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**SHORT COMMUNICATION**

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# Orbital metastasis from squamous cell carcinoma of the esophagus

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**PURPOSE.** *To describe a rare case of orbital metastasis from squamous cell carcinoma of the esophagus.*

**METHODS.** *A 63-year-old man presented with intermittent left-sided headache. This was initially attributed to angle-closure glaucoma and bilateral peripheral laser iridotomies were performed. One month later, he developed left periorbital swelling. On reviewing the history, it was noted that he had undergone surgery for esophageal carcinoma. CT scan revealed a soft tissue mass in the left orbit, which on biopsy showed histologic features of metastatic squamous cell carcinoma. The patient died before palliative radiotherapy could be completed.*

**DISCUSSION.** *Orbital metastasis from esophageal carcinoma is rare. In this case, the possibility of metastasis was overlooked at initial presentation, as there were no clinical signs to suggest it. Regardless of the primary tumor, the prognosis following orbital metastasis is poor.*

**CONCLUSIONS.** *It is important to consider radiologic investigation when patients with systemic malignancy present with unexplained headache. (Eur J Ophthalmol 2006; 16: 458-60)*

**KEY WORDS.** *Orbital metastasis, Esophageal carcinoma, Squamous*

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## INTRODUCTION

Although metastatic tumors are the commonest intraocular neoplasms (1), metastasis to the orbit is less common (2). In orbital metastases, the breast and lung are the commonest sites of primary tumor, while the esophagus is a rare source (3, 4). We report a case of orbital metastasis from squamous cell carcinoma of the esophagus.

## Case report

A 63-year-old man presented with a 2-week history of intermittent left-sided headache. His ocular history included left amblyopia and hypermetropia. He also had a history of esophageal carcinoma. His best-corrected visual

acuity was 6/6 in the right eye and 6/12 in the left.

Examination revealed shallow anterior chamber and narrow angle (Grade 1 to 2) in both eyes. The intraocular pressure (IOP) was 20 mmHg bilaterally.

A diagnosis of intermittent angle-closure glaucoma was made and bilateral peripheral laser iridotomies were performed. On follow-up, the iridotomies were patent and the IOP was controlled without medications.

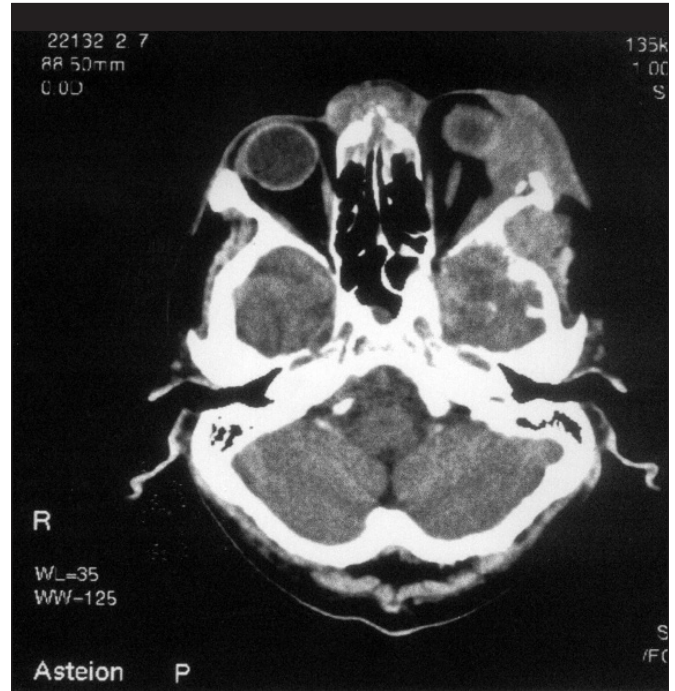
The patient continued to have headaches and 1 month later, developed swelling around the left superior orbital rim and forehead (Fig. 1).

Further details of his history revealed that 5 months previously he was diagnosed with esophageal carcinoma and underwent cardio-esophagectomy. On histology, the tumor was found to be squamous cell carcinoma.



**Fig. 1** - Clinical appearance: periorbital swelling with fullness along the left superior orbital rim.

**Fig. 2** - Axial computed tomography scan shows a homogenous soft tissue mass in the left orbit located supero-temporally outside the muscle cone. Note the lytic destruction of the bone. →



In view of the history, a computed tomography (CT) scan of the head was arranged. This revealed a soft tissue mass in the left orbit (Fig. 2), which showed enhancement after intravenous contrast. In addition, there was gross lytic destruction of the left frontal and temporal region of the skull vault.

A further CT scan showed no liver or pulmonary metastasis. An orbital biopsy was performed which showed histologic features of metastatic squamous cell carcinoma.

A diagnosis of metastatic carcinoma to the orbit and cranium was made, and palliative radiotherapy arranged. The patient died before the treatment could be completed. A definite cause of death could not be ascertained as the patient's family declined the offer for an autopsy.

## DISCUSSION

Gastrointestinal tract carcinomas account for 6 to 7% of orbital metastases (3-5). These mainly include metastases from the stomach, ileum, and colon. In our literature search, we found only two cases of orbital metastases from esophageal carcinoma (6, 7).

Misdiagnosis and lengthy delay in diagnosis are common in orbital metastases (4). The diagnosis depends on presenting symptoms, clinical signs, and radiologic evidence. If in doubt, a biopsy of the orbital mass is helpful.

The most common features of orbital metastases are acquired strabismus, proptosis, periorbital swelling, ptosis, pain, and reduced vision (3, 8).

Although our patient had a history of primary malignancy, the possibility of orbital metastasis was overlooked during the initial presentation as he had no clinical signs of orbital metastasis at that time.

Regardless of primary tumor type, the prognosis following orbital metastasis is poor as it occurs during the advanced stage of the disease. The median survival is 7.4 months from the time of metastases (1). The principal treatment modalities are radiotherapy, hormonal therapy, chemotherapy, and surgery. Radiotherapy is the mainstay since most tumors are untreatable. Surgery is indicated for isolated metastasis (4).

This case highlights the need for increased awareness of orbital metastasis. It also reinforces the need for radiologic investigation for unexplained headache in patients with systemic malignant disease.

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