An adolescent girl with prior right lower eyelid epiblepharon repair was referred to a tertiary care center for assessment of ipsilateral Brown syndrome. She was initially diagnosed 3 years previously and had been observed without treatment or report of bothersome symptoms. Clinical examination noted normal visual acuity and expected decreased orbital elevation with adduction. On a 3 Tesla magnetic resonance imaging study, axial (Figure 1A) and coronal (Figure 1B) fat-suppressed, post-contrast T1 imaging revealed asymmetric enlargement and enhancement of the right superior oblique tendon (arrows). Coronal T2 fat-suppressed imaging of both orbits (Figure 1C) and coned-down coronal T2 of the right orbit likewise demonstrated asymmetric signal in the superior oblique tendon (Figures 1C-1D; arrow), as well as patchy intensity in the surrounding superior orbit (Figure 1D; dashed arrow). The appearance suggests focal inflammation anterior to the trochlea as the imaging correlate of the clinically apparent Brown syndrome. First described as superior oblique tendon sheath syndrome in 1950, its imaging appearance has been documented in few case reports and small series. However, most studies include computed tomography or lower field strength magnetic resonance imaging examinations. The exquisite 3 Tesla, multiplanar, fat-suppressed imaging presented herein represents a unique and informative visualization of the anatomic features and pathologic appearance of the process.