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recommend continued surveillance with repeated assessment, including periodic assessment of visual fields and magnetic resonance imaging at intervals that would gradually lengthen as the time from initial discovery of the incidentaloma increases.

Larry Frohman, MD University of Medicine and Dentistry of New Jersey Newark Mark J. Kupersmith, MD New York (NY) University School of Medicine Floyd Warren, MD New York (NY) University Medical Center

 Reincke M, Allolio B, Saeger W, Menzel J, Winkelmann W. The 'incidentaloma' of the pituitary gland: is neurosurgery required? JAMA. 1990;263:2772-2776.

In Reply.—Drs Frohman, Kupersmith, and Warren provide important additional information on the conservative approach to patients with incidentally discovered small pituitary tumors. They describe several patients with lesions less than 1 cm in diameter and no increase in tumor size during the first year of follow-up who experienced later tumor enlargement and compression of the optic nerve.

Although we did not observe a similar case in a total of 30 patients with incidentalomas treated conservatively (14 patients in our initial series, 16 additional patients studied since 1988), unexpected late tumor growth certainly may occur in a small percentage of these patients. However, our preliminary results demonstrate that the great majority of incidentalomas remain asymptomatic and stable during follow-up. Nevertheless, close surveillance seems to be necessary for more than a year. Since yearly magnetic resonance imaging or computed tomographic scans should be avoided, we recommend clinical follow-up studies (for example, perimetry every year) as suggested by Dr Frohman et al after 1 to 2 years.

> Martin Reincke, MD Bruno Allolio, MD Werner Winkelmann, MD University of Cologne West Germany

# The Pituitary Incidentaloma Beyond the First Year of Follow-up

To the Editor. - Reincke et al1 coin the term incidentaloma to describe those pituitary tumors serendipitously detected on magnetic resonance imaging or computed tomographic scan and provide guidelines for their evaluation and treatment. We agree that modern noninvasive neuroimaging has revolutionized the approach to these and all pituitary tumors, making a conservative approach, as they suggest, more tenable. Nonetheless, we disagree with their recommendation that if a patient has a tumor less than 1 cm in size and normal visual fields and pituitary function, and on repeated magnetic resonance imaging at 1 year there is no interval change in tumor size, then no further studies are necessary. We have had experience with small pituitary tumors (as well as other parasellar tumors initially misdiagnosed as pituitary tumors before histopathologic examination) that, although the above criteria were met at 1 year, went on to enlarge and produce chiasmal compression and visual loss at a later date. We would