



## 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.

### Terms of Use

To use the digital ethical dilemmas in the series, all or part, you must first agree to the Terms of Use specified at <https://www.dentaethics.org/termsfuse.shtml>. By using this dilemma, or any in the series, you are affirming your acceptance of said Terms of Use and your concurrence with the Purpose presented immediately above.

### Permission

The ethical dilemmas are used with the permission of the *Texas Dental Journal*.

### Support

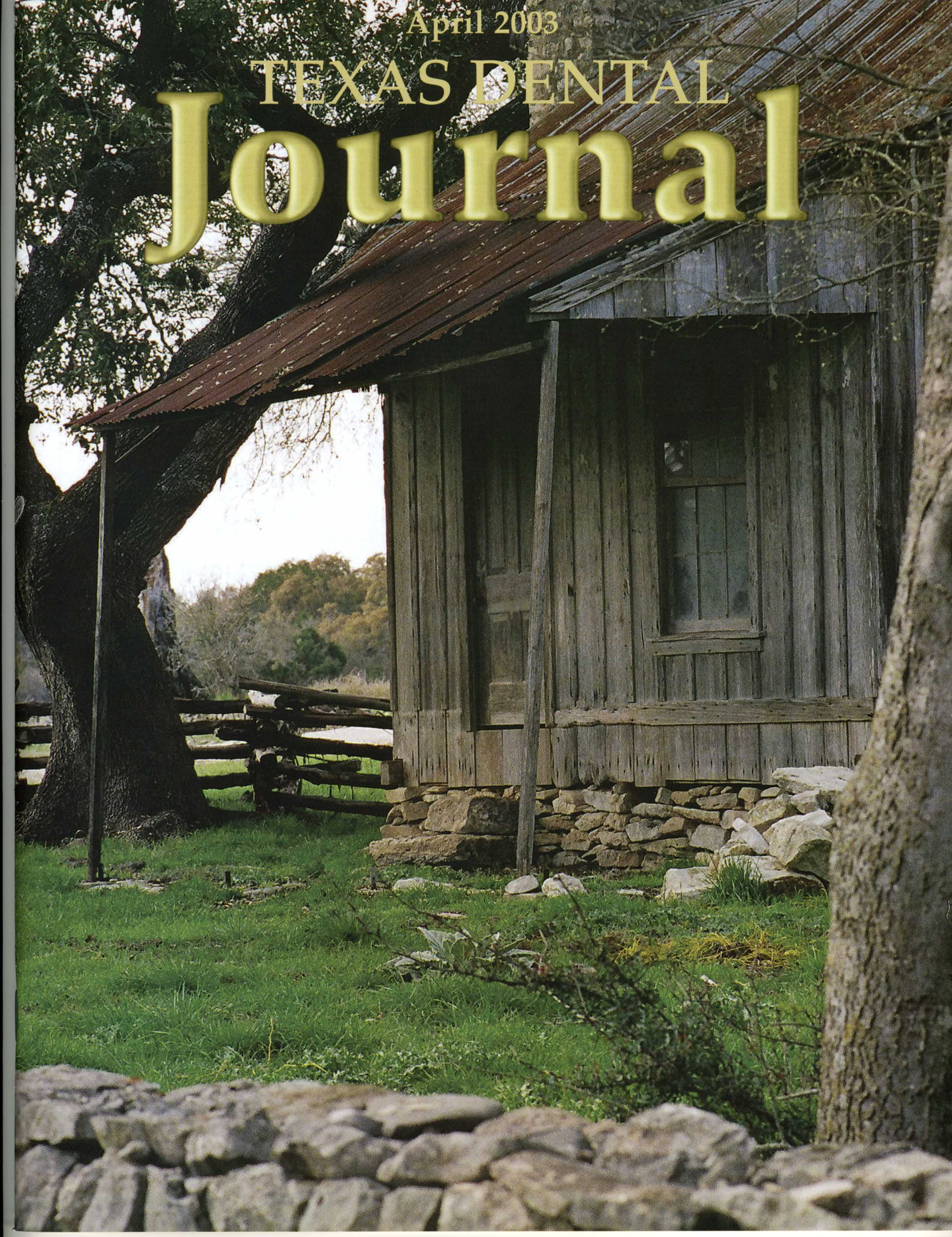
For more information about this series of digital ethical dilemmas, contact:

American College of Dentists  
839J Quince Orchard Boulevard  
Gaithersburg, MD 20878-1614

301-977-3223  
fax 301-977-3330  
[office@acd.org](mailto:office@acd.org)

April 2003

# TEXAS DENTAL Journal



# What Would You Do?

## Ethical Dilemma #43

**D**r. Jack Nigel is a general dentist who has a large practice in a booming suburb near a Texas metroplex. The typical patient demographic is the 28 to 35-year-old, most with families. This was a real change from his previous practice that was in an older established community where the typical demographic was 40 to 65 years. His patient skills and reputation for honesty and fair prices has made him an "instant" success over the last 3 years.

Gail Norman is a new patient in the office, and she is very excited because she just secured her first "real" job with benefits, including dental. Gail is a 28-year-old white female who is in excellent health, has good vital signs and an unremarkable medical history with regular medical and dental examinations. She is very conscientious about her life style and, although not a holistic medicine purist, keeps up with the reading on the topic.

As a new patient in Dr. Nigel's office, she is very anxious about something that has bothered her for years — the eight amalgam restorations on her molars that were placed when she was a teenager. She is worried about the possible side effects to her health caused by the amalgam fillings, particularly since she just found out that they are made with mercury. A co-worker who has multiple sclerosis told Gail that while amalgam has not been found to be a "problem," it probably "wouldn't hurt" to have them replaced. Gail was so worried she asked her physician, Dr. Terry Dobbs, to write a note requesting the replacement of the amalgams for medical purposes. Dr. Dobbs told Gail that while she could see no real benefit for the replacement, she also saw very little harm. Even though Dr. Dobbs had not done this before, she wrote a consultation note to Dr. Nigel that stated, "please remove all amalgams for medical purposes."

Dr. Nigel has explained to Gail that the eight conservative amalgam restorations are very serviceable and will probably last for many years. He also informed Gail that it was against dentistry's code of ethics to remove amalgam for reasons of preventing disease except in the case of allergy. Gail could see that she was at an impasse and asked Dr. Nigel, "If you won't replace them because of my fears, will you change your mind based on the letter from Dr. Dobbs? And if that still does not convince you, will you change your mind if I said it was for esthetic reasons?"

\* \* \*

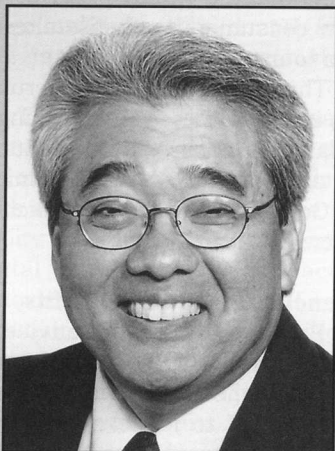
Dr. Nigel is now faced with an ethical dilemma. Check the following course(s) of action he should take in this case and mail, fax this page, email, or send a note indicating your recommendations. What would you do if you were Dr. Nigel? Some options (check one or write your own) include:

- ☐ 1. Dr. Nigel should refuse to remove the amalgams if they are serviceable;
- ☐ 2. Dr. Nigel should remove the amalgams only after the patient signs an acknowledgement that the reason for the replacement is for esthetics only;
- ☐ 3. Dr. Nigel should send the patient to another office for this treatment, as he refuses to bend his principles;
- ☐ 4. Dr. Nigel should call her physician and discuss the consultation letter and share materials and information from the ADA. If the physician maintains her position, Dr. Nigel should still refuse to replace the amalgams.
- ☐ 5. Dr. Nigel should call her physician and discuss the consultation letter and share materials and information from the ADA. If the physician maintains her position, Dr. Nigel should replace the amalgams.
- ☐ 6. Other alternative (please describe):

**SEND YOUR RESPONSE BY February 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.  
Fax to (214) 828-8958 or E-mail to [thasegawa@tambcd.edu](mailto:thasegawa@tambcd.edu)

# Ethical Dilemma

By Thomas K. Hasegawa, Jr. D.D.S., M.A., Merrill Matthews, Jr. Ph.D., and Marvin Hirsh, D.D.S. Dr. Hirsh is an associate professor in the Department of Restorative Sciences and Director of Operative Dentistry.



Hasegawa

## Anxious (Patient) About Amalgam

*Response to Ethical Dilemma  
#43*

Dr. Jack Nigel is a general dentist who has a large practice in a booming suburb near a Texas metroplex. The typical patient demographic is the 28 to 35-year-old, most with families. This was a real change from his previous practice that was in an older established community where the typical demographic was 40 to 65 years. His patient skills and reputation for honesty and fair prices has made him an "instant" success over the last 3 years.

Gail Norman is a new patient in the office, and she is very excited because she just secured her first "real" job with benefits, including dental. Gail is a 28-year-old white female who is in excellent health, has good vital signs and an unremarkable medical history with regular medical and dental examinations. She is very conscientious about her lifestyle and, although not a holistic medicine purist, keeps up with the reading on the topic.

As a new patient in Dr. Nigel's office, she is very anxious about something that has bothered her for years — the eight amalgam restorations on her molars that were placed when she was a teenager. She is worried about the possible side effects to her health caused by the amalgam fillings, particularly since she just found out that they are made with mercury. A co-worker who has multiple sclerosis told Gail that while amalgam has not been found to be a "problem," it probably

"wouldn't hurt" to have them replaced. Gail was so worried she asked her physician, Dr. Terry Dobbs, to write a note requesting the replacement of the amalgams for medical purposes. Dr. Dobbs told Gail that while she could see no real benefit for the replacement, she also saw very little harm. Even though Dr. Dobbs had not done this before, she wrote a consultation note to Dr. Nigel that stated, "please remove all amalgams for medical purposes."

Dr. Nigel has explained to Gail that the eight conservative amalgam restorations are very serviceable and will probably last for many years. He also informed Gail that it was against dentistry's code of ethics to remove amalgam for reasons of preventing disease except in the case of allergy. Gail could see that she was at an impasse and asked Dr. Nigel, "If you won't replace them because of my fears, will you change your mind based on the letter from Dr. Dobbs? And if that still does not convince you, will you change your mind if I said it was for esthetic reasons?"

\* \* \*

Dentists who responded to the case chose the following options: 1) Dr. Nigel should remove the amalgams only after the patient signs an acknowledgement that the reason for the replacement is for esthetics only; 2) Dr. Nigel should call the physician and discuss the consultation letter and share materials and information from the ADA. If the physician maintains her position, Dr. Nigel should still refuse to replace the amalgams. None of the respondents chose the following options: 1) Dr. Nigel should refuse to

# Ethical

remove the amalgams if they are serviceable, 2) Dr. Nigel should send the patient to another office for this treatment, as he refuses to bend his principles, or 3) Dr. Nigel should call the physician and discuss the consultation letter and share materials and information from the ADA. If the physician maintains her position, Dr. Nigel should replace the amalgams. Other alternatives were discussed for managing this case.

Dentists who responded to the case acknowledged that this request is not uncommon from patients, albeit more uncommon from physicians. The on-going debate about dental amalgam has been fueled by a recent congressional bill, one that would eliminate the use of amalgam in 2007. The ethical issues that will be addressed will include: 1) the controversy over dental amalgam; 2) an act to ban amalgam; and 3) balancing risks and benefits.

## **Controversy Over Dental Amalgam**

For well over a century and a half, the use of silver amalgam as a restorative material has fomented controversy. The problems began with the introduction to the United States in the 1830's because it posed a threat to the accepted use of gold as well as to the economic status of many dentists (1). Today the alleged threat, based on anecdotal case reports, is to the health of the patient (2).

The anti-amalgam literature exhibits many logical and methodological errors that are used to arrive at its conclusions. People are exposed to far more mercury in the environment than the minute amount released from silver amalgam restorations (2). Estimated levels of mercury exposure from silver amalgam restorations is 1 to 3 micrograms per day while the estimated exposure from environmental

sources such as seafood, electrical applications, and industrial pollution is 20 micrograms a day. Absorption of up to 25 micrograms per day has shown no known health effects (1).

Dentists and their assistants who work with silver amalgam are exposed to a much larger amount of mercury than the average individual, yet these professionals do not have a higher incidence of the purported diseases that anti-amalgamists claim are caused by silver amalgam restorations (2).

Evidence-based conclusions confirm that silver amalgam is a safe restorative material and may be used without health concerns except for the less than 1 percent of the population who exhibit allergic reactions (1, 2).

## **An Act to Ban Amalgam**

The controversy surrounding mercury and silver amalgam was a recent topic in the ADA News describing congressional hearings held on November 14, 2002 (3). A primary focus of the hearings is in response to H.R. 4163, The Mercury in Dental Filling Disclosure and Prohibition Act. The act, sponsored by Rep. Diane Watson (D-Calif) and cosponsored by Rep. Dan Burton (R-Ind), would ban the use of dental amalgam by 2007.

H.R. 4163 intends "to prohibit after 2006 the introduction into interstate commerce of mercury intended for uses in a dental filling." Findings in the bill include comments such as: "mercury is a highly toxic element," "the mercury in dental amalgam continually emits mercury vapors," "according to certain scientific studies, Health Canada, and the Agency for Toxic Substances and Disease Registry of the Department of Health and Human Services, children and pregnant women are at particular risk for exposure to mercury contained in

dental amalgam," and "alternatives to mercury-based dental fillings exist, but many publicly and privately financed health plans do not allow consumers to choose alternatives to mercury amalgam (4)."

The findings are under scrutiny and expert witnesses are seeking to explain the risks and benefits of dental amalgam to the Committee on Government Reform, which is reviewing the act.

## **Balancing Risks and Benefits**

Patients seek the advice of their dentist because as laypersons they lack the training and knowledge needed to make a diagnosis, evaluate treatment needs, and balance the associated risks and benefits. Patients trust that their health professional is competent and has the integrity to discuss these matters without bias and with mutual respect.

Health professions must demonstrate to the public that the trust placed in them is justified and founded in sound science. The profession earns the respect of the society by continually reinforcing the foundation of science, expertise and new knowledge to benefit the health of the patient. Dr. Lawrence Tabak, director of the NIDCR (National Institute of Dental and Craniofacial Research) of the National Institutes of Health, testified before the House Government Reform Committee on H.R. 4163 and reviewed the findings of two NIDCR clinical trials intended to assess whether exposure to mercury in dental amalgam in children is associated with adverse neurological, renal, immunological, microbiological, behavioral, or cognitive effects. The two studies, which began in 1996, are on-going and to date "there have been no harmful untoward effects attributable to amalgam noted in either trial and, on each occasion, the DSMB (Data

# Dilemma

and Safety Monitoring Board) has recommended that the trials be continued." In summary, Dr. Tabak stated that "available scientific evidence indicates that dental amalgam is a safe restorative material (5)."

There is no risk-free invasive dental procedure — each and every act of the dentist must weigh the risks and benefits. There is the possibility that the patient is allergic to dental amalgam but the act of removing amalgam may itself result in potential damage to healthy tooth structure and the loss of sound tissue in the process (6). There are also the risks and benefits involved with the replacement materials and the extra costs. No material or technique is perfect, and each has an array of risks and benefits that may be material to the patient. However, safety is not a risk factor for amalgam except for patients who may have an allergy.

Under the principle of veracity (The dentist has a duty to communicate truthfully), the ADA Code is clear about removal of amalgam restorations:

"Based on current scientific data the ADA has determined that the removal of amalgam restorations from the non-allergic patient for the alleged purpose of removing toxic substances from the body, when such treatment is performed solely at the recommendation or suggestion of the dentist, is improper and unethical. The same principle applies to the dentist's recommendation concerning the removal of any dental restorative material (7)." The question in this case is whether a dentist is ethically obligated to remove serviceable dental amalgam from the non-allergic patient at the patient's request or on the recommendation of the patient's physician. According to Peter Sfikas, a lawyer for the ADA, "the answer is

no." (6) Agreeing to remove the amalgam is the independent decision of the clinician.

Respondents to the case noted that they would consult with the physician and make her aware of the facts. Even though the physician saw little harm in the replacement, one dentist said he would encourage her to "stop scaring patients." None of the respondents chose to replace the amalgams after consulting with the physician and she still recommended the replacement. Dentists did write that they were concerned about the patient's anxiety and this anxiety represented some modicum of health risk to her. Should the dentist be concerned for the patient's mental health regarding anxiety? Dentists did write that after educating Gail about the safety of amalgam, if she was still obsessed with the removal they would accommodate her. It was not clear if these dentists understood that this is considered unethical by the ADA Code (6).

## Conclusion

Dental amalgam has been in use for over 150 years and continues to be intensely scrutinized for matters of safety. Dentists are ethically obligated to educate patients and their physicians about the risks and benefits of amalgam and to describe the profession's view regarding the matter of safety in its code of ethics. In the case of patients who are anxious about their amalgams, the dentist is ethically justified in refusing to replace the amalgams solely to alleviate these concerns.

## References

1. Hirsh M. Amalgam toxicity, fact or fiction? *Baylor Dent J.* Fall 1991;9:29.
2. Dodes JE. The amalgam controversy an evidence based analy-

sis. *J Am Dent Assoc.* 2001, 132(3):348-56.

3. Palmer C. ADA Talks amalgam on the hill. *ADA News.* 2002, 33(21):6.
4. H.R. 4163 The Mercury in Dental Filling Disclosure and Prohibition Act. 107th Cong. Available at: <http://www.nvbt.nl/hot-metalen-amer003.html>. Accessed Feb 17, 2003.
5. Hearings before the House Government Reform Committee, 107th Cong, (2002)(testimony of Lawrence Tabak, D.D.S., Ph.D. Director NIDCR) Available at: <http://www.house.gov/reform/hearing.02.11.14.htm>. Accessed Nov 14, 2002.
6. Sfikas PM. Can a dentist ethically remove serviceable amalgam restorations? *J Am Dent Assoc.* 1996; 127(5):685-687.
7. ADA Principles of ethics and code of professional conduct. American Dental Association. April 2002: update 6.

## 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.