involve-

ment. We did not observe any such change on the patient's second (and last) visit, 15 days after the first visit. In Case 2, Lin et al<sup>1</sup> reported anisocoria with an absent light reflex, perhaps because of the optic nerve involvement.

Most tumors metastasizing to the choroid are carcinomas, and sarcomas are extremely rare. The most common primary site is the breast, followed by the lungs. There are very few reports in the literature in which the pancreas is the primary site. Carcinoid tumors are slow-growing, locally invasive neoplasms with low metastatic manifestation. They can originate from the pancreas or other organs derived from the embryonic foregut and have been known to metastasize to the choroid.<sup>4</sup> Benign uveal melanocytic proliferation in the choroid, secondary to an undifferentiated adenocarcinoma originating in pancreas, has also been reported in the literature.<sup>5</sup>

It was believed in the past that the left eye is more commonly involved in metastatic disease, because the left common carotid artery arises directly from the aorta on the left side and provides a more direct vascular route to the choroid. However, equal incidence of laterality has been found in a large series.<sup>3</sup> While our case was found to have a choroidal metastasis in the left eye, both cases described by Lin et al<sup>1</sup> showed involvement of the right eyes.

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#### Reply

#### Dear Editor:

We appreciate the comments of Dr. Nagpal and associates about our report and the information on their previous report on this subject.

Both reports emphasized the rare occurrence of pancreatic cancer metastasizing to the choroid and the optic nerve and the extremely poor prognosis after intraocular tumors were detected, as all three patients died soon after the diagnoses of the choroidal metastasis were made. The aggressive nature of the metastatic pancreatic cancer was suggested in the report by Nagpal et al by the initial large tumor size despite systemic chemotherapy, and in our report by the rapid growth of the lesion with possible extraocular extension.

Our patients demonstrated early involvement of the macular area with visual loss and rapid tumor growth. Conversely, the case described by Nagpal et al maintained a vision of 20/30 in the eye with the lesion. The initial extramacular location of the tumor might account for the good vision in their case. Furthermore, they did not observe any increase in size of the choroidal lesion after 15 days. Unfortunately, there were no follow-up echographic pictures and quantitative measurement data in their report. The increase in size of a tumor already large enough might not be readily appreciated by clinical observation alone, especially when there is extensive exudative retinal detachment.

The posterior choroid, especially the macula, was the most frequently affected area of metastasis of systemic malignancy. Whether the lack of involvement of the macular region was purely a matter of chance or due to other factors, such as different cell types of the original tumor, is not known. It's a pity that none of the three cases had histologic data available.

Once again we thank Drs. Nagpal for those valuable comments and for providing us a case with a different clinical presentation of pancreatic cancer. We apologize for not including their study in the references of our report.

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#### Radial Optic Neurotomy for Central Retinal Vein Occlusion

##### Dear Editor:

In the June 2002 issue of *Retina*, while reading the response by Opremcak et al<sup>1</sup> to my letter<sup>2</sup> commenting on their paper dealing with radial optic neurotomy for central retinal vein occlusion, I was appalled to find the following completely untrue statement attributed to me by the authors: "As mentioned by Dr. Hayreh, 80% of eyes with CRVO will be permanently blind." I have *never* said or written any such thing; on the con-

trary, my studies on more than 700 patients with CRVO over 30 years have shown that it is *very rare* for eyes with CRVO to be "permanently blind" with the current modes of management of neovascular glaucoma. I must call upon the authors to retract this total misquotation publicly and immediately, and apologize to me and to the readers of *Retina* for the misinformation.

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##### Reply

##### Dear Editor:

Thank you for your letter regarding Dr. Hayreh's concern about a misquote in our letter. As written, "For perspective, and as mentioned by Dr. Hayreh, 80% of eyes with CRVO will be permanently blind, 9% to 10% of all eyes with CRVO will develop 'catastrophic' neovascular glaucoma and 9% to 10% of these will have to be enucleated." I apologize for the structure of the sentence. In our editing of the letter, the sentence should have read, "For perspective, 80% of eyes with CRVO that present with 20/200 vision will be permanently blind, and as mentioned by Dr. Hayreh, 9% to 10% of all eyes with CRVO will develop catastrophic neovascular glaucoma and 9% to 10% of these will have to be enucleated." Dr. Hayreh is correct; he did not state that 80% of eyes with CRVO will be permanently blind. We were discussing our population of patients we studied who were operated on with radial optic neurotomy, and 100% of these eyes had a visual acuity of 20/200 or worse. As the CRVO study showed, 80% of eyes that present with 20/200 vision will remain 20/200 or worse. This is the 80% permanently blind population I was referring to in our sentence. I sincerely apologize to Dr. Hayreh for the structure of our sentence, and it was the CRVO study that mentioned that 80% of eyes with a CRVO and 20/200 acuity will be blind. Please accept my sincerest apologies.

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