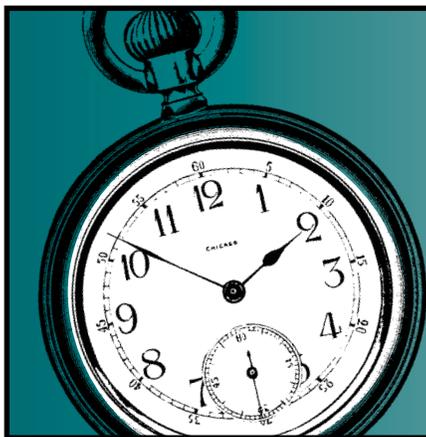


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Study says patients can take some herbs until 24 hours before surgery

But ASA advises discontinuing use at least two weeks before procedure

Contrary to public and professional educational information released by the American Society of Anesthesiologists (ASA), a new study in the *Journal of the American Medical Association (JAMA)* suggests that patients may continue the use of some herbs until as few as 24 hours before surgery.¹ In contrast, information from the ASA, which is based in Park Ridge, IL, recommends that herbs be discontinued at least two weeks before surgery.

The controversy has profound implications for the same-day surgery field. A recent study found that about one-third of patients in an ambulatory surgery setting admitted that they used herbal medications.² And this statistic should really get your attention: More than 70% of the patients studied did not disclose their herb use during the routine pre-op assessment. In one case, a patient undergoing a laparoscopic cholecystectomy told his primary care physician and two surgical staff that he had not taken any medication.³ The patient subsequently experienced postoperative bleeding. Twenty-four hours later, the patient was questioned further and revealed that he took a multivitamin and two *Ginkgo biloba* tablets per day.

EXECUTIVE SUMMARY

A recent study goes against advice from the American Society of Anesthesiologists and says that not all herbs need to be discontinued at least two weeks before surgery.

- The study has been criticized because it isn't based on double-blind, placebo-controlled studies, and it doesn't take into consideration the time it takes for the effect of herbs to wear off.
- To avoid any potential interactions between herbs and other medications, ask patients to bring the herbs they are taking to the pre-op evaluation. Include pediatric patients and their parents in this process.
- It's possible for patients taking herbs to suffer from withdrawal, particularly if they are taking valerian.

Chun-Su Yuan, MD, PhD, one of the authors of the *JAMA* study, says, "They're thinking they're not 'drugs,' because they're not physician prescription [medications]. Or patients think it's not important, or they don't want to be criticized by the physicians." Yuan is assistant professor in the department of anesthesia and critical care and a member of the Tang Center for Herbal Medicine Research at the University of Chicago.

Patients often think that physicians aren't educated about herb use, according to one study.⁴ And the truth is, many physicians aren't certain about what to do when the patients present them with herb information, complementary medicine experts say.

The *JAMA* article recommends that providers use a "targeted" approach when advising patients on discontinuing herbs before surgery.

"The ASA recommendations for two or three weeks is very good, but sometimes not practical in our view," Yuan says. Many surgical patients have their preoperative visit conducted just a few days before surgery, he points out.

"To say, 'Stop your herbs and come back in two weeks' is not practical," Yuan says. "We got very specific [in our recommendations], based on our literature search."

Pharmacokinetic data indicate that some herbs are eliminated quickly and could be discontinued closer to the time of surgery, the study says. The study focused on the eight most common herbs: echinacea, ephedra, garlic, ginkgo, ginseng, kava, St. John's wort, and valerian. These herbs account for 50% of all single-herb preparations sold, studies show.⁵⁻⁶ The authors made the following recommendations for discontinuation:

- echinacea (purple coneflower root), no data;
- ephedra (ma-huang), at least 24 hours before surgery;
- garlic (ajo), at least seven days before surgery;
- ginkgo (duck foot tree, maidenhair tree, silver apricot), at least 36 hours before surgery;
- ginseng (American ginseng, Asian ginseng, Chinese ginseng, Korean ginseng), at least seven days before surgery;
- kava (ava, intoxicating pepper), at least 24 hours before surgery;

- St. John's wort (amber, goatweed, hardhay, Hypericum, klamathe weed), at least five days before surgery;

- valerian (all heal, garden heliotrope, vandal root), no data.

The concern about patients taking herbs before surgery is that some herbs, as well as dietary supplements, can affect the body's ability to clot blood, surgery experts say. In addition, herbs can affect sedation, pain control, heart function, metabolism, immunity, and recovery, they say. **(For more information on the impact of herbs, see *Same-Day Surgery*, April 2001, p. 43, and August 1999, p. 93.)**

Study is criticized

The study has been criticized by some people with ties to the ASA because the recommendations aren't based on double-blind, placebo-controlled studies.

"My opinion, basically, is that they didn't do sound scientific studies to come up with discontinuation dates," says **Jessie A. Leak, MD**, associate professor in the Department of Anesthesia at the University of Texas, MD Anderson Cancer Center in Houston. Leak is one of the authors of the ASA publications, *What You Should Know About Your Patients' Use of Herbal Medicines* and *What You Should Know About Herbal Use and Anesthesia*. **(For an excerpt listing herbs, common uses, and side effects, see *Same-Day Surgery*, April 2001, insert. For ordering information on the pamphlets, see *SDS*, April 2001, resource box, p. 44.)**

The *JAMA* authors examined how long it would take herbs to be excreted from the body and assumed that once the herbs were out of the body, it would be safe for the patient to have surgery, Leak says.

"My opinion is that without well-designed patient safety studies, these are probably premature recommendations," she says.

Leak says she is alarmed that practitioners might shorten the time to discontinue herbs before surgery without taking into account the effect of the herbs on various body systems.

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“Their margin of safety won’t be wide enough,” she says.

Yuan acknowledges that the criticism of the basis of his study is valid, but adds, “This is the best we can do: Look at how long it takes the compound to be excreted from the system.” The authors looked into the effects of the herbs, but most of the published studies have concentrated on pharmacological data, he says, “so our report was based on that.”

What should you do?

With conflicting information coming from the ASA and the *JAMA* study, what should providers do?

“Until we can get better patient safety studies, I’m going to stick with the two-week deadline,” Leak says. “I’m very concerned, particularly with bleeding.”

Experts offer these additional suggestions:

- **Ask patients about herb use and document it.**

Because most patients do not volunteer information on herb use when you ask them about medications, specifically ask them about herbs in the pre-op evaluation, experts suggest.²

“We recommend to nurses that they include in their pre-op assessment the use of herbal medicines by patients, and that they include that [use] in the interview questions,” says **Ramona Conner**, RN, MSN, perioperative nursing specialist at the Association of periOperative Registered Nurses in Denver.

“If you ask, ‘Are you taking any herbs or dietary supplement?’ you often get ‘no,’” Yuan adds. “But if you list each herb, ask specific questions, we saw a high percentage taking herbs or dietary supplements.”

However, simply asking about herbs isn’t sufficient, the *JAMA* authors maintain. One in five patients can’t identify which preparations they are taking.⁷ Therefore, ask patients to bring their herbs and other dietary supplements, as well as prescription medication, with them to the pre-op evaluation, experts suggest.

This step is important because the field of dietary supplements is unregulated, Leak says. “When we ask them to bring bottles, every bottle is the U.S. potentially could be different,” she says. “[Also], it’s not at all uncommon for patients to be taking herbs that are mixtures.” For example, ma-huang (*Ephedra Sinica*), which represents 17% of all dietary supplement use, is available in as many

as 5,000 commercially available products, Leak says.

- **Include your pediatric patients and their parents.**

SOURCES AND RESOURCES

For more on discontinuing drugs before surgery, contact:

- **Ramona Conner**, RN, MSN, Perioperative Nursing Specialist, Association of periOperative Registered Nurses, 2170 S. Parker Road, Suite 300, Denver, CO 80231-5711. Telephone: (303) 755-6304, ext. 264. Fax: (303) 338-5165. E-mail: rconner@aorn.org.
- **Jessie A. Leak**, MD, Associate Professor, Department of Anesthesia, University of Texas, MD Anderson Cancer Center, 1515 Holcombe Blvd., Box 042, Houston, TX 77030. Telephone: (713) 792-6911. Fax: (713) 794-4590. E-mail: jleak@mdanderson.org.
- **Chun-Su Yuan**, MD, PhD, Assistant Professor, Department of Anesthesia and Critical Care, University of Chicago, 5841 S. Maryland Ave., MC 4028, Chicago, IL 60637.

For more information on herbs and other dietary supplements, see the following web sites:

- **nccam.nih.gov**. National Center for Complementary and Alternative Medicine, National Institutes of Health. Fact sheets about alternative therapies, consensus reports, and databases are included.
- **vm.cfsan.fda.gov/~dms/supplmnt.html**. Center for Food Safety and Applied Nutrition, Food and Drug Administration. Report adverse events associated with herbs and other dietary supplements. Safety, regulatory, and industry information are included.
- **www.ars-grin.gov/duke**. Agricultural Research Service, U.S. Department of Agriculture. A phytochemical database is included.
- **www.consumerlab.com**. ConsumerLab. This corporation performs independent laboratory investigations of dietary supplements and other products.
- **www.herbmed.org**. HerbMed, a project of the Alternative Medicine Foundation. Information on more than 120 herbal medications is included. Significant research publications are summarized with Medline links.
- **www.ncahf.org**. National Council Against Health Fraud. Includes a position paper on over-the-counter herbal therapies.
- **www.quackwatch.com**. Quackwatch. Includes significant amount of information on herbal and complementary therapies.

One study indicated that one in six parents reported giving dietary supplements to their children.⁸ “Echinacea is popular for use in kids,” Leak warns. “Herb use has to be part of children’s [history and physical] too.”

• **Realize that even if patients discontinue herb use, they may suffer withdrawal.**

Because withdrawal from conventional medications is associated with increased morbidity and mortality after surgery, withdrawal from herbs use may have a similar impact, the *JAMA* authors warn.⁹

“The danger of abstinence after long-term use may be similar with [alcohol and] herbal medications, such as valerian, which have the potential for producing acute withdrawal after long-term use,” the authors say. They point to one case in which a patient who stopped taking valerian before surgery had delirium and cardiac complications postoperatively.¹⁰

Concerns over herb use before surgery are likely to grow. One publication estimates that 49% of the U.S. population has used an herbal product in the last year.¹¹ Keep in mind that many of these patients will continue to take herbal medications up until the time of surgery.

“Therefore, clinicians should be familiar with commonly used herbal medications to recognize and treat complications that may arise,” the *JAMA* authors recommend. **(For a list of web sites, see resource box, p. 99.)**

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How to lawsuit-proof your SDS program

Good communication, documentation important

Law and Order. *The Practice*. Ally McBeal. Family Law. 100 Centre Street. *The People’s Court*. Judge Judy.

Watch television and you’ll see people going to court to solve their problems, make their lives better, and punish those who caused them to suffer. Of course, these television shows don’t show the real lives most of us lead. Still, they reflect the litigious society in which we live and work.

What does this trend mean for a same-day surgery manager? It means knowing your risks and taking steps to protect your program from malpractice suits, say experts interviewed by *Same-Day Surgery*.

Although medical error may be the primary reason for the lawsuit, not all patients decide to sue based on the medical error alone, says **Bill Duffy**, RN, MJ, CNOR, assistant vice president

EXECUTIVE SUMMARY

Reducing your lawsuit risk means understanding why patients sue and identifying the areas within your program that might create an opportunity for malpractice accusations.

- Poor communication is a major reason patients and families file lawsuits.
- SDS programs, especially freestanding programs, are at greatest risk in relation to credentialing.
- Well-defined protocols related to epidural monitoring, removal of contact lenses, and discharge are essential.
- Legible, clear documentation is important if you are sued.

of perioperative services for Evanston (IL) Northwest Health Care.

Research shows that patients cite four general reasons, in addition to medical error, that they have sued their physicians or other health care providers,¹ he says. All four reasons are related to communication, a particularly vulnerable area for same-day surgery programs because moving patients quickly through the facility is emphasized, he points out. Those reasons are:

- **Deserting the patient**, which is the reason for the suit 32% of the time, happens when the patient's telephone calls are not returned, or the patient is not given any way to contact the health care provider.

- **Devaluing patient/family views**, which is the reason for the suit 29% of the time, occurs when the physician or health care provider does not pay attention to the patient's concerns or dismisses them as inconsequential.

- **Delivering information poorly**, which is the reason for the suit 26% of the time, is often a matter of not explaining pre-op or post-op instructions so that the patient knows what to expect.

- **Failing to understand patient/family relationships**, which is the reason for the suit 13% of the time, occurs when the physician or same-day surgery personnel either don't include a family member in conversations that the patient may not understand or include a family member against the patient's wishes.

The patient's and family's expectations as to what will happen before, during, and after surgery may differ from what normally happens, says Duffy. When the physician or surgery program staff do not clearly communicate what will happen or do not listen to what the patient expects, and the service does not meet the patient's expectations, patients and their families believe they've been mistreated, he explains. (See **communication tips, p. 102.**)

Credentialing presents challenge

In addition to communication, there are other areas in which same-day surgery programs are more at risk than traditional hospital departments, says **Joel Cronin, JD, MD**, managing partner at Romano, Eriksen, and Cronin, a West Palm Beach, FL, law firm.

Surgeon credentialing is one area in which same-day surgery programs are especially at risk, says Cronin. (For more information on credentialing see ***Same-Day Surgery*, June 1999, p. 65.**)

While hospitals have well-defined accreditation committees and monitoring requirements and specific lists of approved procedures for each surgeon, same-day surgery programs, especially freestanding centers, may not have the resources for this type of credentialing process, he explains.

If you don't check a surgeon's proficiency and qualifications, your program may be liable for the surgeon's performance, he adds.

"Same-day surgery programs should be able to rely upon a local hospital's credentialing of physicians, but the same-day surgery manager must ask the right questions," Cronin says. Don't ask the surgeon what privileges he or she has at the hospital, he emphasizes. "Ask the hospital 'Has Dr. Jones been approved for the following procedures?'" he says. Make sure the facility monitors surgeons for a certain number of procedures to check for competency and that it checks educational requirements, Cronin adds.

You also can seek data from the National Practitioner Data Bank (www.npdb.com) and state professional standard agencies, and check with the circuit court clerk for your county to determine if any lawsuits have been filed against the physician, experts suggest.

In addition to checking qualifications of your surgeons, be sure to honestly evaluate your own surgery program's capabilities, suggests Cronin. Look carefully at your staff members, equipment, facility, emergency plans, and financial resources to be sure you can handle each procedure safely, he says. More complicated procedures mean increased liability risk for same-day surgery programs, he explains.

Document processes and procedures

Another potential area of liability can be lab specimens that are sent to outside labs, says Cronin. "You must demonstrate a vigilance in tracking the specimen, obtaining accurate test results, and reporting results to the patient's doctor in a timely manner," he says. A simple skin lesion might be malignant, and losing the specimen or the test results can result in the patient's condition going undiagnosed, he points out.

Epidural monitoring practices also may present a problem in a same-day surgery program, says Cronin. "Everyone is careful to monitor a patient with an epidural the first one-half hour, but then he or she tends to relax," he says.

Careful monitoring is still necessary because there can be a defect with the infusion pump, the

SOURCES AND RESOURCES

For more information about avoiding malpractice within your same-day surgery program, contact:

- **Joel Cronin**, JD, MD, Managing Partner, Romano, Eriksen, and Cronin, P.O. Box 21349, West Palm Beach, FL 33416. Telephone: (561) 533-6700. Fax: (561) 533-8715.
- **Bill Duffy**, RN, MJ, CNOR, Assistant Vice President of Perioperative Services, Evanston Northwest Healthcare, 2650 Ridge Ave., Evanston, IL 60201. Telephone: (847) 570-1880. E-mail: duffyrn@sprynet.com.

Audiocassettes are available from the 2001 *Same-Day Surgery* Conference on many outpatient surgery topics, including *Simple Steps to Avoid a Lawsuit* (tape 080) by Bill Duffy, RN, MJ, CNOR, Assistant Vice President of Perioperative Services for Evanston (IL) Northwest Health Care; and *To Err is Human — A Panel Discussion* (tape 090) by Duffy; Stephen Earnhart, MS, President and CEO, Earnhart and Associates, Dallas; Ann Kobs, MS, RN, president and CEO, Type 1 Solutions, Cape Coral, FL; and Leonard S. Schultz, MD, Hickok & Schultz, PA, St. Luis Park, MN. To order, contact:

- **American Health Consultants**, P.O. Box 740056, Atlanta, GA 30374. Telephone: (800) 688-2421. Fax: (800) 284-3291. E-mail: customer service@ahcpub.com. Web: ahcpub.com.

patient can develop sudden hypotension, or the line can shift and the anesthetic is no longer delivered to the proper location, he points out. Monitoring mistakes generally happen when the patient is prepped and there is a delay, he says.

“The patient stays in the holding area and feels no pain, so he or she may not realize there is a problem. Everyone is alert during the surgery,” Cronin emphasizes. “The most common places for a drop in vigilance are in the pre-op and post-op areas.”

Written protocols and procedures, practice guidelines based on the community standard of care, and good documentation also are essential if you are sued, says Duffy. (**See tips for documentation, p. 103.**) Juries believe the written word more than the spoken word in a trial, so if you can point to a written protocol or a clear operative note that describes what happened during the procedure or the care postoperatively, you are much better off, he says. Of course, if you have a written protocol, make sure your staff follow it, he says.

Take the time to evaluate all areas of potential risk and put processes, procedures, and practices into place to reduce your risk of a lawsuit, says Cronin. This time and effort is well spent because, he points out, “The best malpractice case is one that doesn’t occur.”

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Good communication is first line of defense

A patient with a badly fractured leg that was not healing well could be crippled for life. She went to see her orthopedic surgeon to see what could be done next. The surgeon said, “Well, let’s see if we can put Humpty Dumpty back together again,” and then he chuckled.

The patient already was angry that the doctor’s first efforts did not work well, and this comment made her believe that he was not taking her concerns seriously, says **Joel Cronin**, JD, MD, managing partner, Romano, Eriksen, and Cronin, a West Palm Beach, FL, law firm. The patient sued, Cronin says.

Watch what you say to patients and their families, he recommends. While a humorous remark may make you feel relaxed, an anxious patient may believe you aren’t taking the procedure seriously, he explains.

Don’t just talk; listen

If you communicate clearly with your patient, you can reduce your risk of a malpractice suit, says **Bill Duffy**, RN, MJ, CNOR, assistant vice president of perioperative services for Evanston (IL) Northwest Health Care. “You must also remember that communication is not just talking, but it is listening as well,” he adds.

While every same-day surgery manager is looking for ways to improve efficiency, “You must balance your quest for efficiency with concern for the patient,” Duffy points out. Be sure to take a few extra minutes to make sure the patient and family members understand what you are saying, he suggests.

Also build in a process to study patient complaints, recommends Duffy. This process can be a formal patient survey or a less formal method of collecting patient comments made to staff members and physicians, he says. "Study the complaints for trends. If you see several patients complaining of poor discharge instructions, look at how you present instructions and evaluate methods to improve the communication," he says.

Be careful to not discount a low number of complaints, warns Duffy. "You may only have five patients that complain, but the sixth patient to encounter the same difficulty might sue," he says. You need to have some method of identifying potential problems, he adds.

Keep family members updated

Don't forget to communicate with the family members also, Cronin advises. The reputation of a same-day surgery program's caring staff grows as much from comments by family members as comments by patients, he adds.

"If a family member is waiting and has been told the surgery will last 30 minutes, that person expects someone in the waiting room 35 minutes later," he says. If the family has to wait much longer, they begin to imagine that something bad is happening, he says.

"A staff person can go to the waiting room, explain that everything is fine and the procedure was late starting and it will be a little longer," he suggests. This reassures the family member that he or she has not been forgotten and that the patient is fine.

Same-day surgery staff members need to remember that what is an ordinary part of the day to them is a real concern to the patient, says Cronin. The more that can be done to reassure patients and family members that staff members understand this point, the less likely the patient will sue, he adds.

One other important way to show patients and family members that you are concerned about their welfare is to be available, says Cronin. "An administrative person, who will not be defensive, must be on site and ready to listen to any complaint or concern a family member or patient wants to express," he says.

Managers should listen and thank the person for bringing it to their attention because they always want to know how service can be improved, he adds. ■

Protocols, documentation needed to prevent lawsuits

The best time to evaluate your protocols, guidelines, and documentation is not when you are served with notice of a malpractice lawsuit, say experts interviewed by *Same-Day Surgery*. (See **tips on preparing for a deposition enclosed in this issue.**) Examine them now, and look at them from the perspective of patients and their attorneys, they say.

If you use clinical pathways or practice guidelines, make sure they are based upon reasonable, scientific data, says **Bill Duffy**, RN, MJ, CNOR, assistant vice president of perioperative services for Evanston (IL) Northwest Health Care. Also, make sure the guidelines allow flexibility based on the uniqueness of the patient.

"Be clear about why you deviate from the guidelines," he says. For example, "obese patients are at greater risk of skin injury than average-sized patients, so you might position them differently."

Be sure all staff members understand the reasons for deviating from the guidelines so it doesn't seem as if you treated this patient differently for no reason, he explains.

Documentation can be a simple note

Documentation in the chart doesn't have to contain a lot of specifics, he says. "A note that the patient stated that her arm was in an uncomfortable position and the position was adjusted, or a note that the doctor was informed of the lab results, without specific numbers, is all that is necessary," he says.

Make sure, however, that the notes are legible. "It doesn't look good for a nurse to be unable to read her own writing on the witness stand," he says.

If you use pre-printed forms in your charts, be sure that sloppy checkmarks don't create a problem, says Duffy. For example, if you have the box marked "alert" directly above the box marked "unconscious," a sloppy checkmark might cover both boxes, creating doubt in a jury's mind. To avoid this problem, print opposites side by side rather than on top of each other, he suggests.

Have clear procedures as to how to handle patient belongings, including eyeglasses and contact lenses, says **John Romano**, JD, partner at

Romano, Ericksen, and Cronin in West Palm Beach, FL.

He recalls one case in which the facility did not have a procedure that ensures contact lenses were removed.

“The patient was in the hospital and underwent extensive surgery,” he says. “She was not fully awake for several days, so the staff did not know the lenses were still in her eyes. By that time, the corneas developed ulcers,” he says.

Always check for contact lenses

Romano points out that while same-day surgery patients are awake much sooner, they still may be disoriented and not realize the lenses are still in the eyes.

“Pain medication may keep the patient sleepy enough that he or she would leave the lenses in long enough to cause discomfort and possible injury,” he says. For this reason, include removal of contact lenses on any preoperative checklist and make sure they are out of the eyes before anesthesia is administered, he suggests.

Very strict protocols for discharge are also important, says Cronin.

“Everyone has a tendency to move on and get the patients home,” he says. While this is the business of same-day surgery, it’s critical to be extra careful with a lethargic patient, Cronin emphasizes. “There is a fine line between someone who is resting comfortably and someone who is almost dead,” he adds.

Be sure to keep the patient long enough to make sure they are not overly lethargic, he says. This point will differ between patients, type of anesthesia, and family support, he adds.

Call the patient at home post-surgery

Another good practice after discharge is to call the patient’s home several hours after surgery, he adds. Let the patient’s family know that you will be doing this so they won’t be alarmed at the call, he adds.

“Patients and their families won’t call about little things, so before they are discharged, remind them they can call, and make sure they have a telephone number,” he says. “Not only does this reassure them that you are still available, but it gives you a chance to identify a potential complication early.” ■



Your pressing questions on satellite expansion

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

One of the things I like most about writing this column is the feedback from readers. Many of you have told me that I often serve to validate your thoughts or actions. I like that, as none of us want to feel as though we are out on the edge alone — myself included.

The past two columns on satellite expansion clearly hit home with hundreds of you. I have had a tremendous amount of feedback from many sections of the industry. I thought it might

be helpful to share some of the comments from the different sectors with you, as well as some previous questions I’ve received on the subject. I have found that if one person asks a question, there often are many more thinking about it as well. I have tried to use the exact message they sent to me, but for obvious reasons, their names are withheld.

Question. From a not-for-profit hospital CEO in the Southeastern part of the United States: “I agree with your reasons for the expansion of the ambulatory surgery center [ASC] market via a satellite center. We have considered it for some time.

“After your first article on this series, we had a board meeting of the hospital and, using many of your reasons, decided to begin the process. While the board is in favor of such an expansion, they are not in favor of ‘selling off our surgical business to the surgeons’ in a joint venture. With that understood, can a satellite location be successful in a location 17 miles from our main campus?”

Response. Being in a joint venture with surgeons does not ensure the success of any ASC. If you feel that you have the support of the staff and include them in the planning process, you

increase your chances of success via their usage of the center.

While you are not going to include physicians in an equity agreement, you can increase your success potential by assimilating many of the positive aspects of a joint equity position such as rapid turnover, on-time case starts, consistent staffing, easy accessibility for patients and users, and receptiveness to surgeons' ideas.

Question. From an administrator of a surgery center in the Midwest: "We currently have two ASCs up and running. We are planning a third about 25 miles from our original location. Some physician investors in the other two centers are upset that if we build this center, they will lose cases to surgeons who live closer to the proposed 'new center.' We are going to do the center anyway, but I don't know how to respond to their arguments. This can be a nasty group sometimes, and I would like to expand but not anger my investors. Any ideas?"

Response. First, the investors are right. They potentially could lose as users and investors as the existing centers shift cases to the center in order to convenience the center and its patients.

Since you have made the decision to move forward regardless, I suggest that you allow a certain amount of equity to be purchased by the original partnership to offset the potential loss of income to investors. (Follow-up: This suggestion worked. The original investors are allowed to purchase up to one-half of 1% in the satellite center.)

Question. From a nurse manager in a mid-Atlantic state: "Thank you so much for these two articles! We have been begging the organization to let us expand to the other side of town. We are overloaded with cases, and our efficiency is significantly less than what it used to be because it is so difficult to post cases and get 6,500 patients out of a center that is 14,000 square feet and has five operating rooms. We now have permission to open a new satellite center, and we couldn't be happier! (Of course, anesthesia [staff are] upset, but they always are anyway.) Thanks again for validating what we have been saying for two years!"

Response. Most of what I write is only validation to others' ideas to begin with. Glad it helped!

Question. One more from a surgeon in New England: "Our hospital is adding another surgery center about 10 miles from the current center.

This is part of their 'master expansion plan.' When the hospital built this surgery center about six years ago, we surgeons had no choice but to use the center, because the hospital restricted operating room space in the main hospital to help its surgery center. We have not been included in any of the decisions on this new center, nor can we participate in ownership (again). The hospital just assumes we will support it.

"One comment that came back to us from administration was, 'If we [the hospital] build it, they [the surgeons] will come.' Not this time! It is our plan to boycott the center when it is finished. I would encourage you to urge your readers to include the surgeons in your planning process. Surgeons do not have to be investors, but the last time I checked, hospital CEOs and their vice presidents cannot do surgery — only surgeons can."

Response. None required.

[Editor's note: Earnhart and Associates is an ambulatory surgery consulting firm specializing in all aspects of surgery center development and management. Earnhart can be reached at 5905 Tree Shadow Place, Suite 1200, Dallas, TX 75252. E-mail: searnhart@earnhart.com. Web: www.earnhart.com.] ■

Get patients' prescriptions from a vending machine

A new electronic prescription delivery service allows you to fill take-home prescriptions from a dispensing machine in the surgery center. The machine resembles a large vending machine, with up to 90 medications.

The medications are customized to individual facilities and their surgeons' most common prescriptions, says **Amy Glover**, RN, BSN, CNOR, administrator of Indiana Surgery Center in Indianapolis.

ASC scans or faxes prescription

Glover's facility participated in a pilot test of the Point of Care System, manufactured by TSI in North Billerica, MA. After the surgeon wrote the prescription, the surgery center would scan the prescription or fax it to the pharmacy.

"They verified whether it's acceptable under

SOURCE AND RESOURCE

For more information on the electronic prescription dispensing service, contact:

- **Amy Glover**, RN, BSN, CNOR, Administrator, Indiana Surgery Center, 8040 Clearvista Parkway, Indianapolis, IN 46256. Telephone: (317) 621-2070. Fax: (317) 621-2005. E-mail: amyglover@physiciannetwork.com.

For more information on the Point of Care System, contact:

- **TSI**, 267 Boston Road, Suite 27, North Billerica, MA 01862. E-mail: ADDS@addsinc.com. Telephone: (888) 670-0746 (978) 670-1500. Fax: (978) 670-1015. Web: www.addsinc.com.

[the patient's] insurance plan and whether there's a deductible or copay," she says. If so, the pharmacists notified the surgery center, which collected the payment.

The pharmacist gave the authorization for the nurses at the center to disperse the medication. The nurse took the medication and patient education materials, provided by the pharmacy, to the patient.

"In Indiana, patients must be given the option of speaking to a pharmacist," Glover says. "If the patient wishes to confer with the pharmacist, we can bring in the videoconferencing monitor so the patients and pharmacists can have direct dialogue."

The wireless system allowed a monitor to move from one patient room to the next without having to be plugged in, she says.

Making sure prescription is compatible

The technology avoids drug errors by having the pharmacist check to ensure the prescription is compatible with the patient's history on file. If the patient's prescription wasn't available through the delivery service or the patient needed refills, the pharmacy called another pharmacy of the patient's choice.

Potential disadvantages include the fact that the center was limited to one pharmacy chain. Also, some states might not allow controlled substances to be dispensed by machines, Glover says.

The remote dispensing system had to be approved by the Indiana Board of Pharmacy and is a state-by-state determination. The pharmacy stocked the dispenser, as well as checking

outdates and reordering the inventory.

Facility administrators opted to discontinue the pilot test because the company wasn't able to commit to providing the prescription service to all 40 locations in the network to which Glover's facility belongs, she says.

"The concept is wonderful," Glover says. "Normally patients would stop somewhere on the way home. We felt we were providing a convenience of filling it before they left the center."

In addition, the technology could provide revenue, she says. "We saw a larger percentage of our prescriptions were being filled on site vs. the pharmacy down the road," she adds. ■

Proposed rule addresses supervision of CRNAs

A proposed rule on physician supervision of certified registered nurse anesthetists (CRNAs) maintains the current physician supervision requirement unless the governor of a state, after consulting with the state's boards of medicine and nursing, exempts this requirement and the exemption is consistent with state law.

The Clinton administration had issued a proposal that allowed CRNAs to perform cases without MD supervision.

Comments are being accepted

Comments on the new proposed rule must be received by Sept. 4, 2001. Mail written comments (one original and three copies) to: Centers for Medicare and Medicaid Services, Department of Health and Human Services, Attention: CMS-3070-P, P.O. Box 8013, Baltimore, MD 21207-8013.

For further information on the rule from the Centers for Medicare and Medicaid Services, contact Stephanie Dyson, RN, at (410) 786-9226 or Jeannie Miller, RN, at (410) 786-3164.

The proposed rule in the July 5, 2001, *Federal Register* is available free on line at the web site: http://www.access.gpo.gov/su_docs/aces/aces140.html. Also, many libraries have copies.

To order a copy, specify the date, and enclose a check or money order for \$9 made out to the Superintendent of Document, or enclose your Visa or MasterCard number and the expiration date.

Send your request to: New Orders, Superintendent of Documents, P.O. Box 371954, Pittsburgh, PA 15250-7954.

Credit card orders also can be placed by calling (202) 512-1800 or faxing the request to (202) 512-2250. ■

FDA explains requirements for reuse of devices

The Food and Drug Administration in Rockville, MD, has released a *User Facility Reporting Bulletin* on the regulatory requirements of reuse of single-use devices.

The 10-page issue gives an overview of each regulatory requirement and provides Internet addresses to obtain more detailed information. The *Bulletin* can be accessed at the following addresses:

- www.fda.gov/cdrh/fusenews/ufb34.html;
- www.fda.gov/cdrh/fusenews/ufb34.pdf (acrobat version).

This is a government document, so it can be freely copied and distributed. ■

Joint Commission issues *Sentinel Event Alert*

The Joint Commission on Accreditation of Healthcare Organizations in Oakbrook Terrace, IL, has issued a *Sentinel Event Alert* on Creutzfeldt-Jakob Disease (CJD).

The Joint Commission has received reports that patients at two hospitals may have been exposed to CJD through instruments used during brain surgeries.

Alert examines incident in Denver

The alert includes an exploration of the incident at Exempla Saint Joseph Hospital in Denver, which encountered exposure to CJD in 2000 (For more information on an incident at Tulane University Hospital and Clinic in New Orleans, see *Same-Day Surgery*, April 2001, p. 37.)

“Although CJD is rare — only one in 1 million people worldwide have been diagnosed with CJD

— and iatrogenic transmission of CJD by exposure to central nervous system tissue or spinal fluid of a diseased person is even rarer, these new incidents signal the need for renewed awareness of preventive measures in health care organizations in regards to infection control,” the Joint Commission said in a released statement in which it referred providers to the standards in *The Comprehensive Accreditation Manual for Hospitals*, IC.1-IC.6.2.

“This is particularly important since regular sterilization techniques are not yet proven to be effective against the CJD organism,” the Joint Commission adds.

To view the *Sentinel Event Alert*, go to www.jcaho.org/edu_pub/sealert/sea20.html. (For information on CJD draft guidelines from the Centers for Disease Control and Prevention, see *SDS*, August 2001, p. 91.) ■

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CE questions

9. According to a new study in the *Journal of the American Medical Association*, St. John's wort should be discontinued how long before surgery?
 - A. at least two weeks before surgery
 - B. at least one week before surgery
 - C. at least five days before surgery
 - D. at least three days before surgery
 - E. at least 24 hours before surgery

10. According to Joel Cronin, JD, MD, managing partner at Romano, Eriksen, and Cronin, what question about a surgeon's privileges should be asked of a hospital's credentialing office?
 - A. How long has the doctor been in practice?
 - B. For what procedures is this physician credentialed?
 - C. How many procedures does this surgeon perform?
 - D. What is the surgeon's average procedure time?

11. Why is a process to study complaints important, according to Bill Duffy, RN, MJ, CNOR, assistant vice president of perioperative services for Evanston Northwest Health Care?
 - A. It is a good way to use staff time.
 - B. It keeps the patients from complaining to the doctors.
 - C. Your surgeons like to hear reports of survey results.
 - D. You can identify a trend of complaints and solve potential problems before someone sues.

12. What suggestion does Bill Duffy, RN, MJ, CNOR, assistant vice president of perioperative services for Evanston Northwest Health Care offer to ensure that pre-printed forms will keep documentation clear and easy to understand?
 - A. Use large type.
 - B. Print boxes for opposites (e.g. alert vs. unconscious) side by side rather than on top of each other.
 - C. Use checkmarks to indicate condition.
 - D. Leave little space for handwritten notes.

CE objectives

After reading this issue of *Same-Day Surgery*, the continuing education participant will be able to:

- Identify clinical, managerial, regulatory, or social issues relating to ambulatory surgery care and management. (See "*Study says patients can take some herbs until 24 hours before surgery*," and "*How to lawsuit-proof your SDS program*.")
- Describe how those issues affect nursing service delivery or management of a facility. (See "*Study says patients can take some herbs until 24 hours before surgery*," and "*Good communication is first line of defense*.")
- Cite practical solutions to problems or integrate information into their daily practices, according to advice from nationally recognized ambulatory surgery experts. (See "*Protocols, documents needed to prevent lawsuit*.") ■

Same-Day Surgery Reports

Supplement to *Same-Day Surgery*

September 2001, BB #472A

Overview

The development of "minimally invasive surgery" has revolutionized surgical procedures. The explosive growth of endoscopic procedures has resulted from increasing acceptance of their potential advantages. There is no doubt that such an approach reduces postoperative pain and immobility as a result of small incisions and limited surgical trauma.¹ Recovery occurs sooner, hospital stays may be reduced, and there may be an earlier return to normal activities and work. Some procedures (but not all) have become possible on an outpatient basis, where previously a hospital stay of several days was mandatory.¹

However, despite the potential advantages, there are also some disadvantages to laparoscopic surgery.¹ Operative times may be longer (sometimes substantially so), especially during the learning phase. Endoscopic surgical procedures are associated with significant physiological changes and complications.¹ One of the complications that can increase postoperative morbidity and delay recovery is the occurrence of intraoperative hypothermia.^{2,3} With more extensive endoscopic procedures being performed on older and sicker patients, as well as on pregnant and pediatric patients, prevention of hypothermia has received significant attention. This article discusses the consequences and prevention of hypothermia during a laparoscopy with emphasis on warming and humidification of insufflation gas.

Perioperative hypothermia has been associated with several metabolic consequences.^{2,3} Shivering increases oxygen demand and causes significant patient discomfort.² In addition, hypothermia increases sympathoadrenal discharge, resulting in peripheral vasoconstriction, increased vascular resistance, and greater perioperative fluid requirements.⁴ In high-risk patients, a core temperature less than 35°C is associated with a two- to threefold increase in the incidence of early postoperative ischemia.⁵

Hypothermia influences the coagulation system by affecting platelet function, the coagulation cascade, and fibrinolysis.⁶ Hypothermia impairs wound healing and increases the susceptibility to wound infection. Kurz and colleagues reported that perioperative hypothermia is an independent factor that increases the incidence of postoperative surgical infection and increases length of hospital stay.⁷ Hypothermia delays drug metabolism and thus

increases the duration of action of anesthetic drugs. This increase may delay emergence from general anesthesia, depress cognitive function, and prolong immediate recovery.⁸ Therefore, maintaining core normothermia can decrease the duration of postanesthesia care unit stay and reduce costs of health care.⁸ Inadvertent hypothermia, defined as core temperature less than 36°C,

occurs frequently in patients undergoing open abdominal surgery. During general anesthesia, patients become hypothermic because their ability to regulate core temperature by means of behavioral and shivering responses is abolished, and nonshivering thermogenesis is ineffective.³ Vasodilatation from anesthetic drugs results in heat loss to the cool, ambient environment of the operating room. In addition, there is heat loss from the exposed abdominal cavity and its contents. Redistribution of heat from the warm core thermal compartment to cooler peripheral tissues and inhibition of normal thermoregulatory heat production and retention mechanisms contribute to hypothermia.^{9,10} Furthermore, the use of room temperature irrigation fluid further increases heat loss.¹¹

Generally, it is expected that the degree of hypothermia during a closed procedure such as laparoscopy would be less than that occurring during an open procedure because the abdominal contents are not exposed to the atmosphere. However, hypothermia commonly occurs during a laparoscopic procedure.¹²⁻¹⁴ These observations are supported by studies investigating the heat loss caused by unheated insufflation gas^{15,16} and irrigation fluid.¹¹

Hypothermia During Laparoscopy: Effects of Warming and Humidification of Insufflation Gas

Author: **Girish P. Joshi, MD, MB, FFARCSI**, Professor of Anesthesiology and Pain Management, Director of Perioperative Medicine and Ambulatory Anesthesia, University of Texas Southwestern Medical Center at Dallas.

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Furthermore, the degree of hypothermia during a laparoscopic procedure is similar to that during an open procedure.¹⁶⁻²⁰ Luck and colleagues compared the temperature change between patients undergoing open and laparoscopic colorectal surgery.¹⁹ The median operating times were 150 minutes (range 90-240 minutes) for open procedures and 180 minutes (range 60-285 minutes) for laparoscopic procedures. The investigators found that the incidence of hypothermia in the two groups was similar.¹⁹

It is postulated that heat loss during laparoscopy occurs mainly by convection (i.e., the loss of heat due to flows of a fluid [liquid or gas], when it circulates through a surface at a different temperature). The potential for heat loss during laparoscopic procedures is considerable with dry carbon dioxide (CO₂), exiting the cylinder at 21°C, being insufflated into a peritoneal cavity with a surface area similar to the external body surface of 1-2 m². Ott estimated a 0.3°C drop in core temperature resulted from every 50 liters of CO₂ insufflated.²¹ With more prolonged laparoscopic procedures and larger volumes of gas exchanged through the patient, the potential for hypothermia increases.^{12, 22} Most advanced laparoscopic procedures (e.g., colorectal or esophageal procedures) need longer operating times and frequently require large gas flows because of significant leaks caused by the use of multiple large ports, frequent insertion and removal of laparoscopic instruments, and aspiration of gas during the suction of blood and electrocautery smoke, which increases the potential for heat loss. Thus, it is possible that warming and humidifying the gas prior to insufflation may prevent hypothermia.²¹

Stewart and colleagues¹⁸ compared the degree of hypothermia in patients undergoing open and laparoscopically assisted colorectal surgery with a standardized warming protocol but without any warming or humidification of the insufflation gas. The warming protocol included maintenance of operating room temperature at 22°C, use of a standard circle system with a respiratory humidifier for anesthesia, warming of intravenous fluids to 37°C, and use of an upper body forced air blanket at 40°C placed over upper limbs, trunk, and face. Despite high insufflation volumes (mean 230 L, range 60-500 L) and prolonged operating times (median 180 minutes), there was no difference in the degree of hypothermia between the two groups.¹⁸ Only 10% of the patients had temperatures below 35°C at the completion of the procedure, and the average drop in temperature was less than 0.5°C across all cases. Although there was no difference in temperature drop between the open and laparoscopic approaches, a significant association was found between temperature loss and duration of surgery, which suggests that convective heat losses during laparoscopic procedures are similar to the evaporative and radiant losses during an open procedure.¹⁸ Furthermore, the authors emphasized that routine measures, including forced-air warming, should be used to prevent hypothermia during extensive laparoscopic procedures.

With initial reports suggesting that warming insufflation gas may decrease the incidence of hypothermia, commercial insufflators providing heated gas have become available. Cooling of the CO₂ delivered to the patient can be prevented by application of heat at the gas regulator using a heating element. With the heater element activated, the temperature of the regulator could be set at 45°C, and the temperature of the CO₂ as it exits the insufflator at a flow rate of 10 L/min could reach approximately 30°C. However, the clinical advantage of warming insufflation gas is being questioned.

Controlled animal studies have determined that the physiologic impact of warm gas insufflation is minimal.²³ Using an animal model, Bessell and associates¹⁵ showed that insufflation of CO₂ gas at high-flow rates over a prolonged period of time results in a significant fall in core temperature. CO₂ is in the liquid form in the cylinders and is under pressure. When it is released to atmospheric pressure to be insufflated, it is converted to a gaseous form. This change from liquid to gas results in cooling of the gas. However, the insufflation of warm gas does not confer any protection against changes in core temperature. The lack of any advantage of heating the insufflation gas suggests that the heat required to warm the cold gas to body temperature is small and that the cause of intraoperative hypothermia may not be related to heat loss from gas flow. Other clinical studies have also shown that the use of warmed CO₂, particularly during laparoscopic procedures of short duration (median times 60 minutes), has no clinical benefit.²⁴⁻²⁵ A study comparing the incidence of hypothermia in patients undergoing laparoscopic and open cholecystectomy found no difference in temperature loss between the two approaches.¹⁶ The mean operating time was 94 minutes (range 67-130 minutes) for the laparoscopy group and 74 minutes (range 46-120 minutes) for the open group. The gas flow was limited to less than 3.5 L/min. These investigators also

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observed a trend toward significant hypothermia with longer cases. They concluded that it was unnecessary to warm insufflated gas for laparoscopic procedures of short or medium duration.¹⁶

Interestingly, Nelskyla and colleagues found that the core temperature decrease was greater in the patients receiving heated gas than in those receiving cold gas.²⁶ Similar observations have been reported by other investigators.^{18,27} This paradox may be related to the fact that less energy is required for the saturation of water vapor at 24°C than at 37°C, because fewer molecules are vaporized. Therefore, most of the hypothermic effect may be because more latent heat is required to saturate the warm insufflated gas, which can be minimized by humidification of the gas.²⁸ However, Biegner and colleagues found that insufflation of dry CO₂ for extended periods does not result in significant fluid loss.²⁹ It is now well accepted that warming (without humidification) of insufflation gas does not prevent a decrease in body temperature and is thus unnecessary during laparoscopy.

Insufflation of dry (nonhumidified) gas creates a potential for insensible water loss through transfer of water vapor to the gas in the peritoneal cavity. It is suggested that this evaporative heat loss is primarily responsible for hypothermia during laparoscopy. In addition, tissue surface super-cooling from the jet stream of insufflated gas can lead to tissue drying and damage. Therefore, heating and hydrating the gas to a physiologic condition may prevent hypothermia and tissue desiccation.³⁰

In a pig model, changes in core temperature were evaluated over a three-hour operative period using high flow CO₂ insufflation in three groups: controls (not gas-insufflated), insufflation with cool gas, and insufflation with warm, humidified gas.³¹ The investigators observed that insufflation with cool CO₂ resulted in a drop in the core temperature by 1.8°C as compared with only 0.6°C decrease in the other two groups. They also determined that a 1.5°C lower temperature would occur due to water evaporation alone in pigs insufflated with the cool dry CO₂.³¹ These investigators concluded that the majority of heat lost during laparoscopy was due to water evaporation and that this effect could be prevented with heated humidified gas insufflation.³¹

In another study, patients undergoing laparoscopic cholecystectomy were randomized to receive either heated (34-37°C) and humidified (88%) CO₂ insufflation gas or cool (21-25°C) CO₂ insufflation with a humidity of 0-5%.³² The investigators reported that the drop in mean core temperature during the surgical procedure in the two groups was similar. They postulated that the lack of heat-preserving effect of humidified gas insufflation probably was due to the short (40-45 min) duration of the procedure.³² No adverse effects from the heated humidification of the CO₂ gas were observed. Another study evaluated the effects of preconditioning of insufflation gas by filtering, heating, and hydrating on intraoperative hypothermia.

The authors found that preconditioning of insufflating gas reduced intraoperative hypothermia, length of stay in the postanesthesia care unit, and operative pain.³³ Insufflated gas is humidified by incorporating a humidification chamber in the insufflator tubing line. It is suggested that any additional cost of humidifying the insufflation gas should be minimal, and

if postoperative pain and time to return to normal activities is reduced, the small additional cost may be compensated.³³ However, larger clinical trials comparing heated humidified CO₂ and cool CO₂ insufflation in longer laparoscopic procedures are necessary.

Pain after Laparoscopy

Although it is generally accepted that pain after laparoscopy is less than that after an open procedure, it is not completely abolished. Patients frequently complain of severe discomfort, which may delay discharge or increase the incidence of unanticipated hospital admission. One of the factors affecting postlaparoscopy pain is the humidity and temperature of the insufflated gas.³⁴ It is suggested that insufflation with warmed gas can significantly reduce postlaparoscopy pain, particularly diaphragmatic and shoulder-tip pain.³⁵⁻³⁶ A randomized, controlled study observed significant pain reduction in patients receiving body-temperature insufflation gas compared with those receiving standard gas insufflation.³⁷ Although the exact mechanism of reduced postoperative pain with the used of humidified and warmed gas is not known, it is possible that tissue injury from the cold and dry CO₂ might be prevented. In contrast, Slim and colleagues found that warming the insufflation gas does not reduce — and actually can increase — shoulder-tip and subcostal pain after laparoscopic procedures.³⁸ These authors also found that intraperitoneal temperatures did not increase with warming insufflation gas.³⁸ Similarly, Saad and associates did not observe any reduction in pain after laparoscopic cholecystectomy in patients receiving warmed insufflation gas.²⁵

A recent study by Mouton and colleagues reported that humidification and warming of insufflated gas reduced pain and showed a trend toward less need for analgesics after laparoscopic cholecystectomy, as well as an early return to normal activities and work; however, these differences did not reach statistical significance.³² Larger studies will be required to show any significant benefits of humidified insufflation gas.

The common techniques employed to reduce intraoperative hypothermia include raising ambient (operating room) temperature to 24-26°C, humidification of inspired anesthetic gases with heat and moisture exchange filters, warming of intravenous fluids, use of warming blankets and mattresses, and use of forced-air warming devices.

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CME Objective

After participating in this CME activity, the participant will be able to identify a true statement regarding hypothermia during a laparoscopic procedure.

Physician CME Question

To earn CME credit for this issue of *Same-Day Surgery Reports*, please refer to the enclosed Scantron form for directions on taking the test and submitting your answers.

1. Which of the following statements is true of hypothermia during a laparoscopic procedure?
 - A. It is more than that during an open abdominal procedure.
 - B. It is less than that during an open abdominal procedure.
 - C. It can always be reduced by warming the insufflated gas.
 - D. It can occur to the same degree as during an open abdominal procedure.
2. Controlled animal studies have determined that the physiologic impact of warm gas insufflation is:
 - A. nonexistent
 - B. minimal
 - C. significant
3. Nelskyla and colleagues found that the core temperature decrease in the patients receiving heated gas compared how with those receiving cold gas?
 - A. The core temperature decrease was greater in the patients receiving heated gas than in those receiving cold gas.
 - B. The core temperature decrease was the same in the patients receiving heated gas than in those receiving cold gas.
 - C. The core temperature decrease was less in the patients receiving heated gas than in those receiving cold gas.

Dos and Don'ts When Having a Deposition

- Never take a deposition lightly. Budget sufficient time to more than adequately prepare.
- Never practice deposition questions, or otherwise prepare for your deposition, with your spouse. The level of stress to a relationship resulting from a malpractice lawsuit need not be further escalated by actively involving the spouse.
- Never underestimate the plaintiff's attorney and fail to diligently prepare for your deposition. Remember that, at a deposition, you are facing a formidable enemy on a foreign battlefield.
- Do not discuss your case with anyone other than your attorney. You might have discussed the medical aspects of the case with your department head, another practitioner, or the committee at the hospital with peer review responsibilities. Such discussions are generally privileged under state law. Do not, however, discuss procedural and tactical issues with anyone other than your attorney.
- Beware of all attorneys other than your personal attorney. Granted, "your" attorney is really, in most cases, the insurance company's attorney. If you have concerns about this, discuss them with the attorney supplied to you and ask for an explanation of his or her obligations to you vs. the insurance company. In rare instances (e.g., a verdict in excess of your policy limits is likely), you will need to retain independent counsel.
- Never consider your case to be a "slam-dunk" winner. It might be, but do not plan on it. "Slam-dunks" are rare.
- Listen to your attorney carefully, both before and during your deposition.
- Tell your attorney everything. To have a chance of protecting you, your attorney must know all the facts, no matter how embarrassing they might be.
- Always get your answer right the first time. Take your time and answer all questions correctly. Pauses before answering (unless extraordinary long and commented on by opposing counsel) are not reflected in the deposition transcript.
- Always tell the truth. How much information must be disclosed to be "the truth" should be discussed with your attorney.
- Use "yes" and "no" frequently as answers.
- Always qualify your answers when "yes" or "no" would be overly broad.
- Never get comfortable during a deposition. Comfort leads to carelessness, which leads to disaster.
- Never ignore your attorney's objections. He or she often is talking to you.
- Never assume.
- Be extremely cautious if asked to agree with the plaintiff's attorney. It is seldom a good idea.
- Never agree that a textbook or journal is "authoritative."
- Never answer a question that is ambiguous or compound.
- Do not be afraid to say "I don't know" when that is the truthful answer.
- Keep your cool; don't argue with opposing counsel. Leave the arguing to your attorney.

Source: Freedman DL. Depositions: You must prepare if you hope to survive. *ED Legal Letter* 2001; 12:35. Published by American Health Consultants. Telephone: (800) 688-2421. Web: www.ahcpub.com.