

Curr Gastroenterol Rep. 2004 Dec;6(6):454-63.

**Zollinger-Ellison syndrome revisited: diagnosis, biologic markers, associated inherited disorders, and acid hypersecretion.**

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Despite general awareness of Zollinger-Ellison syndrome (ZES) by most physicians and more than 3000 articles written about it since 1955, the diagnosis of ZES is still delayed for a mean of 5 years. Recent studies show it is being delayed even more with the widespread use of proton pump inhibitors. A number of tumor markers, in addition to assessing serum gastrin, such as chromogranin A, neuron-specific enolase, and subunits of chorionic gonadotropin, have been proposed for use in either the diagnosis of pancreatic endocrine tumors, such as gastrinomas, or for assessment of tumor extent and growth. In this article important recent insights into the diagnosis of ZES as well as the clinical usefulness of assessing tumor markers for diagnosis and determination of disease extent and growth are discussed. Approximately 25% of ZES cases are due to multiple endocrine neoplasia type 1 (MEN1). A number of important studies in this group of patients are also reviewed. Finally, almost every patient with ZES has marked gastric acid hypersecretion, and its current treatment as well as the long-term possible side effects are reviewed briefly.