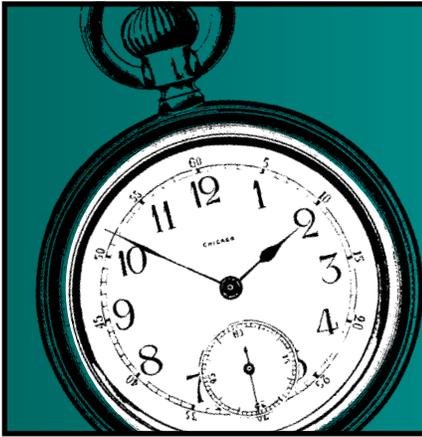


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# Same-Day Surgery

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**MAY 2003**

VOL. 27, NO. 5 • (pages 49-60)

## Additions to the ASC list *finally* out — centers have reason to celebrate

*Almost 300 additions are welcomed, but about 145 deletions posted*

The list of approved procedures for the ambulatory surgery center (ASC) list is free at last! Leaders in the field have been calling for the updated list of ASC-approved procedures, which was last changed in 1995. Officials at the Centers for Medicare & Medicaid Services (CMS) finally responded.

As of July 1, 2003, ASCs can be reimbursed for almost 300 procedures that were proposed as additions to the list in 1998. **(For explanation of why the update was delayed, see story, p. 51.)**

"The additions will allow us to bring many new procedures to our center," says **Jerry Henderson**, RN, CNOR, CASC, executive director of Surgi-Center of Baltimore in Owings Mills, MD. "Now ASCs can offer Medicare beneficiaries many of the same high-quality, cost-effective procedures that we provide our other patients."

Managers at Minnesota Eye Laser & Surgery Center in Bloomington are very pleased by the additions, especially relating to oculoplastics and

## Evaluate bronchoscopy patients for SARS

The Centers for Disease Control and Prevention (CDC) is advising providers to evaluate all bronchoscopy patients for severe acute respiratory syndrome (SARS). If you don't, you could be at high risk for contracting the disease, which has killed 62 worldwide.

At press time, the World Health Organization reported that there were 1,804 SARS cases worldwide. In the United States, there are 85 cases under investigation, but no deaths, according to the CDC. At least two of the U.S. cases under investigation are health care workers, the CDC said.<sup>1</sup> There were 129 probable or suspected cases of SARS in Canada, with four deaths, according to reports from Health Canada, the Canadian health department.<sup>2</sup>

*(Continued on page 59)*

## EXECUTIVE SUMMARY

On March 28, 2003, the Centers for Medicare & Medicaid Services published the final rule on additions and deletions to the list of procedures approved to be performed in ambulatory surgery centers. This update is the first since 1995.

- Almost 300 procedures are added. About 100 proposed additions were taken off the list after national associations objected.
- About 145 procedures were deleted. Several pain management procedures were *not* deleted, as originally proposed.
- The changes take effect July 1, 2003. Comments must be received by May 27, 2003.

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### Editorial Questions

Questions or comments?  
Call **Joy Daughtery Dickinson**  
at (229) 377-8044.

astigmatism surgery, says **Peggy Halvorson**, RN, CNOR, nurse manager.

"We have been referring many of our Medicare oculoplastics patients to a hospital setting, which obviously has been costing CMS and the patient more money than doing them in an ambulatory setting," Halvorson says.

**Janice Roach**, executive director of Tri-City Regional Surgery Center in Richland, WA, says, "We are pleased with the additions, especially adding endoscopic carpal tunnel, arthroscopic rotator cuff repair, more variations to hernia procedures, and blepharoplasty."

"Delighted" and "very pleased" also were the reactions of leaders of same-day surgery associations after the March 28, 2003, final notice in the *Federal Register*. **(For more information on how to access the notice, see resource box, p. 53.)**

"AAASC successfully persuaded CMS to reverse many of the undesirable changes it proposed in 1998," says **Craig Jeffries**, executive director of the American Association of Ambulatory Surgery Centers (AAASC) in Johnson City, TN. For example, AAASC representatives persuaded CMS to retain three urodynamics procedures: 51726 (complex cystometrogram), 51741 (electro-uroflowmetry), and 51785 (anal/urinary muscle study) and four nerve block procedures: 64420, 64421, 64622, and 64623 (injection of nerve block), he says.

Most of the added codes were proposed in 1998, according to **Kathy Bryant**, executive director of the Federated Ambulatory Surgery Association (FASA) in Alexandria, VA. **(See list of additions, p. 51.)**

The assignment of some of the procedures to group nine will allow Surgi-Center of Baltimore to perform procedures that it previously did not because of poor reimbursement from other payers, Henderson says. "We will now have to go back to the other payers to see how they will handle the ninth group," she says.

Overall, the additions will have mixed impact on ASCs depending on the types of contracts the ASC has with their other carriers regarding ungrouped procedures, Henderson says. Some of the procedures on the addition list would be paid at a percentage of charges by some payers with the old list, she says.

"Now that they are on the ASC list, they will be paid at the Medicare grouper category to which it is assigned," Henderson says. "This may or may not be better for the center."

Unfortunately, about 100 procedures proposed to be added in 1998 were not added, Bryant said in

a *Medicare Alert* sent to FASA members. "Most of these were ones that were proposed at low reimbursement levels, but a few were not added after other groups objected to their addition," she wrote.

These objections point to the need for physicians at surgery centers to be active in their national medical associations, Bryant says.

Roach says, "We are disappointed that they did not add laparoscopic cholecystectomy or lithotripsy."

It is unfortunate that CMS did not add numerous ophthalmic laser procedures that are important to ophthalmologists and appropriate for the ASC, says **Eric Zimmerman**, JD, partner with McDermott, Will, and Emery in Washington, DC. Also, "it is bad news in that CMS still has not dealt with the many codes that commenters suggested be added, or other important changes, like updating the criteria used to determine whether procedures should be on the ASC list," he says.

Managers at ASCs that specialize in dermatology, gastroenterology, and orthopedics may object to the fact that certain procedures that were proposed in 1998 were not added, CMS acknowledged in the final rule.

"In particular, we are not adding procedures performed more than 50% of the time in a physician's office, procedures that are not appropriately or safely performed in an ambulatory setting, or

## What's the reason for the long delay?

**A**lthough there are many reasons for the delay, the primary explanation is that the Centers for Medicare & Medicaid Services does not have enough staff working on the ambulatory surgery center (ASC) issue to provide the work that is needed to keep a program up to date, according to **Kathy Bryant**, executive director of the Federated Ambulatory Surgery Association in Alexandria, VA.

"The nonpolitical appointee staff working on our issue are some of the finest government officials I have ever encountered," Bryant says. "They are eager to follow the law and support the ASC benefit; however, they are constantly called to work on a whole range of other outpatient services; and quite frankly, ASCs always fall to the bottom of the barrel."

Because ASCs are the smallest, this low priority makes sense from their perspective, she maintains. Other, less important factors in the delay were questions concerning exactly what the rule should say and whether payment and list changes were separate. ■

procedures that would otherwise have met the criteria for inclusion on the ASC list except that they would be significantly overpaid in the lowest ASC payment group," the notice said. "We have determined that the adverse economic impact on the Medicare program that could result from a shift of such services to an ASC setting outweighs the potential negative reaction of these medical specialties."

CMS proposed to delete 203 procedures from the ASC list in 1998; however, CMS changed its position on several procedures and will delete only about 145 codes. ASCs can continue to provide these deleted services and bill for them until July 1, 2003. (See list of deleted codes, p. 52.)

Officials with the American Hospital Association (AHA) are reviewing the changes to see if rates

*(Continued on page 53)*

## Additions to ASC-Approved Procedures List (Excerpt)

HCPCS code and short descriptor:

- 15820, 15821, 15822, and 15823 Revision of lower and upper eyelid
- 21029 Head and facial excisions
- 21122, 21123, and 21127 Augmentation of the head and facial bones
- 21181 Reconstruction of the cranial bones
- 28126 Resection of toes
- 29800 Jaw arthroscopy/surgery
- 29848 Wrist arthroscopy with release of transverse carpal ligament
- 29860, 29861, 29863, and 29863 Hip arthroscopy/diagnostic and surgical
- 29891 and 29892 Ankle arthroscopy/surgical
- 29893 Scope plantar fasciotomy
- 31081, 31085, and 31087 Frontal sinusotomy
- 51715 Endoscopic injection/implant
- 52327 Cystoscopy, inject material
- 52647 Laser coagulation of prostate
- 53080 Drainage of urinary leakage
- 54111 Treat penis lesion graft
- 54304 Revision of penis
- 54308 Reconstruction of urethra
- 54322, 54324, 54326, Reconstruction of urethra
- 54328 Revise penis, urethra
- 54340 Secondary urethral surgery
- 54400 Insert semi-rigid prosthesis
- 54405 Insert multi-comp prosthesis
- 55250 Removal of sperm ducts
- 65772 and 65775 Correction of astigmatism
- 66825 Repositioning intraocular lens

Source: 68 *Fed Reg* 15,267-15,312 (March 28, 2003).

## Deletions from List of ASC-Approved Procedures

HCPSC code and short descriptor:

- 15756 Free muscle flap, microvasc
- 15757 Free skin flap, microvasc
- 15758 Free fascial flap, microvasc
- 15842 Flap for face nerve palsy
- 16030 Treatment of burns
- 16035 Incision of burn scab, initi.
- 19260 Removal of chest wall lesion
- 19364 Breast reconstruction
- 20660 Apply, remove fixation device
- 20661 Application of head brace
- 20662 Application of pelvis brace
- 20663 Application of thigh brace
- 20665 Removal of fixation device
- 20661 Application of head brace
- 20662 Application of pelvis brace
- 20663 Application of thigh brace
- 20665 Removal of fixation device
- 20955 Fibula bone graft, microvasc
- 20962 Other bone graft, microvasc
- 20969 Bone/skin graft, microvasc
- 20970 Bone/skin graft, iliac crest
- 20972 Bone/skin graft, metatarsal
- 20973 Bone/skin graft, great toe
- 21041 Removal of jawbone lesion
- 21343 Treatment of sinus fracture
- 21360 Treat cheek bone fracture
- 21385 Treat eye socket fracture
- 21386 Treat eye socket fracture
- 21387 Treat eye socket fracture
- 21390 Treat eye socket fracture
- 21395 Treat eye socket fracture
- 21406 Treat eye socket fracture
- 21407 Treat eye socket fracture
- 21422 Treat mouth roof fracture
- 21470 Treat lower jaw fracture
- 21495 Treat hyoid bone fracture
- 21510 Drainage of bone lesion
- 21550 Biopsy of neck/chest
- 21620 Partial removal of sternum
- 21810 Treatment of rib fractures
- 21920 Biopsy soft tissue of back
- 22100 Remove part of neck vertebra
- 22101 Remove part, thorax vertebra
- 22102 Remove part, lumbar vertebra
- 22103 Remove extra spine segment
- 22325 Treat spine fracture
- 22326 Treat neck spine fracture
- 22327 Treat thorax spine fracture
- 22328 Treat each add spine fx
- 23065 Biopsy shoulder tissues
- 24065 Biopsy arm/elbow soft tissue
- 24150 Extensive humerus surgery
- 24151 Extensive humerus surgery
- 24152 Extensive radius surgery
- 24153 Extensive radius surgery
- 25065 Biopsy forearm soft tissues
- 25170 Extensive forearm surgery
- 26035 Decompress fingers/hand
- 26037 Decompress fingers/hand
- 26551 Great toe-hand transfer
- 26553 Single transfer, toe-hand
- 26554 Double transfer, toe-hand
- 26992 Drainage of bone lesion
- 27030 Drainage of hip joint
- 27303 Drainage of bone lesion
- 27303 Drainage of bone lesion
- 27440 Revision of knee joint
- 27507 Treatment of thigh fracture
- 27511 Treatment of thigh fracture
- 27513 Treatment of thigh fracture
- 27524 Treat kneecap fracture
- 27535 Treat knee fracture
- 27613 Biopsy lower leg soft tissue
- 27715 Revision of lower leg
- 30124 Removal of nose lesion
- 31584 Treat larynx fracture
- 31600 Incision of windpipe
- 31710 Insertion of airway catheter
- 31715 Injection for bronchus X-ray
- 31785 Remove windpipe lesion
- 31800 Repair of windpipe injury
- 32002 Treatment of collapsed lung
- 32005 Treat lung lining chemically
- 32020 Insertion of chest tube
- 32002 Treatment of collapsed lung
- 32005 Treat lung lining chemically
- 32020 Insertion of chest tube
- 34101 Removal of artery clot
- 38700 Removal of lymph nodes, neck
- 38790 Inject for lymphatic X-ray
- 40805 Removal, foreign body, mouth
- 40806 Incision of lip fold
- 40820 Treatment of mouth lesion
- 41000 Drainage of mouth lesion
- 41105 Biopsy of tongue
- 41110 Excision of tongue lesion
- 41115 Excision of tongue fold
- 41805 Removal foreign body, gum
- 41806 Removal foreign body, jawbone
- 42104 Excision lesion, mouth roof
- 42106 Excision lesion, mouth roof
- 42160 Treatment mouth roof lesion
- 42225 Reconstruct cleft palate
- 42281 Insertion, palate prosthesis
- 42335 Removal of salivary stone
- 44345 Revision of colostomy
- 44346 Revision of colostomy
- 49000 Exploration of abdomen
- 49400 Air injection into abdomen
- 49425 Insert abdomen-venous drain
- 50020 Renal abscess, open drain
- 50040 Drainage of kidney
- 50520 Close kidney-skin fistula
- 50570 Kidney endoscopy
- 50572 Kidney endoscopy
- 50574 Kidney endoscopy & biopsy
- 50576 Kidney endoscopy & treatment
- 50578 Renal endoscopy/radiotracer
- 50580 Kidney endoscopy & treatment
- 50684 Injection for ureter X-ray
- 50690 Injection for ureter X-ray
- 51005 Drainage of bladder
- 51600 Injection for bladder X-ray
- 51605 Preparation for bladder X-ray
- 51610 Injection for bladder X-ray
- 51725 Simple cystometrogram
- 51865 Repair of bladder wound
- 51900 Repair bladder/vagina lesion
- 51920 Close bladder-uterus fistula
- 54125 Removal of penis
- 55600 Incise sperm duct pouch
- 55605 Incise sperm duct pouch
- 55650 Remove sperm duct pouch
- 56405 I&D of vulva/perineum
- 56605 Biopsy of vulva/perineum
- 57310 Repair urethrovaginal lesion
- 57311 Repair urethrovaginal lesion
- 57320 Repair bladder-vagina lesion
- 57800 Dilator of cervical canal
- 58551 Laparoscopy, remove myoma
- 60220 Partial removal of thyroid
- 60225 Partial removal of thyroid
- 62256 Remove brain cavity shunt
- 62351 Implant spinal canal cath
- 62367 Analyze spine infusion pump
- 62368 Analyze spine infusion pump
- 69424 Remove ventilating tube
- 69710 Implant/replace hearing aid

Source: 68 Fed Reg 15,267–15,312 (March 28, 2003).

## SOURCE/RESOURCES

The *Federal Register* document is available free from the on-line database through GPO Access. The web address is [www.access.gpo.gov/nara/index.html](http://www.access.gpo.gov/nara/index.html). Also, you can view and copy the *Federal Register* at many libraries. To order copies of the *Federal Register*, send your request to: New Orders, Superintendent of Documents, P.O. Box 371954, Pittsburgh, PA 15250-7954. Specify the date of the issue requested (March 28, 2003) and enclose a check or money order payable to the Superintendent of Documents, or enclose your Visa or Master Card number and expiration date. Credit card orders also can be placed by calling the order desk at (202) 512-1800 or by faxing to (202) 512-2250. The cost for each copy is \$10.

For further information on information in the *Federal Register* notice, contact: Bob Cereghino, Centers for Medicare & Medicaid Services. Telephone: (410) 786-4675.

The deadline for comments on the *Federal Register* notice is May 27, 2003. Mail written comments (one original and two copies) to the following address: Centers for Medicare & Medicaid Services, Department of Health and Human Services, Attention: CMS-1885-FC, P.O. Box 8013, Baltimore, MD 21244-8013. Please refer to file code CMS-1885-FC.

have increased beyond the inflationary update, according to Amy Lee, spokeswoman for the Washington, DC, office of the AHA. "Our concern is where ASC payment rates are higher than hospitals for the same procedure," she says.

Recently, the Office of Inspector General (OIG) for the Department of Health and Human Services recommended uniform payments rates for outpatient services provided in ASCs and hospital outpatient departments. (See "Surgery centers, hospitals could lose millions under OIG recommendations, *Same-Day Surgery*, April 2003, p. 37.) In addition, the Medicare Payment Advisory Commission (MedPAC) has recommended to Congress that no surgical procedure be paid more in an ASC than a hospital outpatient department. (See "MedPAC makes 1 change to ASC payment report," p. 58.)

AAASC and FASA are working with their members to submit comments on other procedures that are ready for the ASC setting but were not included in the final rule, Jeffries and Bryant say.

FASA officials are eager to discuss with CMS the decision not to add certain codes, such as 29873 (knee arthroscopy with lateral release), Bryant

says. "We recognize that as long as there is a list, it will always be a little behind what is happening with private payers," she says.

All codes that can be safely performed in an ASC should be added, Bryant maintains. "To deny Medicare beneficiaries access while others can have it makes no sense, especially in light of how long it takes CMS to update the ASC list," she says.

Bryant points to laparoscopic cholecystectomy as one example of a procedure that should be added to the ASC list. CMS concedes that it is appropriate in the ASC for some Medicare beneficiaries, but others need an overnight stay, she says.

"To deny all access because some may need a hospital stay is unfair to those that don't," Bryant maintains. "Moreover, if the list isn't updated for another eight years, this decision could impact the majority of Medicare beneficiaries." ■

## Hospital vs. freestanding: Which setting is the best?

*Parking, waiting times challenge all programs*

*(Editor's note: This is the first in a two-part series that looks at patient satisfaction scores for freestanding and hospital-based same-day surgery programs. This month, we look at overall scores and key issues for all same-day surgery programs. Next month, we will look at areas of greatest opportunity for improvement for each type of program.)*

Patients prefer hospital-based same-day surgery programs for their proximity to other medical services. Patients prefer freestanding same-day programs because they don't have an institutional environment. Patients prefer hospital-based programs because they attract the most experienced physicians and nurses. Patients prefer freestanding programs because they don't have to wait as long for procedures.

These claims from members of the outpatient surgery community have resulted in a long-standing lively debate about whether patients prefer hospital-based or freestanding outpatient surgery programs. As both types of programs have evolved over the years, they each have begun to resemble the other as hospital-based programs address ease of access issues, and freestanding programs incorporate more services to

## EXECUTIVE SUMMARY

Data from Press Ganey Associates show little difference in patient satisfaction between hospital-based outpatient surgery programs and freestanding surgery centers. However, there are challenges for each type of program.

- Freestanding centers owned by hospitals scored higher than freestanding independent centers and hospital-based programs in almost all categories.
- Convenient parking is a challenge to all programs, but freestanding independent programs received the lowest scores.
- Waiting times for registration, X-ray, and EKG are concerns for patients. Thibodaux (LA) Regional Medical Center heads off complaints by offering apology gifts to patients.

respond to patient and physician needs. (See **"Hospitals put priority on outpatient surgery" and "Freestanding centers promote their advances,"** *Same-Day Surgery*, November 2002, pp. 140-143.)

Press Ganey Associates, a health care satisfaction research and improvement company based in South Bend, IN, performed a comparison of patient satisfaction scores for same-day surgery programs that are freestanding, hospital-based, and affiliated with a hospital, but located off-site, exclusively for *Same-Day Surgery*.

"The difference among the three categories is not statistically significant," says **Deirdre E. Mylod**, PhD, manager of research and development for Press Ganey. "However, the pattern seems to be that the group of facilities that are affiliated with a hospital but located off-site have the highest score for almost every issue," she adds. (See graph at [www.same-daysurgery.com](http://www.same-daysurgery.com). Click on "Toolbox" and look under "Patient Satisfaction." Your user name is your subscriber number from your mailing label. Your password is sds (lowercase) plus your subscriber number.)

When asked about likelihood of recommending the same-day surgery program to others, hospital-affiliated off-site programs received a score of 93.4 by their patients, freestanding centers a score of 92.6, and hospital-based programs a score of 92.4.

While freestanding center managers always have pointed to convenience of parking as an advantage for them, patients still have complaints. Press Ganey data show that hospital-affiliated, off-site centers received a score of 83.6 for convenient parking, but hospital-based programs rated higher than freestanding centers with scores of 82.5 to 80.

"Parking was a major problem for us when we received our first Press Ganey report in 1999," says **Sharon Jordan**, RN, CNOR, director of perioperative services at Thibodaux (LA) Regional Medical Center. "We had designated parking areas closest to same-day surgery as same-day surgery parking, but patients complained that there were never enough spaces."

Because she knew that there should be enough spaces, Jordan and her staff began to monitor the same-day surgery parking area and found that hospital employees were using the spaces, especially when the weather was bad, she says.

The solution to the parking problem was twofold, says Jordan. "First, our chief executive officer sent a hospitalwide memo telling employees to park in employee lots only and not in lots designated as patient parking," she says.

Next, her facility began giving same-day surgery patients a parking permit when they come for pre-admission testing. "The permit includes the date of surgery and is placed on their dashboard on the day of surgery," Jordan says. Although the hospital doesn't charge for parking, patients appreciate the fact that the hospital is making special arrangements for their convenience, she adds. As a result of these efforts, patient satisfaction scores for parking have risen, although Jordan would not release specific scores.

Press Ganey also produced a priority index for each of the three categories of same-day surgery programs. "We look at each question's mean score and the question's correlation with overall satisfaction to produce the priority index," Mylod says. "Questions that appear high on the list would be considered high priorities for improvement because they are both low in score and high in importance to patients."

One issue that appears high on the priority index for hospital-based programs, but not in the

## SOURCES

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freestanding categories, is concern for privacy of patient. Protecting a patient's privacy in a busy same-day surgery program is an extra challenge in small towns where everyone knows each other, Jordan adds. "Our patients don't complain about our placing them in cubicles with curtains," she says. "In fact, we usually have several patients who insist on not closing the curtain because they want to see who else is there and talk with them."

Nurses do close curtains and respect a patient's desire for privacy, but there are always some patients who converse with each other during recovery, she says. Reducing waiting times are a challenge for all three types of same-day surgery facilities, but staff at the Thibodaux same-day surgery program have a secret weapon to reduce complaints, says Jordan.

"If any of our staff members notices that a family member or patient has had an unusually long wait, they have the authority to give a gift of either a free meal in the hospital cafeteria, a picture frame, or a gift certificate, with the level of gift determined by the amount of inconvenience the patient experienced," she says. During 2002, staff members distributed approximately 32 \$5 gift certificates to the hospital cafeteria, seven \$10 picture frames, and nine \$25 gift certificates to local merchants for a total of \$455, she adds.

"While the gifts are small in cost to us, they mean a lot to our customers because they know that we recognized the inconvenience to them and apologized," Jordan says. ■

## Same-Day Surgery Manager



## Your pressing questions on joint ventures

By **Stephen W. Earnhart, MS**  
President and CEO  
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Dallas

I write and speak often on the topic of physician-to-physician joint ventures, hospital and physician mergers, and similar arrangements. I have put together several of the more common

questions that I have been asked for this month's column. Enjoy!

**Question from an orthopedic surgeon:** Our hospital is proposing that we consider a joint-ventured surgery center. Quite honestly, it is attractive to us because we probably cannot afford to do it by ourselves and we do not want to give equity or ownership to some corporate entity. What is going to be our biggest obstacle with the hospital?

**Answer:** The biggest obstacle to hospitals and physicians getting into business together is summed up in one word: Trust. I see more physician groups shoot themselves in the foot because they do not feel they can trust the hospital leadership. The physicians will cite example after example why they cannot trust the hospital leaders. They will say they have been "used" before, and there is no way they are going to be manipulated again. They go on about how the hospital leaders will have the attorneys write language into the documents of the partnership that is bad for the physicians. They will explain how the accountants for the project will change the numbers around so the investors get no profits.

I get so tired of hearing this rhetoric. To think that independent outsiders are going to risk their license, abandon their ethics, and risk imprisonment just to "get the doctors" is ridiculous. In a legal and binding joint venture, the hospital and physicians are equally at risk. Since profits are paid out based upon ownership percentage, the hospital would not receive profits either if it somehow were coercing the management team to alter the numbers. I have seen many a surgery center never get off the ground because of failure to trust the other party. Such a waste!

**Question:** A group of us [surgeons] are going to start our own surgery center. Are there any potential problems we will face that we are not expecting that could cause this joint venture to fail?

**Answer:** Yes. Where does the greatest potential of failure come from? Greed! Greed is responsible for more failed surgery centers than most people realize. When independent physicians come together without clear guidance and sense of purpose, look out! Physicians are very independent, rugged individuals. They rarely take prisoners!

Unlike joint ventures with hospitals, in which the hospital usually is the unfair target of frustration for the physician partners, physicians tend to find fault with each other that is counterproductive. For example, one or more busy surgeons who use the center as it was designed to be used will come down heavy on a partner who does his or her

cases elsewhere. This is particularly common if that surgeon uses the local hospital because it is more convenient than coming over to the surgery center.

This practice quickly becomes an irritant that festers on the more active surgeons over a relatively short time (months, not years).

What typically happens in this situation is that the more active surgeons will pull out of the partnership and start their own surgery center. This action not only brings down the original surgery center, but the second center typically is not as profitable as the original could have been.

**Question:** A group of us [surgeons] are going to join the local hospital in a joint venture with its existing surgery center that is owned and run by the hospital. The center already is up and running, as the hospital has owned it for years. We are in the process of changing ownership of the center, and the issue of staffing has come up.

Our consultants are telling us that we should not hire the current hospital staff because they, the consultants, have their own people that they want to come in and run the center. As surgeons who have used this surgery center and the current staff for the past four years, we are balking at this. What is the right answer?

**Answer:** If there is one thing you want when your center opens its new doors, it is competency! Like any other job profession, there are great staff members, and those who just do enough to get by. You want as much continuation of great staff members as possible in your new center. Terminating the staff as a whole is silly, expensive, rude, unprofessional, and speaks poorly for the new partnership.

Often, to conform to the regulations and dictates of the surgery center board, the existing staff may have to resign "en masse" only to reapply for their current positions. This often is the only way to terminate existing retirement plans and other benefits under the hospital employment that may be different under the new ownership. Now, will all of the staff be invited to come back in to the new center? Maybe. If they are an asset to the hospital surgery center, they should be an asset to the new partnership. Only you can determine their value.

**Question:** Is that any regulation that requires the hospital to have the majority of ownership in a surgery center that is joint-ventured with surgeons?

**Answer:** No.

*(Editor's note: Earnhart & Associates is an ambulatory surgery consulting firm specializing in all aspects*

*of surgery center development and management. Contact Earnhart at 5905 Tree Shadow Place, Suite 1200, Dallas, TX 75252. E-mail: searnhart@earnhart.com. Web: www.earnhart.com.) ■*

## Study shows tumescent liposuction safe, effective

*Study offers patient satisfaction, benchmarks*

More than 372,000 patients underwent liposuction in 2002, making it the most commonly performed aesthetic procedure, according to statistics recently released by the New York City-based American Society for Aesthetic Plastic Surgery.<sup>1</sup>

Because of liposuction's popularity and questions about the safety of the procedure,<sup>2</sup> the Accreditation Association for Ambulatory Health Care's (AAAHC) Institute for Quality Improvement (IQI) in Wilmette, IL, conducted a study of tumescent liposuction to compare practices and results of the surgery.

"We focused upon tumescent liposuction in which local anesthesia alone was used so we could compare similar procedures and settings," says **Naomi Kuznets**, PhD, director of the IQI. Liposuction under general anesthesia is being addressed in a separate IQI study, Kuznets says.

The most notable finding is confirmation of the belief that tumescent liposuction is safe, says **C. William Hanke**, MD, president of the AAAHC board of directors and medical director of the Laser and Skin Surgery Center in Carmel, IN.

"Many retrospective studies have demonstrated

### EXECUTIVE SUMMARY

With the increasing popularity of liposuction, along with concerns about the procedure's safety, a tumescent liposuction study by the Institute for Quality Improvement (IQI) is welcome information to programs looking for benchmarks.

- A clinical complication rate of 0.7% was reported in the 702 cases on which data were submitted.
- The total lidocaine dose was miscalculated in one-third of the cases submitted with enough data for IQI to calculate dose.
- The average wait time ranged from 13 to 91 minutes, with a median of 32 minutes. Procedure times ranged from 28 to 153 minutes, with a median of 87 minutes.
- For all but 12 cases (2% of total cases), prophylactic antibiotics were used.

the safety of this procedure, but ours is the first real-time study to prove it," Hanke says. The information in the study will be helpful for same-day surgery programs to evaluate their own practice related to tumescent liposuction, he adds.

Of the 702 cases collected from 39 participating organizations, complications were reported in only 14 cases. Complications were generally minor and included hematoma (3), extreme discomfort (2), hyperpigmentation (2), anxiety (1), dizziness (1), mild swelling (1), hypotension (1), and sensitivity to epinephrine (1). In one case, a power outage interrupted the procedure. The most severe complication was a hospitalization to rule out a pneumothorax. Once complications that were not directly associated with the liposuction procedure, such as anxiety or dizziness, were eliminated, the clinical complication rate was 0.7%, Kuznets says.

"I was very surprised to see a pneumothorax reported in the study," says **Sue Ellen Cox, MD**, a dermatologic surgeon in Chapel Hill, NC. Because this study involved liposuction patients who were awake, an injury of this severity is unusual, Cox says. "When I rub a muscle with the cannula, my patients say 'ouch,'" she says. An injury such as a pneumothorax is more likely to occur when the patient is asleep, she adds.

Another safety issue to consider in tumescent liposuction is total lidocaine dose, Cox says.

From the information provided by the study participants, IQI calculated the total lidocaine dose for 513 cases, she says. Body weight values, lidocaine concentration values, or infused fluid volume were not available for the other cases.

"We found that one-third were incorrectly calculated by the organizations submitting data," Cox says.

The information about the incorrect lidocaine doses raises questions about who is calculating the dose, what type of training is given, and how much physician oversight of the calculation and the data collected in the study existed, Kuznets says.

While the American Academy of Dermatology in Schaumburg, IL, has cited 55mg/kg as a safe limit for total lidocaine dose in liposuction, 8% of the cases in the IQI study exceeded this limit, says Cox. Forty-six percent of the cases were below the more conservative limit of 35 mg/kg cited in clinical guidelines produced by the American Society of Plastic Surgeons in Arlington Heights, IL.

*(Editor's note: The maximum dose of 55 mg/kg recommended by the American Academy of Dermatology applies to the tumescent technique only. For other techniques, the guidelines are 4.5 mg/kg to a maximum of*

*300 mg without epinephrine and 7 mg/kg to a total of 500 mg with epinephrine.)*

For all but 12 cases or 2% of total cases submitted, prophylactic antibiotics were used. "I prescribe 1 g of cefazolin preoperatively and cephalexin for one week following surgery," says Cox. "I choose to treat potential infection aggressively, but not all physicians prescribe antibiotics following surgery." **(For more about prophylactic antibiotics, see "Fight infection before it develops," Same-Day Surgery, November 2002, p. 136.)**

"We did measure procedure and discharge times in the same way we've measured them in previous studies," says Kuznets.

A slight change was made in the measurement of wait time rather than pre-procedure time, she says. Wait time is a combination of how long before the procedure was scheduled that the patient was shown into the OR and the time the patient was shown in the OR to the time when infiltration began. The average wait time ranged from 13 to 91 minutes, with a median of 32 minutes. "As with all other studies, wait time is affected by how early the patient is instructed to arrive," adds Kuznets.

In addition to procedure time, which is defined as the insertion of the cannula to the time the cannula is removed, the IQI study also gathered information on infusion/diffusion time. Infusion/diffusion time is defined as the time infiltration is started to the procedure start time. Infusion/diffusion time ranged from 25 minutes to 193 minutes, with a median of 70 minutes. Procedure times ranged from 28 to 153 minutes with a median of 87 minutes.

"Procedure time statistics may not be as beneficial as they've been in previous studies because

## SOURCES/RESOURCE

For more on the study, contact:

- **Naomi Kuznets, PhD**, Director, AAHC Institute for Quality Improvement, 3201 Old Glenview Road, Suite 300, Wilmette, IL 60091-2992. Telephone: (847) 853-6060, ext.179. Fax: (847) 853-9028. E-mail: Naomi@aaahc.org.
- **Sue Ellen Cox, MD**, Cosmetic Surgery of North Carolina, 5925 Farrington Road, Chapel Hill, NC 27517. Telephone: (919) 682-2901.

Copies of the *Tumescent Liposuction Study* are \$25 each. To order, contact:

- **Institute for Quality Improvement**, 3201 Old Glenview Road, Suite 300, Wilmette, IL 60091-2992. Telephone: (847) 853-6060. Web: www.aaahciqi.org.

there was a great variation in the types of procedures performed," says Kuznets. "We also found that many cases combined several liposuction procedures," she adds.

The most common liposuction procedures were performed on the following body areas:

- thigh, 30%;
- abdomen, 23%;
- hip, 22%.

Patients included in the study received follow-up phone calls to measure their satisfaction at one-, three-, and six-month intervals, says Kuznets.

At six months post-surgery, 84% of patients were very satisfied (55%) and "nearly" very satisfied (29%) with the results of surgery, she says. In terms of discomfort during procedure, 75% had a rating of 1 or 2, with 1 representing no discomfort on a scale of 1 to 5, says Kuznets. Slightly more than 1% rated their discomfort level as severe discomfort, she adds.

Being able to follow up with patients in real time is a great advantage, points out Hanke.

"This study shows that tumescent liposuction is safe, patients experience little discomfort during and after the procedure, and patients are very satisfied with the results," he says. **(For more information on the procedure, see "Study: Office liposuction has low malpractice risk," *Same-Day Surgery*, December 1999, and "Liposuction deaths hit the headlines," *SDS*, July 1999.)**

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2. Coldiron B. Office surgical incidents: 19 months of Florida data. *Dermatol Surg* 2002; 28:710-713. ■

## Correction

In the April 2003 issue of *SDS Accreditation Update*, we made an incorrect statement about random, unannounced surveys by the Accreditation Association of Ambulatory Health Care (AAAHC). AAAHC-accredited organizations do undergo unannounced surveys. In addition to the unannounced "deemed status" reviews of organizations that want an accreditation survey combined with a Medicare review, AAAHC also selects organizations for random, unannounced surveys from nine to 30 months after a regular survey. The AAAHC also conducts "for-cause" unannounced surveys to address concerns about the organization's compliance with standards during the regular survey.

*Same-Day Surgery* regrets the error. ■

# MedPAC makes 1 change to ASC payment report

*Centers still may face cuts from Congress*

In its March report to Congress, the Medicare Payment Advisory Commission (MedPAC) made one change to its recommendations regarding payment for procedures in ambulatory surgery centers (ASCs). MedPAC says that until the Centers for Medicare & Medicaid Services (CMS) implements a revised ASC payment system, Congress should ensure that payment rates for ASC procedures do not exceed hospital outpatient prospective payment system rates for those procedures *after accounting for differences in the bundle of services covered*.

"We view this amendment in italics as extremely helpful," said **Michael Romansky**, JD, partner in the health law department of McDermott, Will, and Emery in Washington, DC, in his advisory for the Johnson City, TN-based American Association of Ambulatory Surgery Centers.

*Same-Day Surgery* sources point out that hospitals often get paid for other services conducted in association with an outpatient surgery case but billed separately. If Congress embraces a proposal along the lines of the original staff proposal, CMS would be compelled to immediately cut reimbursement for many ASC procedures, he says.

"If Congress adopts the amended recommendation, CMS would be required to first undertake a lengthy and complex analysis to establish an apples-to-apples comparison" of hospital and ASC payments, he says.

However, ASCs may not be in the clear yet, because services and rates are being examined like never before in Washington, Romansky says. Congress still could approve the unamended recommendation in its effort to cut spending to finance a Medicare prescription drug benefit, he reports.

The other MedPAC recommendations in the March report were as expected:

- CMS should expedite the collection of recent ASC charge and cost data for the purpose of analyzing and revising the ASC payment system.

- Congress should eliminate the update to payment rates for ASC services for fiscal year 2004. **(For more information, see "MedPAC urges payment cuts for surgery centers," p. 31, *Same-Day Surgery*, March 2003.)** ■

(Continued from cover)

The CDC doesn't know to what extent all SARS patients are particularly infectious, but some appear to be "very highly infectious," said **Julie Louise Gerberding**, MD, MPH, director of the CDC and administrator of the Agency for Toxic Substances and Disease Registry. "For example, in Hanoi, there was one patient who was a source for health care worker transmission, and approximately 56% of the health care [workers] who had direct contact with the patient appeared to have acquired SARS," she said.<sup>1</sup> Gerberding did not specify whether the patient had undergone bronchoscopy or another aerosol-generating procedure.

The cause of SARS is unknown and is being investigated. CDC officials believe that the major mode of transmission is through droplets spread when an infected person coughs or sneezes. However, agency officials are concerned about the possibility of airborne transmission across broader areas and the possibility that objects that become contaminated in the environment could serve as modes of transmission.<sup>1</sup>

At some Ontario hospitals, hundreds of health care workers were under voluntary self-isolation at press time. Due to lack of staff, as well as a desire to stop the spread of SARS, some hospitals were canceling elective surgery. "All Canadian cases have occurred in persons who have traveled to Asia or had contact with SARS cases in the household or in a health care setting," according to Health Canada.

During its U.S. investigation, the CDC received anecdotal reports that aerosol-generating procedures might have facilitated the transmission of SARS in some cases. Procedures that induce coughing can increase the likelihood that droplet nuclei are expelled into the air, the agency pointed out. The potentially aerosol-generating procedures include bronchoscopy, aerosolized medication treatments (such as albuterol), diagnostic sputum induction, airway suctioning, and endotracheal intubation.

"For this reason, health care personnel should ensure that patients have been evaluated for SARS before initiation of aerosol-generating procedures," the CDC said.<sup>3</sup> Evaluation for SARS should be based on the most recent case definition for SARS, the agency says. At press time, a suspected case includes respiratory illness of unknown etiology with onset since Feb. 1, 2003, and the following criteria:

- measured temperature  $\geq 100.5^\circ$  F ( $>38^\circ$  C);
- **And** one or more clinical findings of respiratory illness (i.e., cough, shortness of breath, difficulty

breathing, hypoxia, or radiographic findings of pneumonia or acute respiratory distress syndrome);

- **And** travel within 10 days of onset of symptoms to area with documented or suspected community transmission of SARS [Peoples' Republic of China (i.e., mainland China and Hong Kong Special Administrative Region); Hanoi; Vietnam; and Singapore. This list excludes areas with secondary cases limited to health care workers or direct household contacts.]

- **OR** close contact within 10 days of onset of symptoms with a person with a respiratory illness who traveled to a SARS area or a person known to be a suspected SARS case. Close contact is defined as having cared for, having lived with, or having direct contact with respiratory secretions and/or body fluids of a patient known to be a suspected SARS case.<sup>4</sup>

In other words, be suspect of a patient with flu-like symptoms, a fever, AND who has traveled recently to Southeast Asia, says **Joan Blanchard**, RN, MSS, CNOR, CIC, perioperative nursing specialist at the Center for Nursing Practice at the Association of periOperative Registered Nurses (AORN) in Denver. "A patient with these symptoms would not be a candidate for surgery," she says. "If they did present to the ambulatory surgery center with these symptoms, and they had recently traveled to Southeast Asia, the nurse should speak to the physician. The surgery should be canceled."

Warning: Partly due to the broad criteria, the CDC cautions that most cases meeting criteria for SARS are expected to be unrelated to the current outbreak.<sup>5</sup>

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### Objectives

- Identify clinical, managerial, regulatory, or social issues relating to ambulatory surgery care and management. (See "Additions to the ASC list finally out — centers have reason to celebrate," "Hospital vs. freestanding: Which setting is the best?" and "Study shows tumescent liposuction safe, effective" in this issue.)
- Describe how those issues affect clinical service delivery or management of a facility. (See "Evaluate bronchoscopy patients for SARS.")
- Cite practical solutions to problems or integrate information into your daily practices, according to advice from nationally recognized ambulatory surgery experts.

17. What is the status of four nerve block procedures: 64420, 64421, 64622, and 64623 (injection of nerve block) at ambulatory surgery centers (ASC)?
  - A. They were retained on the list of ASC-covered procedures.
  - B. They were added to the list of ASC-covered procedures
  - C. They were deleted from the list of ASC-covered procedures.
18. What types of procedures might have facilitated the transmission of severe acute respiratory syndrome (SARS) in some cases, according to the CDC?
  - A. laparoscopic procedures
  - B. ear, nose, and throat procedures
  - C. aerosol-generating procedures
  - D. none of the above
19. How does the same-day surgery staff at Thibodaux Regional Medical Center minimize complaints about waiting times for patients and their families, according to Sharon Jordan, RN, CNOR, director of perioperative services?
  - A. They move them ahead of other people.
  - B. The medical director sends a note of apology.
  - C. Staff members who notice the unusual wait offer the patient and family a free meal, picture frame, or gift certificate.
  - D. Staff members put a note on the patient's chart.
20. What percentage of cases included in the tumescent liposuction study by the Institute for Quality Improvement exceeded the American Academy of Dermatology's clinical guideline that sets 55 mg/kg as a safe total lidocaine dose?
  - A 4%
  - B 5%
  - C 7%
  - D. 8%

**Answer Key:** 17. A; 18. C; 19. C; 20. D

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# Same-Day Surgery Reports

From the Publishers of Same-Day Surgery®

Supplement to *Same-Day Surgery*

May 2003, S03153

Post anesthesia care is the management of a patient after the completion of surgery or a diagnostic procedure and anesthesia or sedation. The American Society of Anesthesiologists (ASA) appointed a task force of 10 members who developed the practice guidelines for post anesthesia care through the analysis of the literature, consultation with specialists in post anesthesia care, a survey of ASA members, and open discussion forums at a major meeting.<sup>1</sup> The guidelines examine and provide recommendations for preventive strategies during the perioperative period.

Focus is placed on the prevention and treatment of common postoperative complications events with the goal of improved post anesthetic quality of life, early recovery, and timely discharge. The guidelines are intended for use by anesthesiologists and other health care professionals who direct anesthesia or sedation and analgesia care.

This article reviews these guidelines applicable to same-day surgery. The ASA Post Anesthesia Guidelines are discussed under these subheadings:

- perioperative patient assessment and monitoring;
- treatment during emergence and recovery;
- antagonism of the effects of sedatives, analgesics, and neuromuscular blocking agents; and
- protocol for discharge.

## Perioperative Patient Assessment and Monitoring

The guidelines emphasize the importance of monitoring the patient's vital signs, neuromuscular functions, mental status,

nausea and vomiting, and pain during the postoperative recovery period. Patient outcome can be improved during certain surgical procedures with the monitoring of temperature, drainage and bleeding, fluid intake, and urine output.

• **Respiratory function and mental status.** Recovering patients can exhibit inappropriate mental reactions ranging from confusion to extreme disorientation and physical combativeness.

Hypoxia can result in altered mental status. The task force advises the use of pulse oximeter to detect hypoxia and recommends that monitoring of airway patency, respiratory rate, oxygen saturation, and mental status will reduce the risk of postoperative complications.

• **Cardiovascular and neuromuscular functions.** Monitoring of vital signs, including blood pressure and pulse monitoring rate, during recovery after anesthesia is a standard practice.

Electrocardiographic (ECG) monitoring during recovery may not be routine. The members of the task force agree that ECG monitoring should be done on a case-by-case basis during recovery. Physical examination should be routine for all patients with history of neuromuscular dysfunction, and the use of a neuromuscular blockade monitor is recommended especially in cases in which nondepolarizing neuromuscular blocking agents are used.<sup>1</sup> Residual paralysis can result in hypoxia and adverse outcome. Adverse consequences may result if the train-of-four ratio is less than 0.9.<sup>2</sup>

• **Temperature.** The potential for heat loss or risk of triggering malignant hyperthermia requires temperature monitoring in selected patients. Perioperative hypothermia results from

## Post Anesthesia Guidelines for Same-Day Surgery

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anesthetic-induced inhibition of thermo regulation, the cold ambient environment in the operating room and heat loss due to surgical exposure also contributes to hypothermia.<sup>3</sup> Effects of hypothermia can be detrimental; therefore, the guidelines recommend the patient's body temperature should be periodically monitored intraoperatively and during early recovery period.<sup>1</sup>

• **Pain.** Review of the literature shows that major morbidity and mortality after an ambulatory procedure is extremely low. However, incidence of postoperative pain is very high, which can result in delay of discharge and increases the incidence of unanticipated hospital admission.<sup>4</sup> Furthermore, inadequate pain relief delays return to daily living functions and decreases patient satisfaction. The assessment of the pain is important during the recovery period to avoid complications and thus to ensure early patient discharge.

• **Nausea and vomiting.** The incidence of postoperative nausea and vomiting (PONV) is high and often results in delay of

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discharge after certain types of ambulatory surgical procedures. The consultants and ASA members agree that nausea and vomiting should be assessed routinely to ensure the patient's comfort and satisfaction to allow early treatment and timely discharge.

• **Fluid intake and urine output.** Intravenous fluid therapy (20 mL/kg for eight hours NPO) will reduce the incidence of postoperative thirst, drowsiness, dizziness, and nausea and vomiting in the outpatient.<sup>5</sup> The task force suggests agrees that a patient's hydration status should be assessed in the post anesthesia care unit (PACU). Urine output monitoring may not be routine; it can be used to assess hydration status in some cases. Assessment of voiding may be done for patients with history of voiding difficulty or after certain types of surgical procedures particularly involving urogenital areas.

• **Drainage and bleeding.** Surgical procedures that carry higher risk of bleeding require monitoring of blood loss. Fluid loss may be significant through the surgical drains. Depending on the type of procedure, assessment of bleeding and drainage should be performed. (See "Summary of Recommendations for Assessment and Monitoring," enclosed in this issue.)

#### Treatment During Emergence and Recovery

• **Prophylaxis and treatment of nausea and vomiting.** Despite pharmacological and technological advancements, nausea and vomiting remain a common problem and are present in 20% to 30% of patients in the PACU<sup>6</sup> and 35% of patients after their discharge home.<sup>7</sup> Risk factors for PONV include female gender, previous history of nausea and vomiting, motion sickness, non-smokers, and use of postoperative opioids.<sup>8</sup> Ondansetron and other 5-HT<sub>3</sub> antagonist drugs, metoclopramide or droperidol may be used for prophylaxis or therapy. Supplemental oxygen may also decrease the incidence of PONV.<sup>9</sup> The practice guidelines state that prophylaxis and treatment of nausea and vomiting should be done selectively. Multiple authors recommend prophylactic use multiple antiemetic drugs for high-risk patients and none for low-risk patients.<sup>10-12</sup> Current recommendation by the ASA guidelines is that antiemetic agents should be used for the prevention and treatment of nausea and vomiting when indicated. Multiple agents may be used for the prevention or treatment of nausea and vomiting when indicated.

• **Administration of supplemental oxygen.** Supplemental oxygen reduces the risk of hypoxemia in the postoperative period. The ASA guidelines recommend that patients at the risk of respiratory distress and hypoxemia should be treated by with supplemental oxygen in the PACU. Administration of oxygen also is advised for those at risk of hypoxemia during transportation from the OR to the PACU.<sup>1</sup>

• **Normothermia.** The major and minor complications of hypothermia are well documented. Even a small reduction in intraoperative body temperature can produce substantial morbidity in selected patients, such as patients older than 65 years old at risk for postoperative cardiac ischemia.<sup>13</sup>

Unless hypothermia is specifically indicated as for protection against ischemia, efforts should be made to maintain core body temperature at or more than 36° C by using devices such

as a forced-air warming system.<sup>14</sup>

- **Postoperative shivering.** During emergence from general anesthesia, hypothalamic regulation increases metabolic activity and generates shivering to increase endogenous heat production. As a result, myocardial ischemia or ventilatory failure can occur in patients with coronary artery disease or limited ventilatory reserve. Meperidine is recommended for the control of postoperative shivering,<sup>15</sup> and re-warming of patients also should be strongly considered. In case meperidine is contraindicated or is not available, the ASA guidelines recommend that other opioid agonists or agonist-antagonists should be used.

### **Antagonism of the Effects of Sedatives, Analgesics, and Neuromuscular Blocking Agents**

- **Antagonism of benzodiazepines and opioids.** Residual sedation is the most frequent cause of somnolence in the PACU.<sup>16</sup> Sedation caused by intraoperative opioids or benzodiazepines generally is dose-related. It is recommended that specific antagonists (i.e., naloxone, flumazenil) should be available whenever opioids and benzodiazepines are used. The ASA guidelines advise that the antagonists should not be administered routinely and suggest their use for selected cases of respiratory depression and prolonged sedation. The ASA guidelines also warn practitioners that the recurrence of respiratory depression after antagonism may occur. Acute antagonism of opioids may result in pain, hypertension, tachycardia, and or pulmonary edema.<sup>1</sup>

- **Reversal of neuromuscular blockade.** An increased frequency of emetic episodes has been demonstrated after the use of a high dose of neostigmine (0.5 mg/kg).<sup>17</sup> Yet, in ambulatory patients, neuromuscular recovery should be monitored and residual paralysis antagonized, unless there is strong evidence that they are not required.<sup>18</sup> [See “**Summary of Treatment Recommendations**” at [www.same-daysurgery.com](http://www.same-daysurgery.com). Click on “**toolbox**” and look under “**anesthesia.**” Your user name is your subscriber number from your mailing label. Your password is sds (lower-case) plus your subscriber number.]

### **Protocol for Discharge**

- **Requiring that patients urinate before discharge.** Voiding, traditionally, has been considered a prerequisite to discharge to be assured that a patient will not later develop urinary retention. Requiring that patients urinate before discharge may unnecessarily prolong hospital stay. For example, in one study, the incidence of urinary retention after discharge was 0.8% in low-risk patients.<sup>19</sup> The ASA guidelines recommend that the routine requirement for urination before discharge should not be part of a discharge protocol. It may be necessary only for selected patients at risk for urinary retention (hernia/anal surgery, spinal/epidural anesthesia, and those with a history of urinary retention). Patients discharged without voiding should be given clear verbal and written instructions to seek medical attention if unable to void within eight hours of discharge.

- **Requiring that patients drink clear fluids without vomiting before discharge.** The requirement that oral intake be resumed prior to discharge has been challenged in children, on

the grounds that mandatory drinking may in fact provoke nausea and vomiting.<sup>20</sup> In a comparative study in adults of mandatory drinkers vs. elective drinkers, neither drinking nor non-drinking worsened the incidence of PONV.<sup>21</sup> The requirement to drink clear liquids should not be part of a discharge protocol. Rather, the demonstration of the ability to retain orally administered fluids prior to discharge should be assessed on a case-by-case basis.<sup>1</sup>

- **Requiring that patients have a responsible individual to accompany them home after discharge.** The guidelines recommend that as a part of the recovery room discharge protocol, all patients should be discharged to a responsible adult who will accompany them home and be able to continue supervision overnight and report post-procedure complications.<sup>1</sup>

- **Requiring a minimum mandatory stay in recovery.** The literature is insufficient to suggest the benefits of a minimum PACU mandatory stay. In one study, when the post anesthesia discharge scoring system (PADS) was used to determine the time ambulatory patients were required to stay in the PACU, the majority of patients were discharged within one to two hours of surgery.<sup>22</sup> Therefore, it is suggested that the length of stay in the PACU should be determined on a case-by-case basis and the minimum mandatory stay should not be a part of discharge protocol. The ASA guidelines recommend the implementation of discharge criteria to assess the suitability for the discharge. Discharge criteria or a scoring system, such as the Modified Aldrete Scoring System, which assesses activity, respiration, circulation, consciousness, and oxygen saturation, may assist in documentation of fitness for discharge to phase two recovery.<sup>23</sup> The PADS (based upon stability of vital signs, absence of PONV, pain, and surgical bleeding) can be used to determine home readiness.<sup>3,4,22</sup> (See “**Summary of Recommendations for Discharge**” and “**Summary of Recovery and Discharge Criteria,**” enclosed in this issue.)

### **Conclusion**

The safe, expeditious conduct of ambulatory surgery can succeed only by appropriate intraoperative and postoperative anesthetic care and prudent, timely discharge of patients. Implementation of practical guidelines for post anesthesia care in every ambulatory surgery center can help achieve this goal. The ASA guidelines apply to patients of all ages who have just received general anesthesia, regional anesthesia, or moderate or deep sedation.

However, it is important to note that the above guidelines provide only basic recommendations and must be applied on an individual case basis with clinical judgment. The use of the preventative strategy strategies will establish high optimal postoperative patient care and avoidance of adverse outcomes. We must ensure that patients are discharged home appropriately by treating PONV and other side effects effectively, which will result in optimum patient satisfaction and early return to full daily living function.

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**Answer Key:** 1. D; 2. C; 3. B

## CME Objectives

After participating in this CE/CME activity, the learner will be able to:

- Explain hypoxia during emergence and recovery.
- List one way to address PONV.
- List one example of a way to avoid delaying discharge.

## CME Questions

1. Which of the following statements is *false*?  
Hypoxia during emergence and recovery:
  - A. can be avoided by periodic assessment of airway patency and respiratory rate.
  - B. can be avoided by using supplemental oxygen.
  - C. can result in confusion, disorientation, and combative behavior.
  - D. should be treated by meperidine.
2. Which of the following statements is true?  
The incidence of PONV is high and:
  - A. prophylactic combination therapy should be given to all patients.
  - B. avoidance of neostigmine for the reversal of neuromuscular blockade always will reduce PONV.
  - C. prophylactic administration of antiemetics can reduce PONV in high-risk patients.
  - D. mandatory drinking will reduce PONV by alleviating dehydration.
3. All of following are true *except*:  
Delay in discharge can be avoided by:
  - A. adapting a discharge criteria or scoring system.
  - B. routinely antagonizing any postoperative sedation with naloxone.
  - C. assessing time required for minimum patient's stay after surgery on a case-by-case basis.
  - D. avoiding the requirement to urinate prior to discharge in low-risk patients.

## CE/CME Instructions

Physicians and nurses participate in this CE/CME program by reading the article, using the provided references for further research, and studying the questions at the end of the article. Participants should select what they believe to be the correct answers, then refer to the answer key to test their knowledge. To clarify confusion surrounding any questions answered incorrectly, please consult the source material. After completing this activity, you must complete the evaluation form provided and return it in the reply envelope to receive a certificate of completion. When your evaluation is received, a certificate will be mailed to you.

# Summary of Recommendations for Assessment and Monitoring

	<b>Routine</b>	<b>Cardiovascular</b>	<b>Neuromuscular</b>	<b>Mental status</b>	<b>Temperature</b>	<b>Pain</b>	<b>Nausea and vomiting</b>	<b>Urine</b>	<b>Drainage and bleeding</b>
Routine	Respiratory rate, airway patency, oxygen saturation	Pulse rate, blood pressure	Physical examination	Yes	No	Yes	Yes	No	No
Selected Patients		Electrocardiogram	Neuromuscular blockade, nerve stimulator		Yes			Voiding, output	Yes

Source: Adapted from Practice Guidelines for Post Anesthetic Care: A report by the American Society of Anesthesiologists Task Force on Post Anesthetic Care. *Anesthesiology* 2002; 96:742-752.

## Summary of Recommendations for Discharge

### 1. Requiring that patients urinate before discharge.

Don't make the requirement for urination before discharge part of a routine discharge protocol; it may be necessary only for selected patients.

### 2. Requiring that patients drink clear fluids without vomiting before discharge.

Don't make the demonstrated ability to drink and retain clear fluids part of a routine discharge protocol, but it may be appropriate for selected patients.

### 3. Requiring that patients have a responsible individual accompany them home.

You routinely should require patients, as part of a discharge protocol, to have a responsible individual accompany them home.

### 4. Requiring a minimum mandatory stay in recovery.

Don't require a mandatory minimum stay.

Observe patients until they are no longer at increased risk of cardiorespiratory depression.

Design discharge criteria to minimize the risk of central nervous system or cardiorespiratory depression after discharge.

Source: Adapted from Practice Guidelines for Post Anesthetic Care: A report by the American Society of Anesthesiologists Task Force on Post Anesthetic Care. *Anesthesiology* 2002; 96:742-752.

# Summary of Recovery and Discharge Criteria

## GENERAL PRINCIPLES

- Medical supervision of recovery and discharge is the responsibility of the supervising practitioner.
- The recovery area should be equipped with appropriate monitoring and resuscitation equipment.
- Patients should be monitored until appropriate discharge criteria are satisfied.
- Level of consciousness, vital signs, and oxygenation (when indicated) should be recorded at regular intervals.
- A nurse or other individual trained to monitor patients and recognize complications should be in attendance until discharge criteria have been fulfilled.
- An individual capable of managing complications should be immediately available until discharge criteria are fulfilled.

## GUIDELINES FOR DISCHARGE

- Patients should be alert and oriented. Patients whose mental status was initially abnormal should have returned to their baseline.
- Vital signs should be stable and within acceptable limits.
- Discharge should occur after patients have met specified criteria. Use of scoring systems may assist in documentation of fitness for discharge.
- Outpatients should be discharged to a responsible adult who will accompany them home and be able to report any post-procedure complications.
- Outpatients should be provided with written instructions regarding post-procedure diet, medications, activities, and a phone number to be called in case of emergency.

Source: Adapted from Practice Guidelines for Post Anesthetic Care: A report by the American Society of Anesthesiologists Task Force on Post Anesthetic Care. *Anesthesiology* 2002; 96:742-752.