

Nocturnal Pagophagia Complicating Gastric Bypass

To the Editor: Pagophagia, the most common form of pica, is the compulsive ingestion of large amounts of ice and is a common symptom of iron deficiency anemia.¹ Patients who have undergone bariatric surgery for morbid obesity frequently develop iron deficiency anemia, primarily related to iron malabsorption and decreased intake of iron-rich foods.² I report an unusual case of pica after Roux-en-Y anastomosis.

A 33-year-old woman who had undergone Roux-en-Y anastomosis several years previously was admitted to the hospital with severe fatigue, dizziness, and fever. She had a urinary tract infection and microcytosis (mean corpuscular volume, 59 fL) with a hemoglobin level of 3.8 g/dL and a hematocrit of 14%; platelet and leukocyte counts were normal. Serum iron level and iron saturation were low; vitamin B₁₂ and folate levels were normal. The peripheral blood smear revealed changes compatible with iron deficiency anemia. The patient received red blood cells, iron sucrose, and levofloxacin. On further questioning, the patient denied taking vitamin, mineral, or iron supplements since surgery and reported prolonged, heavy menstrual cycles. She consumed large amounts of ice daily for several months. The patient's husband frequently observed her in the middle of the night with her head in the freezer eating the frost off the icemaker. The patient admitted to awakening several times nightly for months with an uncontrollable compulsion to eat the frost on the icemaker. This craving resolved after transfusion and iron administration.

Pica can manifest in unusual ways, such as the ingestion of dirt, cardboard, large amounts of normal foods, or, rarely, nocturnal pagophagia.^{3,4} With the growing popularity of bariatric surgery, physicians will increasingly encounter iron deficiency anemia. Behavioral issues among patients who have had bariatric surgery occasionally occur, but only one case of compulsive nocturnal ice-seeking behavior has been reported.⁴ Compulsive nocturnal eating occasionally affects patients with various psychiatric and stressful conditions.⁵ Considering and excluding the diagnosis of iron deficiency is important not only when patients ingest ice during the day but also in patients with unusual behavior or nocturnal pagophagia.

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1. Marinella MA. *Pocket Guide of 50 Unusual Symptoms*. Malden, MA: Blackwell Publishing; 2002:12-13.

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4. Kushner RF, Gleason B, Shanta-Retelny V. Reemergence of pica following gastric bypass surgery for obesity: a new presentation of an old problem. *J Am Diet Assoc*. 2004;104(9):1393-1397.

5. Spaggiari MC, Granella F, Parrino L, Marchesi C, Melli I, Terzano MG. Nocturnal eating syndrome in adults. *Sleep*. 1994;17(4):339-344.

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Delayed Clinician Responses to Elevated Prostate-Specific Antigen Values

To the Editor: Nepple et al¹ present evidence of delayed clinician responses to test results among patients in a Department of Veterans Affairs health care system. The authors document failed patient-physician communication and provide an excellent discussion of the difficulties in finding solutions. They remind us that primary care physicians are overwhelmed by massive amounts of data ("1000 test results each week") and that this problem is not alleviated, and might in fact be exacerbated, by the electronic health record. Physicians are spending several hours each day "managing their in-boxes" filled with out-of-context, fragmented data.

The authors call for improved systems for clinical data management "with greater attention to...human factors." We agree. They acknowledge the difficulty in designing computerized algorithms that would be sensitive to the unique clinical situation of each patient. Again, we agree.

In our practice we use a solution that pays attention to human factors, respects physicians' time and limited data-processing capabilities, fosters patients' engagement, and facilitates decision making that is sensitive to the unique clinical situation of each patient. The key element of our data management system is planned care appointments with preappointment laboratory testing. The test results are in hand at the time of the face-to-face visit.

Planned care appointments maximize patients' role in clinical decision making and minimize missed or overlooked laboratory data. Planned care appointments also reduce the amount of clerical work, including the time spent on follow-up telephone calls or letters. Further, physicians do not spend limited clinical resources redundantly clearing in-boxes of random laboratory results. (It is not uncommon for physicians in other practices who order most laboratory studies after the appointment to spend 2-4 hours a day on results-reporting activities.)

Planned care appointments address the safety problem of missed laboratory reporting, support workflow efficiency, and enhance patient-centered care. They also address the capacity problem in primary care. We estimate that many primary care physicians spend 40% to 60% of their workday on clerical tasks. This misdirection of physician resources limits access to primary care physicians' services.

As the US health care system searches for solutions that will enhance safety, reduce costs, increase access, and improve quality, we suggest part of the answer includes well-designed planned care appointments that promote patient-physician communication and facilitate prompt responses to test results.

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1. Nepple KG, Joudi FN, Hillis SL, Wahls TL. Prevalence of delayed clinician response to elevated prostate-specific antigen values. *Mayo Clin Proc*. 2008;83(4):439-445.

In reply: I thank Drs Sinsky and Sinsky for their interest in our article published in the April issue of *Mayo Clinic Proceedings* and agree with them about the benefits of planned visits to minimize handling and clerical tasks and reduce the volume of outstanding work. However, readers must note that their proposal does not provide a complete solution to the problems being discussed because, even with planned patient visits, additional diagnostic studies are often requested.

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CORRECTION

Errata: In the article by Gerber et al entitled “Neighborhood Income and Individual Education: Effect on Survival After Myocardial Infarction,” published in the June issue of *Mayo Clinic Proceedings* (*Mayo Clin Proc.* 2008;83(6):663-669), several errors occurred in the text and tables.

Introduction: The term “interaction” that appears in the second sentence of the first paragraph and in the second sentence of the second paragraph should be replaced with the term “association.”

Statistical Analyses: The third sentence in the second paragraph (lines 7-10) should read: “There were no missing values in the covariates used in the regression analyses, except for

ejection fraction (19%), for which an indicator variable reflecting a missing value was included when appropriate.”

Results: The first sentence of the third paragraph should read: “Evaluated simultaneously, both low neighborhood income (HR, 2.10; 95% CI, 1.42-3.12; for the lowest vs highest tertile) and low individual education (HR, 2.21; 95% CI, 1.47-3.32; for <12 vs >12 years) were independently associated with increased mortality.” In the same paragraph, the sentence starting at line 16 should read as follows: “Additional analysis adjusting for the individual components of the Charlson index separately (rather than lumping components into categories) did not attenuate the income-mortality association (adjusted HR, 1.73; 95% CI, 1.13-2.65; for the lowest vs highest tertile).”

Table 2: The footnote labeled “b” should read “Age- and sex-adjusted *P* value for trend $\leq .01$ ” and the footnote labeled “c” should read “Age- and sex-adjusted *P* value for trend $\leq .05$.” The footnote cited for comorbidity should be “c” for both income and education.

Table 3: The first stub entry under “Adjustment” should read “Income or education,” and the footnote labeled “c” should read as follows: “Adjusted for income or education, age, sex, race, comorbidity, ejection fraction, hypertension, hyperlipidemia, smoking, body mass index, ST-elevation myocardial infarction, coronary artery bypass grafting, percutaneous transluminal coronary angioplasty, statins, β -blockers, and aspirin.”

The journal regrets these errors, which were introduced during the processing of the manuscript.