



ENTERAL FEEDING

A Simpler, Faster Way to Insert Feeding Tubes

Inserting a feeding tube can be challenging, but by using a novel, simple technique without special tools, expensive equipment, or drugs, physicians from The University of Tokushima Graduate School and Tokushima University Hospital, both in Tokushima, Japan, were able to successfully place postpyloric feeding tubes in 40 of 41 patients—in about 15 minutes.

Most methods for blind insertion of postpyloric feeding tubes fall into 2 categories, the researchers say: imaging-aided (eg, fluoroscopy, endoscopy, electromagnetic imaging, and ultrasound) and completely blind (eg, auscultation, pH-guided, air insufflation, medication, and palpation). But at the bedside, most visualization modes are inconvenient, expensive, or ineffective. By contrast, they say, their method is both convenient and effective.

In this method, the clinician advances a stylet-tipped feeding tube via the nostril about 70 cm. To confirm the tip location to the right of the epigastric area, toward the right hypochondriac region, 5-mL shots of air are injected until the clinician can detect bubbling by palpation. When bubbling is detected, the clinician withdraws the stylet 5 cm, then gradually advances the tube, palpating to confirm whether bubbling feels less distinct or is undetectable at the hypochondriac region. If bubbling is strongly detectable elsewhere, the clinician withdraws the tube until bubbling is palpated at the hypochondrium. Finally, when the tube is at 100 cm, the clinician withdraws the

stylet and checks the location of the tube tip by abdominal radiography.

The authors say the procedure saves time (mean duration was 15 minutes), although they did not compare their procedure's time with the standard technique, so the amount of time saved was not clear. In the study, the physician placed the tube successfully at the first attempt in 39 patients and at the second attempt in another patient. The attempt was abandoned after 60 minutes in 1 patient because bubbling was not detected at the target area. Weight may have been an issue, the authors say. One patient's body mass index (BMI) was 18.8 kg/m², the other patient's BMI was 17.6 kg/m².

Although they did not see any major complications, the authors say, to avoid prolonging patient discomfort and to reduce wasted time, they need to clarify the factors that make patients unsuitable for the technique.

Source: Kohata H, Okuda N, Nakataki E, et al. *J Crit Care*. 2013;28(6):1039-1041.
doi: 10.1016/j.jcrc.2013.06.018.

EPIDEMIOLOGY

Gout Attacks in the Hospital

Fluid shifts, alterations in pH, tissue hypoxia, medications, and other facts of hospital life can trigger a gout attack—anecdotally, that's been “established.” But can the association be confirmed? Yes, say researchers from Boston University and Boston Medical Center, both in Massachusetts, and the University of Sydney in New South Wales, Australia. In fact, their study found that hospitalization raises the risk of recurrent gout attack by more than 4-fold.

The researchers constructed a study website on an independent secure server in the Boston University School of

Medicine domain and advertised on the Google search engine. Respondents who had gout and who agreed to release medical records were asked about potential risk factors during the 2 days before the gout attack (hazard period) and during 4 control periods at 3-month intervals during a year of follow-up. They were specifically asked whether they were hospitalized during hazard or control periods. Of 724 respondents who completed both hazard and control period questionnaires, 614 met the American College of Rheumatology Preliminary Classification Criteria for gout; 93 had a previous synovial fluid analysis confirming monosodium urate crystals.

During the follow-up period, 35 patients were hospitalized: 24 during hazard periods and 11 during control periods. Two people hospitalized for a gout attack were excluded from the analysis. Of the remaining hospitalizations, 9 were for surgery, 8 were for acute infections, 7 were for cardiovascular conditions, and 9 were for other or unindicated reasons. The risk appeared to be higher during the post-operative period.

Hospitalization is probably associated with recurrent gout attacks through 2 pathways, the researchers say: through the condition that led to hospitalization and through the events and treatments of the hospitalization itself. Both acute illness and treatment, for instance, may cause volume depletion that promotes urate crystallization, they point out.

Because gout attacks can prolong the hospital stay, finding a way to reduce the risk might also reduce health care costs. The researchers found evidence that suggested allopurinol, colchicine, and nonsteroidal anti-inflammatory drugs might reduce the risk, but the

association did not reach statistical significance because of the small number of hospitalizations.

Their study is the first, to their knowledge, to formally demonstrate the association between hospitalization and increased risk of acute gout attack. Their findings are noteworthy, the researchers add, because up to 18% of patients with gout are hospitalized each year.

Source: Dubreuil M, Neogi T, Chen CA, et al. *Am J Med.* 2013;126(12):1138-1141.
doi: 10.1016/j.amjmed.2013.06.026.

NUTRITION

Nutrition Labels in Menus

In 2010, Philadelphia enacted a law requiring full-service restaurants to list nutritional values on all printed menus. In 2011, researchers from Drexel University, the University of Pennsylvania, and the Philadelphia Department of Public Health, all in Philadelphia, Pennsylvania, conducted a cross-sectional study to find out whether the menu labeling induced customers to change their eating habits. The study findings suggest that mandatory menu labeling is a “promising strategy”—but only a start.

The researchers collected 648 customer surveys and transaction receipts at 7 outlets of 1 restaurant chain. Two restaurants labeled their menus, 5 did not. The labeling displayed calories, sodium, saturated fat, trans fats, and carbohydrates. The researchers looked at a variety of outcomes, including customers’ reported use of nutrition information when ordering.

Menu labeling did encourage some people to eat better: 26% of all customers and 34% of customers who saw labels reported that nutrition information influenced their decisions in ordering food. And mostly, that’s borne out by the receipts. Customers at the labeled-menu restaurants purchased 151 fewer food calories, 224 mg less sodium, 4 g less satu-

rated fat, and 15 g fewer carbohydrates per order. On average, the customers who used the labels purchased 400 fewer calories than others (a relative difference of 20%). They also tended to buy fewer food items. However, even the label users bought oversized meals that provided 70% of a day’s worth of calories and at least 115% of a day’s worth of saturated fat and sodium.

Customers tended to focus on calories—only 24% of label users reported considering sodium. The researchers note that studies have found consumers seriously underestimate sodium in prepared foods; sodium content in this study averaged 2,000 mg per menu entrée and exceeded 3,200 per order.

There’s more to do: 66% of customers at labeled-menu restaurants reported seeing nutrition information but not using it. Granted, they may have been less interested in nutritional information, compared with taste and price. It’s well known, the researchers point out, that “knowledge alone does not drive food choice.”

Source: Auchincloss AH, Mallya GG, Leonberg BL, Ricchezza A, Glanz K, Schwarz DF. *Am J Prev Med.* 2013;45(6):710-719.
doi: 10.1016/j.amepre.2013.07.014.

ONCOLOGY

Uterine Cancer and Weight

“Even relatively modest” weight gain may significantly raise the risk of uterine cancer, according to researchers from the Rebecca and John Moores University of California San Diego Cancer Center in La Jolla, and The University of Texas School of Public Health in Houston.

Using the University HealthSystem Consortium database, the researchers looked at the data of 6,905 women, of whom 1,891 (27%) had uterine malignancy. After adjusting for other risk factors, each 1-U increase in body mass index (BMI) was signifi-

cantly, independently associated with an 11% increase in the proportion of patients diagnosed with uterine malignancy. Among women with BMIs of 25 kg/m² to 29.9 kg/m², 17.5% had uterine malignancy. Among women with BMIs of 30 kg/m² to 39.9 kg/m², 29.7% had uterine malignancy.

That finding is consistent with the known epidemiology of endometrial cancer, the researchers say: 39% of cases result from obesity. More than 80% of endometrial cancers are type I, hormonally mediated lesions, they note, and obesity is one of the most significant risk factors.

Obesity is not only a risk factor for developing cancer, but it also interferes with treatment. Higher BMI, the researchers note, has been associated with surgical complications, prolonged operative time, and radiation errors. Encouraging patients to lose weight can also have an impact on their cardiovascular health—and as the researchers also note, more women with uterine cancer die not of cancer but of cardiovascular disease.

To their knowledge, the researchers say, this is the first study to quantify uterine cancer risk with specific BMI measurements in U.S. women. More than half of U.S. women are estimated to have a BMI within the range examined in the current study—the mean BMI for American women is 26.5 kg/m²—so these results have relevance for millions of women.

Age and white race were also significant factors; along with BMI, the researchers advise, those are the strongest predictors of uterine malignancy and thus should be primary characteristics to consider when assessing a patient’s risk. ●

Source: Ward KK, Roncancio AM, Shah NR, et al. *Am J Obstet Gynecol.* 2013;209(6):579.e1-579.e5.
doi: 10.1016/j.ajog.2013.08.007.



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