Graves Orbitopathy

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A 67-year-old woman presented to her gastroenterologist with 30 lb of unexplained weight loss, anxiety, and bilateral eyelid swelling with tenderness over a 5-month period. Her medical history included hypertension, stroke, and tobacco use. Esophagogastroduodenoscopy, colonoscopy, and abdominopelvic computed tomography (CT) results were unremarkable. CT of the orbit and sella turcica with and without contrast demonstrated bilateral exophthalmos with symmetric enlargement of the inferior and medial rectus muscles of both orbits (**image A** and **image B**), compatible with thyroid-associated orbitopathy.

It is estimated that Graves orbitopathy (GO) is prevalent in only 20% to 25% of patients with Graves disease.¹ Imaging demonstrates bilateral symmetric enlargement of the extraocular muscles (EOMs), most commonly affecting the inferior and medial rectus.² A 2017 study³ was successful in quantifying the severity of active disease by using CT parameters to demonstrate increases in volumetric measurements of EOM and orbital fat in those with active inflammation vs healthy controls. For the most accurate measurements, the axial plane is preferred.⁴ The clinical activity score

assesses GO severity by assigning a point for each pertinent clinical sign of inflammation. This score can be directly correlated to the EOM-to-total orbital ratio; when a patient's clinical signs improve, the ratio diminishes.⁵ (doi:10.7556/jaoa.2020.068)

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