

Freda PU et al. Presenting Features in 269 Patients With Clinically Nonfunctioning Pituitary Adenomas Enrolled in a Prospective Study. J Endocr Soc. 2020 Feb 18;4(4):bvaa021. doi: 10.1210/jendso/bvaa021. eCollection 2020 Apr 1.

CONTEXT: Clinically nonfunctioning pituitary adenomas (CNFPAs) typically remain undetected until mass effect symptoms develop. However, currently, head imaging is performed commonly for many other indications, which may increase incidental discovery of CNFPAs. Since current presentation and outcome data are based on older, retrospective series, a prospective characterization of a contemporary CNFPA cohort was needed.

OBJECTIVE: To determine the prevalence of incidental presentation and hypopituitarism and its predictors in a CNFPA cohort that spanned 6 to 9 mm micro- to macroadenoma included observational and surgical therapy.

METHODS: At enrollment in a prospective, observational study, 269 patients with CNFPAs were studied by history, examination, blood sampling, and pituitary imaging analysis and categorized into incidental or symptoms presentation groups that were compared.

RESULTS: Presentation was incidental in 48.7% of patients and due to tumor symptoms in 51.3%. In the symptoms and incidental groups, 58.7% and 27.4% of patients had hypopituitarism, respectively, and 25% of patients with microadenomas had hypopituitarism. Many had unappreciated signs and symptoms of pituitary disease. Most tumors were macroadenomas (87%) and were larger in the symptoms than incidental and hypopituitary groups than in the eupituitary groups. The patients in the incidental group were older, and males were older and had larger tumors in both the incidental and symptoms groups.

CONCLUSIONS: Patients with CNFPAs commonly present incidentally and with previously unrecognized hypopituitarism and symptoms that could have prompted earlier diagnosis. Our data support screening all large micro and macro-CNFPAs for hypopituitarism. Most patients with CNFPAs still have mass effect signs at presentation, suggesting the need for more awareness of pituitary disease. Our ongoing, prospective observation of this cohort will assess outcomes of these CNFPA groups.