Stereotactic Radiosurgery for Cushing’s Disease: An International Multicenter Study

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Cushing’s disease (CD) is a rare condition in which patients suffer from a multitude of clinical sequelae, as well as excess morbidity and mortality, associated with supraphysiological levels of serum cortisol secondary to unregulated secretion of adrenocorticotropic hormone (ACTH) by a pituitary adenoma.²,⁷ The first-line treatment for CD is endoscopic or microscopic transsphenoidal resection of the ACTH-secreting pituitary adenoma. However, approximately 10-35% of patients fail to achieve endocrine remission after surgery.³ Stereotactic radiosurgery (SRS) has been established as an efficacious salvage therapy for CD patients with residual or recurrent tumor after resection, although the success and complication rates vary widely.⁴,⁵ Since the literature regarding SRS for CD is comprised of small- to moderate-sized series from single institutions, the rates of endocrine remission and SRS-induced complications vary widely and our understanding of the factors related to these biochemical and clinical endpoints remains limited.¹,⁶,⁸,⁹ Therefore, the aims of this multicenter, retrospective cohort study are to (1) analyze the outcomes of SRS for persistent CD after failed surgical intervention and (2) define the predictors of endocrine remission and hypopituitarism in CD patients treated with SRS.
References


