Teaching *NeuroImages*: Bilateral subperiosteal hemorrhage of the orbit

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Figure 1 Patient's appearance 1 day after presentation, demonstrating bilateral ecchymoses and proptosis

A 45-year-old woman developed swelling and ecchymoses of both upper eyelids after an episode of vomiting (figure 1). Examination demonstrated bilateral

proptosis with restriction of ocular motility. Neuroimaging showed bilateral orbital fluid collections consistent with hemorrhages (figure 2). Workup for coagulation disorders and orbital vascular anomalies was negative.

Subperiosteal orbital hemorrhages are rare and mostly traumatic. Nontraumatic causes include increased venous pressure, coagulopathies, paranasal sinusitis, and vascular lesions.¹ Patients present with retro-orbital pain, eyelid edema/ecchymosis, conjunctival chemosis, proptosis, and ophthalmoparesis. The case demonstrates that subperiosteal orbital hemorrhage can develop after vomiting in patients without risk factors and present bilaterally.

Figure 2 Coronal T1 MRI

Bilateral, biconvex, superior subperiosteal masses (arrows) consistent with hemorrhage seen on coronal T1-weighted MRI image without contrast done 1 day after symptom onset. Note the mass effect on both right and left superior recti and levators palpebrae.

AUTHOR CONTRIBUTIONS

All authors contributed to writing and editing this case study and Dr. Kapadia provided the patient photograph.

REFERENCE

1. Atalla ML, McNab AA, Sullivan TJ, Sloan B. Nontraumatic subperiosteal orbital hemorrhage. *Ophthalmology* 2001;108:183–189.

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