A 56-year-old man was seen with signs and symptoms consistent with orbital cellulitis. Computed tomographic scan showed a localized bony defect in the sphenoid wing, on which a biopsy was performed through a lateral orbitotomy. Pathologic examination of the surgical specimen revealed mucinous adenocarcinoma, and metastatic workup revealed an extensive lower esophageal malignant neoplasm.

**REPORT OF A CASE**

A 56-year-old man was seen at a local emergency department with decreased visual acuity in both eyes and pain in his right eye and back. Symptoms began with painful extraocular movements, redness, and swelling in the right periorbital region. The patient also complained of vague pain in his spine with point tenderness in the thoracic region. Computed tomographic scan of the orbits demonstrated an area of bony destruction 1 cm in diameter in the greater wing of the sphenoid extending from the peri-orbita to the dura of the middle cranial fossa (Figure 1, top). His best-corrected visual acuity was 20/20 OU with no evidence of a relative afferent pupillary light defect. Extraocular movements were limited in all fields of gaze on the right, and an external examination demonstrated periorbital erythema and edema. Results of a slitlamp examination showed marked injection and chemosis of the conjunctiva but quiet anterior chambers bilaterally (Figure 1, bottom). Fundus examination results revealed 2 cotton-wool spots in the right eye and 1 cotton-wool spot in the left eye. His temperature was 38.2°C and his complete blood cell count showed a white blood cell count of 10.3 × 10^9/L and a left shift.

Systemic evaluation following the surgery showed evidence of an esophageal adenocarcinoma of the varicose variant in the lower 8 to 10 cm of the patient’s esophagus (Figure 3). X-Ray films of his spinal column were negative for any findings, but a magnetic resonance imaging scan of the back demonstrated extensive metastatic disease in the thoracic and lumbar spines. A later bone scan also revealed metastatic involvement of the right temporal bone, maxilla, ribs, long bones, and pelvis. The patient continued to have periodic temperature spikes as high as 39.1°C. Vancomycin hydrochloride was added to his original antibiotic regimen of ceftriaxone sodium. Serial blood cultures were obtained, but all their results remained negative. The infectious disease consultants believed that the temperature spikes were due to tumor fever as they resolved with radiation therapy. However, systemic infection could not be excluded, so...

From the Departments of Ophthalmology and Visual Sciences (Drs Oh, Alford, and Nerad) and Internal Medicine, Infectious Disease (Dr Kotula), University of Iowa Hospitals and Clinics, Iowa City.
Metastatic lesions involving the orbit are uncommon, comprising between 1% and 13% of all orbital masses. Classically, orbital metastases occur late in the course of the primary disease after the neoplastic process has been identified by other presenting symptoms. However, in some series, an orbital tumor was the presenting sign of systemic cancer in 42% to 61% of patients. Characteristically, orbital metastases will present with mass effect, infiltrative signs, inflammatory signs, or functional impairment of cranial nerves out of proportion to the degree of orbital involvement. The most common initial signs are mass effect and infiltrative signs, which collectively account for 90% of all cases in the Goldberg and Rootman series. Inflammatory presentation is rare, accounting for approximately 5% of all cases.

While breast, lung, and prostate neoplasms account for the majority of orbital metastases, gastrointestinal metastases from stomach, colon, or occult primary sites have been reported and compose 3% to 4% of all orbital metastases. Only 2 cases of esophageal metastases to either the orbit or choroid have been reported. The information in the article by Freedman and Folk is in-

Figure 1. Top, Axial orbital computed tomographic scan shows an osteolytic lesion (arrow) in the greater wing of the sphenoid and indenting the dura of the middle cranial fossa. The dura and the periorbitum are also noted to enhance with contrast. Bottom, Clinical appearance of the patient demonstrating marked conjunctival chemosis and hyperemia of the right eye.

Figure 2. Top, Surgical specimen shows fragments of bone (arrowheads) and fibrous connective tissue. Some areas had cytologically atypical epithelial cells, often with intracytoplasmic vacuoles consistent with an adenocarcinoma (arrows) (hematoxylin-eosin, original magnification × 400). Bottom, Malignant cells within fibrous connective tissue showed intracytoplasmic vacuolization. Stain indicated mucin production (alcian blue, original magnification × 400).

Figure 3. Upper gastrointestinal tract series. Barium swallow technique reveals a characteristic “apple core” appearance of a gastrointestinal tract malignancy in the lower esophagus with a tumor compressing the lumen of the esophagus (arrows).
conclusive as to the exact location of the metastatic lesion. Our patient is unusual in 3 regards. First, the metastasis was diagnosed prior to the primary lesion. Next, presentation was suggestive of infection with peri-orbital swelling, fever, and bandemia. Finally, the primary tumor was esophageal in origin. Diagnosis was made by pathologic examination of an osteolytic lesion taken from the lateral orbital wall and the subsequent metastatic workup.

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Dr Oh is a Heed Foundation (Cleveland, Ohio) Fellow, and Ronald G. Michels Foundation (Scarsdale, NY) Fellow for 1999-2000.

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REFERENCES


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A look at the past . . .

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orneal Sutures. These were very slow in adoption. Elschnig, speaking of wound sutures, commented on how slowly ophthalmic surgeons adopt advances in general surgery. Czermak, in 1888, was probably the first to pass a suture through the cornea and sclera on both sides of the center of the incision after making the section. He abandoned the method on account of infection and prolapse of the iris.

After a number of years, interest in suturing slowly developed, and the necessity of the sutures passing through the corneal and scleral tissues in order to obtain exact coaptation of the wound surfaces without overriding is now generally recognized. The sutures must not cause traction or deformity of the eyeball.