# The Medical Letter®

## On Drugs and Therapeutics

Published by The Medical Letter, Inc. • 1000 Main Street, New Rochelle, NY 10801 • A Nonprofit Publication

Volume 48 (Issue 1230) March 13, 2006 www.medicalletter.org

### **IN BRIEF**

### Exenatide (Byetta) for Weight Loss

Patients may be asking about reports in the lay press that exenatide (*Byetta* – Med Lett Drugs Ther 2005; 47:45), a synthetic peptide that stimulates release of insulin from pancreatic beta cells, has been used by diabetics and non-diabetics to lose weight. Approved by the FDA to improve glycemic control in patients with type 2 diabetes not controlled by metformin, a sulfonylurea or both, it is given by subcutaneous injection before the morning and evening meals. In clinical trials, some diabetic patients treated with the drug lost weight. No data are available on use in non-diabetics. Exenatide slows gastric emptying and promotes satiety, which is presumably the mechanism of weight loss.

Patients should be warned that exenatide has some adverse effects. Hypoglycemia has occurred when the drug was added to a sulfonylurea but not when it was added to metformin. The risk of hypoglycemia in non-diabetics is unknown. Exenatide often causes nausea, which can be severe, and vomiting. Diarrhea can also occur. Because the drug slows gastric emptying, it can decrease the rate and extent of absorption of other drugs such as antibiotics and oral contraceptives; oral drugs should be taken at least one hour before exenatide.

Perhaps the greatest concern with off-label use of exenatide for weight loss is that 3 times the human dose given to pregnant animals slowed fetal growth and produced skeletal and other developmental abnormalities. The FDA classified it as category C (risk cannot be ruled out) for use during pregnancy. For diabetics and non-diabetics, pregnant or not, exenatide's long-term safety is unknown.

# The Medical Letter®

EDITOR: Mark Abramowicz, M.D.

DEPUTY EDITOR: Gianna Zuccotti, M.D., M.P.H., Weill Medical College of Cornell University

DIRECTOR OF DRUG INFORMATION: Jean-Marie Pflomm, Pharm.D. ADVISORY BOARD:

Jules Hirsch, M.D., Rockefeller University

James D. Kenney, M.D., Yale University School of Medicine

Richard B. Kim, M.D., Vanderbilt School of Medicine

Gerald L. Mandell, M.D., University of Virginia School of Medicine

Hans Meinertz, M.D., University Hospital, Copenhagen

Dan M. Roden, M.D., Vanderbilt School of Medicine

F. Estelle R. Simons, M.D., University of Manitoba

Neal H. Steigbigel, M.D., New York University School of Medicine EDITORIAL FELLOWS:

Jane Gagliardi, M.D., Duke University Medical Center

Monika K. Shah, M.D., Columbia University College of Physicians and Surgeons,

SENIOR ASSOCIATE EDITORS: Donna Goodstein, Amy Faucard ASSISTANT EDITORS: Cynthia Macapagal Covey, Tracy Shields

MANAGING EDITOR: Susie Wong PRODUCTION COORDINATOR: Cheryl Brown

VP FINANCE & OPERATIONS: Yosef Wissner-Levy

Founded in 1959 by Arthur Kallet and Harold Aaron, M.D.

Copyright and Disclaimer: The Medical Letter is an independent nonprofit organization that provides health care professionals with unbiased drug prescribing recommendations. The editorial process used for its publications relies on a review of published and unpublished literature, with an emphasis on controlled clinical trials, and on the opinions of its consultants. The Medical Letter is supported solely by subscription fees and accepts no advertising, grants or donations. The content of The Medical Letter is controlled by the Editor, who declares no conflict. The members of the Advisory Board are required to disclose any potential conflict of interest.

No part of the material may be reproduced or transmitted by any process in whole or in part without prior permission in writing. The editors do not warrant that all the material in this publication is accurate and complete in every respect. The editors shall not be held responsible for any damage resulting from any error, inaccuracy or omission.

### Subscription Services

### Mailing Address:

The Medical Letter, Inc. 1000 Main Street New Rochelle, NY 10801-7537

**Customer Service:** 

Call: 800-211-2769 or 914-235-0500 Fax: 914-632-1733 Web Site: www.medicalletter.org

E-mail: custserv@medicalletter.org

Permissions:

To reproduce any portion of this issue, please e-mail your request to: permissions@medicalletter.org

### Subscriptions (US):

1 year - \$89; 2 years - \$151; 3 years - \$214. \$44.50 per year for students, interns, residents and fellows in the US and Canada. CME: \$44 for 26 credits.

### E-mail site license inquiries to:

info@medicalletter.org or call 800-211-2769 x315. Special fees for bulk subscriptions. Special classroom rates are available. Back issues are \$12 each. Major credit cards accepted.

Copyright 2006. ISSN 1523-2859