

Evaluation of the Factors Predicting the Outcome of Transsphenoidal Microsurgery in Patients with Premenopausal Microprolactinoma

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Abstract : Although cabergoline is an effective first-line treatment for prolactinoma, transsphenoidal microsurgery remains useful for the treatment of microprolactinoma. We investigated the factors that predict the outcome of transsphenoidal microsurgery and also evaluated indications for this method in patients with prolactinoma. We reviewed the cases of 21 premenopausal patients with prolactinoma, who had undergone magnetic resonance imaging (MRI). The clinical characteristics, preoperative prolactin level, adenoma size, MIB-1 labeling index, and cavernous sinus invasion were evaluated. Cavernous sinus invasion was graded according to Knosp's MRI classification. The preoperative prolactin level ($P=0.0268$) and grade of cavernous sinus invasion ($P=0.0284$) were statistically significant predictors of a surgical cure for patients with prolactinoma. As a result, transsphenoidal microsurgery is considered to be an effective therapy for appropriately selected premenopausal patients with prolactinoma. We believe that patients with either low Knosp's grade (0 or 1) and/or a preoperative prolactin level of <100 ng/ml would benefit most from transsphenoidal microsurgery as a first-line treatment.

Key words : Prolactinoma, Microadenoma, Cabergoline, Grade, Premenopausal, Transsphenoidal microsurgery