

# Choroidal metastases from transitional cell carcinoma of the bladder

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## ABSTRACT

Secondary metastasis tumors are the most common form of the adult intraocular neoplasm. It has an incidence of 9.3% among all fatal cases of cancer and 4% in patients dying of all types of cancer. We report a rare metastatic spread to the choroid from bladder carcinoma which is unusual primary site in a 64-year-old male. This case describes metastatic spread to the choroids from bladder carcinoma that is a very unusual primary site.

**Key words:** Enucleation, fundus fluorescein angiography, transitional cell carcinoma

## INTRODUCTION

The most common site for the primary tumor is the breast. In a large survey of 420 consecutive patients with uveal metastases,<sup>[3]</sup> it was found that 47% had common sites are the gastrointestinal tract, kidney, testis, and prostate. The urinary bladder is, however, an extremely rare primary site.<sup>[4]</sup> In our literature search, there have only been five reported cases of choroidal metastases from transitional cell carcinoma (TCC) of the urinary bladder in the last 50 years.

## CASE REPORT

A 64-year-old presented with blurred vision in his right eye of 1-month duration. He had been undergoing palliative radiotherapy for TCC of the bladder and was also found to have metastases to the right inferior pubic ramus with invasion of local tissues.

On examination, his visual acuity was 6/60 in the right eye and 6/9 in the left eye. Anterior segment evaluation

revealed posterior chamber intraocular lens in both eyes. Intraocular pressures were normal in both eyes. Dilated fundus examination of the right eye showed a large subretinal mass with well-defined elevated lesion (7DD) above the optic disc [Figure 1a] and Fundus Fluorescein angiography showed typical pinpoint leakage corresponding to the lesions [Figure 1b]. B-scan ultrasonography was also performed and showed a raised lesion of moderate internal reflectivity and calcification at its base. The left fundus was normal. A diagnosis of metastatic carcinoma to the choroids was made but unfortunately he passed away 2 weeks later.

## DISCUSSION

Metastatic tumors to the eye are usually seen as a late manifestation of the primary disease and carry with them a poor prognosis. Bladder carcinoma has a distinct pattern of metastatic spread, involving the regional lymph nodes predominantly, followed by hematogenous spread to the lung, liver, bones, and very occasionally to the eyes.<sup>[5]</sup> Survival is approximately 7.4 months in patients with the posterior uveal disease<sup>[6]</sup> but does differ for the various primary tumors with overall survival ranging between 6 and 12 months.

Treatment options available for metastatic tumors to the eye include observation, enucleation, resection, chemotherapy, and radiotherapy. The choice of treatment depends on the primary disease, stage of disease, symptoms, and the patient's general condition. In many patients, the metastatic

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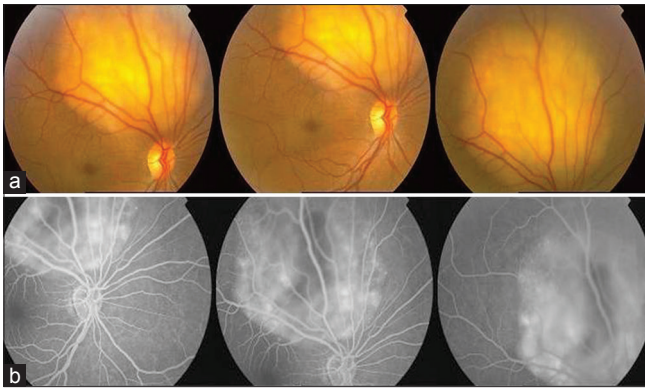
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**Figure 1:** (a) Right eye showed a large subretinal mass with well-defined elevated lesion (7DD) above the optic disc. (b) Fundus fluorescein angiography showed typical pinpoint leakage corresponding to the lesions

lesions do not affect their visual function; hence, they can be successfully managed with observation and systemic chemotherapy. Enucleation is usually only indicated when there is intractable pain from a blind eye. Radiation is used as a palliative measure as the majority of these patients have end-stage disease, and this could improve their vision and quality-of-life.

Metastatic spread to the choroids is essentially a clinical diagnosis. This patient had a history of a primary malignancy, the clinical appearance of the lesion as well as the B-scan ultrasonography showed classical features of a metastatic lesion and the diagnosis was quite easily made. Unfortunately, we were unable to substantiate our clinical findings with histopathological confirmation as the patient was terminally ill and following his

death, the family refused permission of a postmortem examination.

## CONCLUSION

This case describes metastatic spread to the choroids from bladder carcinoma that is a very unusual primary site; only five reported cases in the last 50 years. We aim to bring to the attention of the physicians, who commonly treat TCC of the bladder, the possibility of choroidal metastases and to have this in mind when they review their patients.

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