

Five Things Physicians and Patients Should Question

1 **Avoid an open approach for primary bariatric surgical procedures.**

Compared to an open surgical approach, laparoscopy offers several advantages including shorter hospital length of stay, and decreased morbidity and mortality.

2 **Avoid routine postoperative antibiotics.**

An appropriate selection and dosage of a preoperative parenteral antibiotic should be administered within a designated time frame to patients undergoing bariatric procedures as prophylaxis against surgical site infection. Extending the duration of prophylactic antibiotics may increase the risk of superinfection with *Clostridium difficile* and the development of antimicrobial resistance.

3 **Don't routinely use the intensive care unit for postoperative monitoring.**

Most patients undergoing bariatric surgery do not require an intensive care unit for postoperative monitoring which can have higher rates of nosocomial infections and expose patients to resistant microorganisms.

4 **Don't routinely remove the gallbladder unless clinically indicated.**

Although infrequent, the incidence of bile duct injury rates has increased since the introduction of laparoscopic cholecystectomy. Major and even minor bile duct injuries can result in life-altering complications with significant morbidity and cost. Removal of normal and asymptomatic gallbladders at the time of bariatric surgery has not been shown to be necessary and may expose a patient to possible risk of complications without proven benefit.

5 **Avoid routine use of invasive monitoring.**

Arterial and central venous catheters are associated with risk of nosocomial infections and associated morbidity. Objective data does not support routine use of invasive monitoring for patients undergoing bariatric procedures at this time.

How This List Was Created

The American Society for Metabolic and Bariatric Surgery (ASMBS) initially solicited expert opinion from surgeons who are members of the Clinical Issues Committee. This committee is responsible for drafting guidelines and position statements for the ASMBS. We also received input from the Executive Council of the ASMBS to narrow the original list down to those with highest priority.

For ASMBS' disclosure and conflict of interest policy please visit www.asmbms.org.

Sources

- Masoomi H, Nguyen NT, Stamos MJ, Smith BR. Overview of outcomes of laparoscopic and open Roux-en-Y gastric bypass in the United States. *Surg Technol Int*. 2012 Dec;22:72-6.

Banka G, Woodard G, Hernandez-Boussard T, Morton JM. Laparoscopic vs open gastric bypass surgery: differences in patient demographics, safety, and outcomes. *Arch Surg*. 2012 Jun;147(6):550-6.

Reoch J, Mottillo S, Shimony A, Filion KB, Christou NV, Joseph L, Poirier P, Eisenberg MJ. Safety of laparoscopic vs open bariatric surgery: a systematic review and meta-analysis. *Arch Surg*. 2011 Nov;146(11):1314-22.

Lancaster RT, Hutter MM. Bands and bypasses: 30-day morbidity and mortality of bariatric surgical procedures as assessed by prospective, multi-center, risk-adjusted ACS-NSQIP data. *Surg Endosc*. 2008 Dec;22(12):2554-63.

Nguyen NT, Goldman C, Rosenquist CJ, Arango A, Cole CJ, Lee SJ, Wolfe BM. Laparoscopic versus open gastric bypass: a randomized study of outcomes, quality of life, and costs. *Ann Surg*. 2001 Sep;234(3):279-89.

Nguyen NT, Ho HS, Palmer LS, Wolfe BM. A comparison study of laparoscopic versus open gastric bypass for morbid obesity. *J Am Coll Surg*. 2000 Aug;191(2):149-55.
- Bratzler DW, Dellinger EP, Olsen KM, Perl TM, Auwaerter PG, Bolon MK, Fish DN, Napolitano LM, Sawyer RG, Slain D, Steinberg JP, Weinstein RA; American Society of Health-System Pharmacists; Infectious Diseases Society of America; Surgical Infection Society; Society for Healthcare Epidemiology of America. Clinical practice guidelines for antimicrobial prophylaxis in surgery. *Surg Infect (Larchmt)*. 2013 Feb;14(1):73-156.

Chopra T, Zhao JJ, Alangaden G, Wood MH, Kaye KS. Preventing surgical site infections after bariatric surgery: value of perioperative antibiotic regimens. *Expert Rev Pharmacoecon Outcomes Res*. 2010 Jun;10(3):317-28.
- Grover BT, Priem DM, Mathiason MA, Kallies KJ, Thompson GP, Kothari SN. Intensive care unit stay not required for patients with obstructive sleep apnea after laparoscopic Roux-en-Y gastric bypass. *Surg Obes Relat Dis*. 2010 Mar-Apr;4(6):165-70.

El Shobary H, Backman S, Christou N, Schricr T. Use of critical care resources after laparoscopic gastric bypass: effect on respiratory complications. *Surg Obes Relat Dis*. 2008 Nov-Dec;4(6):698-702.

Hallowell PT, Stellato TA, Petrozzi MC, Schuster M, Graf K, Robinson A, Jasper JJ. Eliminating respiratory intensive care unit stay after gastric bypass surgery. *Surgery*. 2007 Oct;142(4):608-12.

Wallace WC, Cinat ME, Nastanski F, Gornick WB, Wilson SE. New epidemiology for postoperative nosocomial infections. *Am Surg*. 2000 Sep;66(9):874-8.
- Tsirline VB, Keilani ZM, El Djouzi S, Phillips RC, Kuwada TS, Gersin K, Simms C, Stefanidis D. How frequently and when do patients undergo cholecystectomy after bariatric surgery? *Surg Obes Relat Dis*. 2014 Mar-Apr;10(2):313-21.

Moon RC, Teixeira AF, DuCoin C, Varnadore S, Jawad MA. Comparison of cholecystectomy cases after Roux-en-Y gastric bypass, sleeve gastrectomy, and gastric banding. *Surg Obes Relat Dis*. 2014 Jan-Feb;10(1):64-8.

Grover BT, Kothari SN. Biliary issues in the bariatric population. *Surg Clin North Am*. 2014 Apr;94(2):413-25.

Patel JA, Patel NA, Piper GL, Smith DE 3rd, Malhotra G, Colella JJ. Perioperative management of cholelithiasis in patients presenting for laparoscopic Roux-en-Y gastric bypass: have we reached a consensus? *Am Surg*. 2009 Jun;75(6):470-6.

Warschkow R, Tarantino I, Ukegini K, Beutner U, Güller U, Schmied BM, Müller SA, Schultes B, Thurnheer M. Concomitant cholecystectomy during laparoscopic Roux-en-Y gastric bypass in obese patients is not justified: a meta-analysis. *Obes Surg*. 2013 Mar;23(3):397-407.

D'Hondt M, Sergeant G, Deylgat B, Devriendt D, Van Rooy F, Vansteenkiste F. Prophylactic cholecystectomy, a mandatory step in morbidly obese patients undergoing laparoscopic Roux-en-Y gastric bypass? *J Gastrointest Surg*. 2011 Sep;15(9):1532-6.

Li VK, Pulido N, Fajnwaks P, Szomstein S, Rosenthal R, Martinez-Duarte P. Predictors of gallstone formation after bariatric surgery: a multivariate analysis of risk factors comparing gastric bypass, gastric banding, and sleeve gastrectomy. *Surg Endosc*. 2009 Jul;23(7):1640-4.

Ellner SJ, Myers TT, Piorkowski JR, Mavanur AA, Barba CA. Routine cholecystectomy is not mandatory during morbid obesity surgery. *Surg Obes Relat Dis*. 2007 Jul-Aug;3(4):456-60.

Portenier DD, Grant JP, Blackwood HS, Pryor A, McMahon RL, DeMaria E. Expectant management of the asymptomatic gallbladder at Roux-en-Y gastric bypass. *Surg Obes Relat Dis*. 2007 Jul-Aug;3(4):476-9.

Papasavas PK, Gagné DJ, Ceppa FA, Caushaj PF. Routine gallbladder screening not necessary in patients undergoing laparoscopic Roux-en-Y gastric bypass. *Surg Obes Relat Dis*. 2006 Jan-Feb;2(1):41-6.

Patel KR, White SC, Tejjirian T, Han SH, Russell D, Vira D, Liao L, Patel KB, Gracia C, Haigh P, Dutson E, Mehran A. Gallbladder management during laparoscopic Roux-en-Y gastric bypass surgery: routine preoperative screening for gallstones and postoperative prophylactic medical treatment are not necessary. *Am Surg*. 2006 Oct;72(10):857-61.

Swartz DE, Felix EL. Elective cholecystectomy after Roux-en-Y gastric bypass: why should asymptomatic gallstones be treated differently in morbidly obese patients? *Surg Obes Relat Dis*. 2005 Nov-Dec;1(6):555-60.

Caruana JA, McCabe MN, Smith AD, Camara DS, Mercer MA, Gillespie JA. Incidence of symptomatic gallstones after gastric bypass: is prophylactic treatment really necessary? *Surg Obes Relat Dis*. 2005 Nov-Dec;1(6):564-7.

Villegas L, Schneider B, Provost D, Chang C, Scott D, Sims T, Hill L, Hynan L, Jones D. Is routine cholecystectomy required during laparoscopic gastric bypass? *Obes Surg*. 2004 Feb;14(1):60-6.

Hamad GK, Ikrumuddin S, Gourash WF, Schauer PR. Elective cholecystectomy during laparoscopic Roux-en-Y gastric bypass: is it worth the wait? *Obes Surg*. 2003 Feb;13(1):76-81.

Sugerman HJ, Brewer WH, Shiffman ML, Brolin RE, Fobi MA, Linner JH, MacDonald KG, MacGregor AM, Martin LF, Oram-Smith JC, Popoola D, Schirmer BD, Vickers FF. A multicenter, placebo-controlled, randomized, double-blind, prospective trial of prophylactic ursodiol for the prevention of gallstone formation following gastric-bypass-induced rapid weight loss. *Am J Surg*. 1995 Jan;169(1):91-6.
- Capella JF, Capella RF. Is routine invasive monitoring indicated in surgery for the morbidly obese? *Obes Surg*. 1996 Feb;6(1):50-53.

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