

## **SUCCESSFUL ASA 10TH ANNUAL MEETING PRESENTED VALUABLE INFORMATION, BOTH CLINICAL AND PROFESSIONAL**



At the ASA 10th Annual Meeting in Orlando, over 60 advanced practitioners enjoyed an opportunity to network and learn in a newly expanded format that included clinical presentations, hands-on workshops and professional exchanges.

The meeting began on Tuesday, May 20, with an afternoon of presentations by surgeons who specialized in congenital heart surgery, peripheral vascular disease, hydrocephalus and mitral valve repair. Attendees rated all of the presenters as outstanding.

On Wednesday morning, the time was devoted to consideration of professional issues of concern, including legislative grassroots efforts for the surgical assistant, reimbursement, and for nearly two hours, a panel of practitioners addressed attendee questions.

In the afternoon, the orthopedic experts from Synthes led two different hands-on workshops examining tibial shaft fractures and periprosthetic fractures.

This meeting was received so successfully, that plans for the ASA 11th Annual Meeting that is scheduled to be held next year at Caesars in Las Vegas are already underway.

The new 1-1/2 day format will be kept, and a hands-on workshop will again be offered but a different topic will be addressed. The schedule should be completed by late fall and registration is anticipated to be available early in 2009.



# OMENTAL WRAP DECREASES GASTROJEJUNAL ANASTOMOTIC LEAKS AFTER LAPAROSCOPIC GASTRIC BYPASS

CHRISTINA JORDAN, CST, CFA

Obesity is a chronic disease and is becoming a real focus of national concern. From 1991 to 1998, the percentage of obese men doubled, and the percentage of obese women increased by 50 percent in the United States. Locally in Maine one in 10 people were defined as obese in 1990, and by 2002, obesity in Maine had doubled to one in five, resulting in Maine being recognized as the most obese state in New England.

Laparoscopic gastric bypass was first described by Wittgrove, Clark and Tremblay in 1994. It is both a restrictive and a malabsorptive procedure. Below are complications associated with this procedure, along with their nationally reported rates.

1. Anastomotic leak (1.5 to 5.8 %)
2. Pulmonary Embolism (0 to 1.5%)
3. Bleeding (0 to 3.3%)
4. Pulmonary complication (0 to 5.8%)
5. Gastrojejunostomy stenosis (1.6 to 6.3 %)
6. Internal hernia (2.5%)
7. Gallstones (1.4%)
8. Marginal ulcer (1.4%)
9. Mortality rate is 0 to 1.5%

An anastomotic leak is a significant consequence related to mortality and laparoscopic gastric bypass. The reported incidence ranges from one to six percent. There are two common places that leaks occur, the gastrojejunal anastomosis and the jejunojejunal anastomosis. The vast majority of these leaks occur at the gastrojejunal anastomosis. Clinical signs of a leak are tachycardia, increased fluid requirement, sepsis, peritonitis, fever, malaise, left-sided abdominal pain and shortness of breath with pleural effusion. The signs and symptoms of a leak can be obscured in the obese patient, although some will present classic signs of sepsis and peritonitis. The majority of obese patients will present with more

subtle nonspecific signs and symptoms, such as tachycardia and general malaise. A large portion of these patients will relay a sense of impending doom.

Leaks can be diagnosed clinically or by radiographic testing; however, radiographic diagnosis can be logistically difficult and unreliable. Therefore, one must maintain a high clinical suspicion and a low threshold for operative exploration. Treatment options for percutaneous drainage are preoperative weight loss, operative placement of a closed suction drain and omental wrap. Patients may be placed on a two-week liquid diet preoperatively in an effort to reduce liver bulk and improve interoperative exposure. During this research, adding an omental wrap can help reduce the incidence of leaks.

Why use the omentum? The omentum has a number of unique and potentially beneficial properties, making it an ideal resource. The structure of the omentum is rich in blood supply and also covers a large surface area, (300-1500 square centimeters). It has immunologic benefits as well and contains a large number of B and T lymphocytes. The omentum has the ability to rapidly produce fibrin to adhere to areas of contamination with subsequent collagen remodeling. Traditionally, the omentum has been used to successfully protect surgical sites in many areas of surgery. It has been used to aid in hemostasis with liver resection, reconstruction of chest wall post open heart surgery, grafting in head and neck surgery, closure of gastrointestinal tract perforations, and recently for reinforcing a gastrointestinal anastomosis.

The data collected was retrospective at a single institution, and all cases were performed by two surgeons. There were two study groups, the no-wrap group and the wrap group. The cases without a wrap represent the earliest cases performed by one surgeon. After the first wrap was performed, all subsequent cases included omental wraps for that surgeon as well as his colleague.

There were a total of 538 patients in the study broken down into two study groups, patients that had a laparoscopic gastric bypass with an omental wrap (403) and those patients having a laparoscopic gastric bypass without an omental wrap (129). Characteristics of gender, age, and BMI were assessed to support the external validity of the study. The demographics from the total population were 17% male, 83% female; the average age was 44.2 years; and the average body mass index was 51.0 kg/m<sup>2</sup>. In this study, leaks were defined based on clinical suspicion, radiographic imaging (gastrograffin swallow study, CT scan), and endoscopic examination. There were eight patients reported to have a leak, six patients did not have a wrap and two patients did have a wrap. All of the patients that did not have a wrap were treated with operative exploration and drainage. Of the two patients who had a wrap, one was diagnosed with esophagogastrroduodenoscopy (EGD) that demonstrated complete disruption of the GJ anastomosis completely contained within the omental wrap. The second patient was reported to have chills and anuria but refused work up and treatment and subsequently died. This patient was presumed to have a leak on the basis of clinical suspicion. There were no statistically significant differences between the study groups in age gender, distribution or BMI. However there is a significant difference in leak rate between the group of patients who did not undergo omental wraps (4.4%) and those who did (0.5%). The leak rate for those who did not undergo omental wrap is consistent with the nationally reported range for leaks, while the group that did undergo omental wraps has a leak rate below this average.

One possible explanation for the lower leak rate results in the omental wrap population could be learning curve. Without debate, complications are more likely early in a series. The reported learning curve for LGBP is 100-125 cases. The study group without wrap does include the first 135 cases of one surgeon. However, the second surgeon adopted the omental wrap technique early and has had no leaks, suggesting that the omental wrap itself contributed to the lower leak rate.

From the data gathered in the study, it appears that the omental wrap is associated with a reduction in gastrojejunal anastomotic leak rate after laparoscopic Roux-en Y gastric bybass surgery.

## REFERENCE

[www.cascobaysurgery.com](http://www.cascobaysurgery.com) (accessed June 23, 2008)

# MACOMB COMMUNITY COLLEGE

Elizabeth Ness, CST, has been a practicing CST for 25 years and worked in the community college environment for 15 years. She began her career in education as a member of the adjunct faculty at Highland Park Community College in Highland Park, Michigan. In 1999, the opportunity to design and develop the surgical technology program at Macomb became available, and she has worked as the program coordinator for the last nine years.

Originally, when designing the surgical technology program, the goal was to create a career ladder template of surgical services in a curriculum that allowed students to pursue distinct components while working toward a bachelor's degree. Programs include a central processing distribution technician program, associate degree in surgical technology and a surgical assisting program. Students can also take course work at the university while waiting to enroll in the surgical assisting program. Working in partnership with Oakland University, surgical technology or surgical assisting students can transfer their earned credits for obtaining a bachelor's degree. This relationship was developed in anticipation that surgical assistants may be required to hold bachelor's degrees in the future.

Additionally, practicing CSTs who have enough work experience are able to complete their coursework and can complete their university course requirements after they complete their surgical assisting certificate requirements.

The program was started after a surgeon requested a surgical assistant program to train advanced practitioners to fulfill the community's need when the hours of surgical residents were reduced. It has been designed so students who are full-time employees can take advantage of evening and weekend classes.

---

*continued on page 4*



**Association of Surgical Technologists**

6 West Dry Creek Circle, Suite 200

Littleton, CO 80120

NONPROFIT ORG.  
US Postage

**PAID**

DENVER CO  
Permit NO. 3997

# MACOMB COMMUNITY COLLEGE

*continued from page 3*

The college has a state-of-the-art lab with two operating rooms that provide a tremendous resource for the students.

Originally, the program began with five students. Three of the students have finished their clinicals and have been awarded their certificates of completion. Two students in the original class are completing their case requirements. The intention is to enroll 15 students by January 2009. One of the strongest advantages of the program is that all of our graduates have been offered employment, and several hospitals are seeking graduates from the program. Even facilities located out of state have been interested in employing the program's surgical assistant graduates.

Students have enrolled in order to advance their careers and have been supported by their employers.

One of the challenges that has been encountered is that many of the practicing surgical technologists are not certified and consequently cannot be admitted to the program. In response, the program has developed a letter for practicing surgical technologists who are not certified that includes all of the information regarding how to become certified.

It is gratifying to note that the college is in complete support of accreditation for all of their health programs. The surgical assistant program was developed using the *Core Curriculum for Surgical Assisting* and under the CAAHEP guidelines. While building this program, the ultimate goal was CAAHEP accreditation.

In addition to classroom education, Elizabeth Ness is also recognized in the field of practice-related publishing. She has served as the contributing editor of *Surgical Technology Principles and Practice* and recently completed the fourth edition.