

Blindness Secondary to Odontogenic Orbital Cellulitis During the COVID-19 Dental Shutdown

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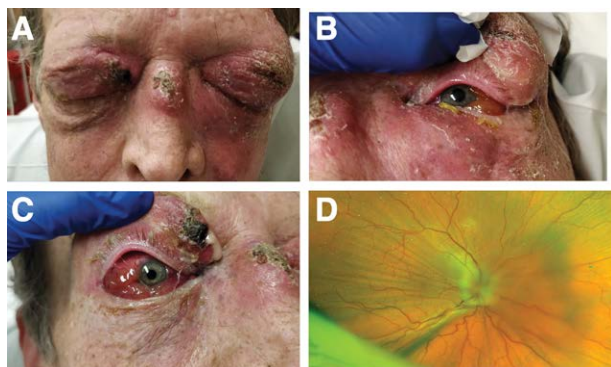


FIG. 1. External photographs demonstrating bilateral eyelid and midface erythema, edema, and desquamation (A) with bilateral bullous conjunctival chemosis and injection (B, C). Right eye fundus photograph demonstrating optic disc edema and chorioretinal folds (D).

A 65-year-old man with history of right amblyopia presented with 2 weeks of oral pain leading to progressive midface and eyelid swelling, then 2 days of left eye vision loss. One-week prior, his dentist prescribed oral antibiotics after a telephone consultation; in person, dental examination was not performed due to COVID-19 ordinances. On presentation, visual acuity was 20/400 and no light perception, and intraocular pressures were 14 and 23, in the right and left eyes, respectively. Extraocular motility was severely restricted in all directions bilaterally. External examination demonstrated bilateral eyelid and midface erythema, edema, and desquamation overlying congested orbits (Fig. 1A–C). Posterior segment examination revealed optic disc edema and chorioretinal folds in the right eye (Fig. 1D) and was normal in the left eye. CT maxillofacial demonstrated multifocal, bilateral orbitofacial abscesses, and midface abscesses of the upper alveolar origin (Fig. 2A). CT orbits demonstrated

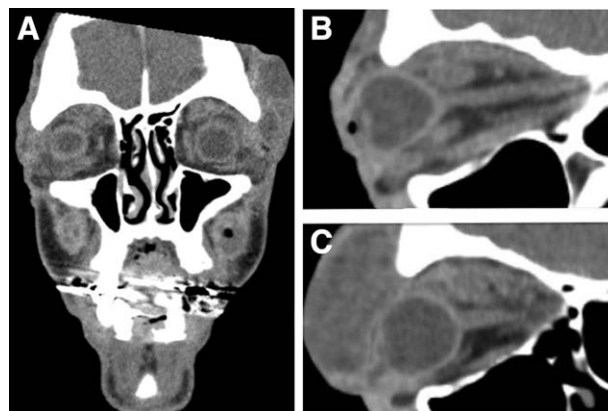


FIG. 2. CT maxillofacial demonstrating bilateral orbital cellulitis with midface abscesses of upper alveolar origin (A), right globe tenting (B), and left pre- and post-septal abscesses (C).

proptosis and tenting of the right globe (Fig. 2B) and left pre-septal and postseptal abscesses (Fig. 2C). The patient underwent emergent bilateral orbit and facial abscess drainage. Cultures revealed polymicrobial organisms consistent with oral flora. Intravenous antibiotics further remedied the cellulitis, but visual acuity at 8 weeks of follow-up was 20/150 and no light perception in the right and left eyes, respectively. Optical coherence tomography demonstrated severe retinal nerve fiber layer thinning in the left eye consistent with optic atrophy. This case highlights an indirect ophthalmologic consequence of the COVID-19 pandemic and illustrates the perils of dental management without adequate assessment.

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