

## Errata for Dilemma 46

The number of the dilemma on page 99 is incorrect. It should read “Response to Ethical Dilemma #46,” not “Response to Ethical Dilemma #45.”



## Important Notice

This is one of a series of ethical dilemmas published in the *Texas Dental Journal* between 1993 and 2005. The lead author of these dilemmas, Dr. Thomas K. Hasegawa, died tragically in 2005. The dilemmas remain an important legacy for dentistry.

### Format

Each ethical dilemma was originally introduced in one issue of the *Texas Dental Journal* with the question, “What would you do?” The more expansive analysis of the dilemma was presented in a subsequent issue. The second page of this file depicts the cover of the issue containing the analysis of the dilemma, not the issue containing the briefer introduction to the dilemma. The ethical dilemmas were compiled for digital use by the American College of Dentists in 2008.

### Purpose

This ethical dilemma and the other dilemmas in the series are only meant to further your knowledge and understanding of dental ethics by presenting, discussing, and analyzing hypothetical ethical dilemmas that may occur in dental settings. The dilemmas are not intended to: a) provide legal advice; b) provide advice or assistance in the diagnosis or treatment of dental diseases or conditions; or c) provide advice or assistance in the management of dental patients, practices, or personnel.

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# TEXAS DENTAL Journal



## **The Texas Meeting**

**134th Annual Session of the Texas Dental Association**

**May 13-16, 2004 • San Antonio, Texas**

# What Would You Do?

## Ethical Dilemma #46

**D**r. Jackie Knowland is a general dentist who is in her 3rd year of practice in a growing suburb. She started practicing as an associate with her family dentist, and the two had agreed that after 2 years he would retire. It was a smooth transition and very enjoyable practicing in the community that she knew through her high school years.

Kris McFarland is a new patient and pleased to be in Dr. Knowland's practice. Kris is 35-years-old and in good health, although it has been 5 years since her last dental examination. She has yearly medical examinations, stable vital signs and no known drug allergies. Her treatment plan is primarily operative dentistry: five posterior composite restorations due to caries and the replacement of two faulty castings on #19 and #30 (both were cemented over 10 years ago and both now have decay at the gingival margins).

The first two operative appointments have gone well and the five restorations are finished. Today was "just one of those days," Dr. Knowland thought as she started to remove the MOD onlay on #30. Attempts to dislodge the casting with hand instruments were unsuccessful, so she decided to split it in half bucco-lingually using a #1556 (straight fissure, rounded end, crosscut) bur. Dr. Knowland prepared Kris well for the procedure telling her "it will be noisy with lots of vibration as I section the casting in order to dislodge it." She told Kris that she would use a piece of gauze in her mouth to catch bits of metal as the casting is separated. Her plan was to separate the casting using high speed and copious amounts of water and then use an excavator to wedge and lift the mesial half of the casting as she had done before for other patients a dozen times. The procedure was going well and just when the casting was completely separated the distal one-half flew off, bounced against Kris's cheek and came to rest on the middle of her tongue. The casting missed the gauze and Dr. Knowland could only watch as her assistant Rebecca tried to aspirate the casting with the high speed evacuator. She was not quick enough.

Kris was very startled and she immediately swallowed the casting followed by several hard coughs. Dr. Knowland had her sit forward and cough, and she hit her back with the palm of her hand to no avail. Dr. Knowland explained to her that she thought that she swallowed the casting, and while it will probably "pass through" just fine, she recommended chest and abdominal radiographs to confirm that she did not aspirate the casting into her lungs, which could be very serious. There was a hospital two blocks from the office, and she would call the radiology department and make arrangements right away.

Kris was visibly disturbed. She never had a casting removed and this was a real surprise for her. Dr. Knowland told Kris that this was the first time it had happened to her, since the gauze usually caught a dislodged casting, and if it missed her assistant's vacuum tip would retrieve it. Kris said, "Look, I'm sure this will just 'pass through,' as you noted. I am just going back to work after you make the temporary. I will check my stools wearing the gloves you are supplying. I'm sure it is all right. Besides, I don't want to have any more medical bills this year." She coughed again.

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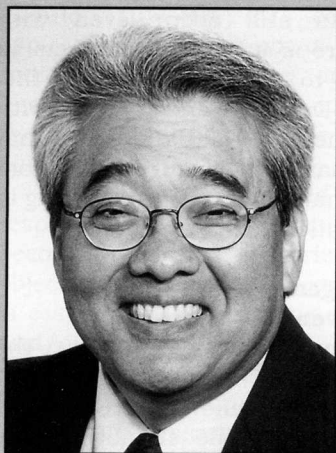
Dr. Knowland is now faced with an ethical dilemma. Check the following course(s) of action she should take in this case and mail, fax this page, email, or send a note indicating your recommendations. What would you do if you were Dr. Knowland? Some options (check one or write your own) include:

- ☐ 1. Dr. Knowland should not worry about Kris. Kris will be just fine; these things happen all the time.
- ☐ 2. Dr. Knowland should insist that Kris see the radiologist as soon as possible. She informs Kris that her office will pay for any charges beyond her medical insurance.
- ☐ 3. Dr. Knowland should let Kris go to work but have co-workers and family observe her to see if she is experiencing any respiratory distress.
- ☐ 4. Dr. Knowland should insist that Kris see the radiologist as soon as possible. She informs Kris that her office will not pay for any charges beyond her medical insurance.
- ☐ 5. Other alternative (please describe): \_\_\_\_\_

**SEND YOUR RESPONSE BY December 1, 2003 ATTENTION:** Dr. Thomas K. Hasegawa, Jr.,  
Associate Dean for Clinical Services Baylor College of Dentistry, P.O. Box 660677 Dallas, TX 75266-0677.  
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# Ethical Dilemma

By Thomas K. Hasegawa, Jr. D.D.S., M.A., Merrill Matthews, Jr. Ph.D., David M. Grogan, D.D.S., M.S.D.  
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Hasegawa

## **"I'm sure it is all right (swallowed/aspirated casting?)"**

*Response to Ethical Dilemma #45*

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# E t h i c a l

Dentists who responded to the case selected only one of the four stated alternatives and several offered their own advice. Clinicians recommended that Dr. Knowland should insist that Kris see the radiologist as soon as possible. She informs Kris that her office will pay for any charges beyond her medical insurance. Those clinicians who offered alternatives uniformly chose to insist that Kris see the radiologist and that all charges, not just those not covered by insurance, should be paid by Dr. Knowland. One person said, "That thousand dollar radiology charge won't seem like much if there is a death or serious injury. Besides, it is the right thing to do."

None of the dentists chose the remaining three alternatives: 1) Dr. Knowland should not worry about Kris. Kris will be just fine; these things happen all the time; 2) Dr. Knowland should let Kris go to work but have co-workers and family observe her to see if she is experiencing any respiratory distress; and 3) Dr. Knowland should insist that Kris see the radiologist as soon as possible. She informs Kris that her office will not pay for any charges beyond her medical insurance.

Did Dr. Knowland use reasonable precautions to prevent the swallowed casting, and should she assume responsibility for paying for any or all of the radiology charges? These questions lead us to consider the ethics of: 1) the slippery slope; 2) emergency assessment/intervention; and, 3) maintaining trust.

## **The Slippery Slope**

Dentists perform care for patients in a complex, risky environment, including alimentary and respiratory hazards. When considering the chance of swallowing or aspirating foreign bodies, we should begin by

reviewing the elements of an operative procedure such as the removal of Kris' cemented onlay casting.

Dr. Knowland provides the care for Kris:

- while wearing protective and possibly magnifying glasses;
- a face shield or other device that may distort or limit vision;
- a protective mask that may muffle communication and warnings;
- protective gloves that may be latex or synthetic, textured or non-textured and slippery when wet;
- while operating a high speed dental handpiece with water required to cool the cutting surface but creating a spray that may obscure vision;
- using metal cutting burs like the #1556 that may fracture under stress;
- while sectioning a dental material under high torque that may shear or dislodge sending flying objects at high speed.

All of these elements are occurring while the dentist is performing an operation on a conscious patient who is in a position where gravity, her swallowing reflex, the size of her tongue and cheeks, awareness of tissues under local anesthesia, quality of her saliva, and the ability to open her mouth may affect the operation on tooth #30 that is in proximity to her oropharynx.

Every dentist practiced these and other operative techniques on the laboratory bench, sometimes using dental simulation equipment to improve their psychomotor skills before operating on their first live patient. The competent clinician learns how to manage this complex environment, applying techniques and

equipment to improve effective practice, thereby lowering the risk to the patient.

Nevertheless, adverse incidents still occur even with numerous safety mechanisms in place to prevent them. In this case, Dr. Knowland is faced with an emergency situation, one that she has not encountered before and that may be life threatening to her patient.

## **Emergency Assessment/Intervention**

The first step in the differential diagnosis of an aspirated/swallowed foreign body is to assess the stability of the patient. If the patient cannot speak, cough or breathe, the dentist must initiate the "foreign body airway obstruction scenario" as taught in the American Heart Association Basic Life Support class and activate their Emergency Medical System. If these maneuvers are not successful and the patient is not able to breathe independently or the dentist is not able to provide positive pressure ventilations, cricothyrotomy becomes necessary.

In Kris' case, the patient was able to maintain her airway independently but, while in no respiratory distress, she continued to cough. This could represent an aspiration of the foreign body. If the object is not obstructing the trachea or one of the main bronchi, the clinician may not see continued clinical symptoms once the object passes below the vocal cords. Therefore, documentation of the foreign body's exact location is necessary for any object lost during a procedure (1).

The clinician should then temporize the operative site as needed and escort the patient to a radiology center and document the location of the foreign body. Since the object in question in

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this case is radiopaque, the first films to order would be a PA (posteroanterior projection) and lateral chest films. The results should rule-out or confirm aspiration (2). If the object is not radiopaque, fluoroscopy or MRI imaging may be used to identify the position of the object or detect air trapping (3).

If the object is identified in the respiratory system, bronchoscopy becomes necessary to retrieve the object. Retrieval of the foreign body is essential to prevent pneumonia and/or a lung abscess. If the foreign body is not evident on these films, an abdominal plain film would be necessary. If the foreign body is located in the stomach, the patient should be supplied with gloves so she can examine her stools to confirm passage. If the patient is not compliant with that request, radiographs should be made to follow the progress of the foreign body. It usually takes 3 to 5 days to pass a foreign body.

## Maintaining Trust

When an adverse event occurs during a medical procedure, it is natural to ask who is at fault? With the identification of fault usually arises the obligation to compensate, or "make whole." If Dr. Knowland were at fault, she clearly would be obligated to pay the additional costs. However, she took reasonable steps to ensure the patient was adequately informed and protected to avoid a calamity. Yes, she might have taken even more precautions, but those precautions also come with risk. Several clinicians recommended using a rubber dam but even this precaution has risks such as latex allergy, clamps that can also be swallowed or aspirated, and patient discomfort and noncompliance (4). Dentistry can only be "risk minimized," it cannot be risk free.

But just because a clinician

isn't obligated to pay when an adverse event occurs doesn't mean he or she shouldn't pay. Ethical professionals don't just ask "What must I do?" they ask "What should I do?" Dr. Knowland could have sent Kris to the radiology department by herself and expected Kris or her insurance to pay for the procedures.

However, Kris might be unfamiliar with the hospital, the procedure, or the process. She might find herself lost in the health care maze at the very time that she needed to maneuver the system like a pro. The more professional and ethical approach would be for Dr. Knowland to continue as Kris' trusted guide through the health care system by taking her to the hospital and at least covering what insurance didn't pay for, if not all the care.

Patients put their trust in the medical professional to carry them through to a successful completion of their treatment. When a problem arises, that is when patients need to trust the medical professional the most. While the clinician may not be at fault, he or she still has a professional responsibility to ensure the patient is properly treated, perhaps even at the dentist's expense.

## Conclusion:

Dr. Knowland is faced with a patient who may have swallowed or aspirated a piece of a gold onlay and who refuses to see a radiologist because of concerns for mounting medical costs. While she was practicing using reasonable care during the adverse event, the priority now is to assure that Kris is properly treated during this emergency and that requires radiological assessment. Dr. Knowland would fulfill her professional responsibility in this emergency situation by pay-

ing the charges in excess of her medical insurance or all of the radiology fees if necessary to assure that Kris receives the assessment.

## References

1. Kwon PH, Laskin DM. Clinician's manual of oral and maxillofacial surgery. 3rd ed. Chicago, Ill: Quintessence Pub Co; 2001.
2. Felson B, Weinstein AS, Spitz HB. Principles of chest roentgenology: A programmed text. Toronto, Ont: W.B. Saunders Co; 1965.
3. Friedman HH. Problem-oriented medical diagnosis. Little, Brown and Company; 1983.
4. Summit JB. Field isolation. In: Summitt JB, Robbins JW, Schwartz RS eds. Fundamentals of operative dentistry. 2nd ed. Chicago, Ill: Quintessence Pub Co; 2001: 149-177.

## EDITOR'S COMMENT:

Responses to the ethical dilemmas are views of the contributors and consultants and not Baylor College of Dentistry, the Institute for Policy Innovation, or the Texas Dental Association. This is not to be taken as legal advice. If you have legal questions, seek competent legal counsel. Address your comments to Dr. Thomas K. Hasegawa, Jr., Office of Clinical Services, Baylor College of Dentistry, P.O. Box 660677, Dallas, TX 75266-0677, Fax to (214) 828-8958, or E-mail to [thasegawa@tambcd.edu](mailto:thasegawa@tambcd.edu).

**NOTE:** Readers are invited to submit topics to be considered in the Ethical Dilemma column. Contact the editor with suggestions or for further information. Recommendations in these cases are not intended to be legal advice. If you need legal advice, seek consultation from an attorney.