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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Support

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

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What Would You Do?

Ethical Dilemma #38

Dr. Joan Loflen is a board certified periodontist who has practiced for 15 years in the same location in a large metropolitan city. Her clinic is located in a dental specialty complex with 10 other offices. She moved in shortly after completing her board certification and has added another periodontist 10 years ago.

As she reviews the schedule for today, she notes that Angela Francis is scheduled this afternoon for her quarterly recall. Angela has been in the practice now for 8 years in the maintenance phase of her periodontal care. She is a 45-year-old Hispanic female who is in excellent health, has stable vital signs and is seen yearly by her physician and her general dentist. She is outgoing and has a large smile that complements her gregarious personality. This was not the case when treatment started.

While her general restorative needs were modest, she had moderate periodontitis with generalized horizontal bone loss and localized areas of advanced periodontitis with Class II buccal furcation involvement of all first molars. She has first molar to first molar dentition in both arches with a Class I occlusion and good oral function. The other molars were extracted 5 years or more before she saw Dr. Loflen. She had lost about 30 percent of the alveolar bone supporting the maxillary anteriors and 50 percent of the support for the mandibular anteriors. After the corrective surgical phase, all four molars experienced moderate cold sensitivity along with her mandibular anterior teeth.

Dr. Loflen and Dr. Miles McKinney, her general dentist, have tried various desensitizing agents over the years with mixed results. While the prognosis for maintaining her dentition is good overall and fair for her remaining molars and mandibular anteriors, at the last appointment she expressed a concern that maybe she should just have her teeth extracted and dentures made. She told her hygienist, Margaret Simmons, that her friend had her dentures made with implants and “loves them,” although her friend’s teeth were much worse. Angela did not ask Dr. Loflen about dentures and implants at the last appointment, although Dr. Loflen noted in the progress notes that she was not a good candidate for dentures or implants because of the quality and quantity of her remaining alveolar structures.

Margaret has completed Angela’s recall appointment today, and when Dr. Loflen enters the operatory to start her assessment, Angela asks, “I seriously think we should just extract my teeth and make dentures, maybe with implants. I want to keep my teeth but this increasing cold sensitivity is making my life miserable. Are dentures a good option now? I know dentures aren’t perfect, but this cold sensitivity isn’t great either.”

* * * *

Dr. Loflen 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 as to your recommendation. What would you do if you were Dr. Loflen? Some options (check one or write your own) include:

- Dr. Loflen should recommend that Angela continue with periodontal maintenance and not discuss the denture option. She will regret the denture option due to the compromised quality and quantity of her alveolar support;
- Angela should be informed that Dr. Loflen and Dr. McKinney will talk and discuss whether more vigorous treatment for sensitivity should be initiated or if dentures with/without implants are a reasonable alternative;
- Dr. Loflen should educate Angela about the risks and benefits of implant supported dentures and ask her to try to live with the sensitivity for another year;
- Other alternative (please describe):

* * * *

SEND YOUR RESPONSE BY December 1, 2001 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.
Ethical Dilemma

By Thomas K. Hasegawa, Jr., D.D.S., M.A., Merrill Matthews, Jr., Ph.D., Thomas W. Stanford, Jr., D.D.S., M.S., Associate Professor in the Department of Periodontics at Baylor College of Dentistry.

Sensitive (Ethical) Issues for the Periodontist
Response to Ethical Dilemma #38

Dr. Joan Loflen is a board certified periodontist who has practiced for 15 years in the same location in a large metropolitan city. Her clinic is located in a dental specialty complex with 10 other offices. She moved in shortly after completing her board certification and has added another periodontist 10 years ago.

As she reviews the schedule for today, she notes that Angela Francis is scheduled this afternoon for her quarterly recall. Angela has been with the practice for 8 years in the maintenance phase of her periodontal care. She is a 45-year-old Hispanic female who is in excellent health, has stable vital signs, and is seen yearly by her physician and her general dentist. She is outgoing and has a large smile that complements her gregarious personality. This was not the case when treatment started.

While her general restorative needs were modest, she had moderate periodontitis with generalized horizontal bone loss and localized areas of advanced periodontitis with Class II buccal furcation involvement of all first molars. She has first molar to first molar denition in both arches with a Class I occlusion and good oral function. The other molars were extracted 5 years or more before she saw Dr. Loflen. She had lost about 30 percent of the alveolar bone supporting the maxillary anterior and 50 percent of the support for the mandibular anterior. After the corrective surgical phase, all four molars experienced moderate cold sensitivity along with her mandibular anterior teeth.

Dr. Loflen and Dr. Miles McKinney, Angela’s general dentist, have tried various desensitizing agents over the years with mixed results. While the prognosis for maintaining her dentition is good overall and fair for her remaining molars and mandibular anterior teeth, at the last appointment she expressed an interest in having her teeth extracted and replaced with dentures. Angela told her hygienist, Margaret Simmons, that her friend had her dentures made with implants and “loves them,” although her friend’s teeth were much worse. Angela did not ask Dr. Loflen about dentures and implants at the last appointment, although Dr. Loflen noted in the progress notes that she was not a good candidate for dentures or implants because of the quality and quantity of her remaining alveolar structures.

Margaret has completed Angela’s recall appointment today and when Dr. Loflen enters the operatory to start her assessment, Angela says, “I seriously think we should just extract my teeth and make dentures, maybe with implants. I want to keep my teeth but this increasing cold sensitivity is making my life miserable. Are dentures a good option now? I know dentures aren’t perfect, but this cold sensitivity isn’t great either.”

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Dentists who responded to the case selected all three alternatives and offered their own strategies. The alternatives included: 1) Dr. Loflen should recommend that Angela continue with periodontal maintenance and not discuss the denture option. She will regret the denture option due to the compromised quality and quantity of her alveolar support; 2) Angela should be informed that Dr. Loflen and Dr. McKinney will talk and discuss whether more vigorous treatment for sensitivity should be initiated or if dentures with/without implants are a reasonable alternative; and 3) Dr. Loflen should educate Angela about the risks and
benefits of implant supported dentures and ask her to try to live with the sensitivity for another year.

Quality of life issues are inseparable from the treatment decisions of dental generalists and specialists. Cold sensitivity can make life "miserable" for patients like Angela, diminishing the enjoyment of eating and drinking or even smiling. These quality of life issues challenge us to consider the ethics of: 1) unique aspects of periodontal treatment; 2) compromised oral health; and 3) (un)reasonable alternatives.

Unique Aspects of Periodontal Treatment

The goals of periodontal therapy are to preserve the natural dentition; to maintain and improve periodontal health, comfort, esthetics and function; and to provide replacements (i.e. dental implants) where indicated. There is irrefutable evidence-based research confirming that chronic inflammatory periodontal diseases are treatable. As a result, with thorough treatment, reasonable plaque control, and continuing supportive maintenance care the great majority of patients retain their dentitions over their lifetimes (1).

Several conditions unique to the provision of periodontal therapy – such as an initial phase of definitive treatment, followed by multiple annual visits for maintenance treatment, which then extend into years of long-term care – come into play in Angela's case. There are very few "prescription periodontal procedures” (perhaps clinical crown lengthening) and as a consequence, most patient-periodontist relationships are for the long-term. In the initial interview, patients are advised of their periodontal disease status, treatment options and the importance of maintenance care.

Periodontal disease is a chronic dental disease, and can be likened to diabetes, a chronic medical disease. In both diseases, there are therapeutic interventions. Patient response, as well as compliance with self-care and professional maintenance care regimens, all play significant roles in long-term success. By its nature, long-term maintenance of the periodontium/dentition is a team effort between the general dentist, the dental hygienist, the dental specialist and most importantly, the patient. Patient compliance with personal oral hygiene procedures and periodic office visits are critical (2).

These factors illustrate unique aspects of periodontal care and the periodontist's practice, including the treatment of a chronic dental disease and the reality that, as in other chronic diseases, much of the success is in the patient's own hands. The patient-periodontist relationship is for the long-term, unlike the emergency patient in the endodontist's or oral surgeon's practice. And unlike the endodontist or oral surgeon, who seek a cure for the patient's disease or symptomatology, the periodontist understands that restoring optimal oral health or complete healing is an unrealistic goal and that outcomes of care may include compromises such as cold and mechanical tooth sensitivity.

Compromised Oral Health

Specific to this case is that Angela's tooth sensitivity that has made her life "miserable." The philosopher Ozar provides us with a useful way of thinking about oral health as "appropriate and pain-free oral functioning." (3) If restoring optimal oral health is the target in this case, we know that we will miss the mark. The three-unit bridge will never exceed the qualities of three healthy teeth. Nor will dentures, even implant-supported, rival a fully functioning dentition. While healing the patient is the ultimate goal for the health professional, we know that disease or injury can debilitate and permanently affect patients' quality of life – in this case, cold and/or mechanical sensitivity.

What then is the quality of oral health that the periodontist seeks? As we look at the scope of periodontal therapy, we see it as a process that begins with a diagnosis and treatment plan presented to the patient, along with a clearly stated and easy-to-understand informed consent. It then proceeds with a corrective/surgical treatment phase and then continues on into an extended maintenance phase. A common treatment risk in periodontal therapy is dentinal sensitivity, resulting in pain from touch and/or temperature. When Angela read and discussed the contents of the consent form she signed 8 years ago describing the material risks of periodontal surgery, including the possibility of cold and/or mechanical sensitivity, she may not have been prepared to fully grasp the impact on her quality of life.

Angela now asks, "I seriously think we should just extract my teeth and make dentures, maybe with implants. I want to keep my teeth, but this increasing cold sensitivity is making my life miserable. Are dentures a good option now? I know dentures aren't perfect, but this cold sensitivity isn't great either."

The dental literature addressing dentinal sensitivity is vast, and new therapies are introduced frequently (4–6). It is not uncommon for dentinal sensitivity to resolve either spontaneously, or over time, with no treatment. Bal and Kundalarki have published a fairly concise review of treatment modalities for dentinal sensitivity. The treatment modalities begin with dentinal tubule obliteration using varnishes, burnishing, calcium, fluoride and oxalate compounds, as well as dentifrices, and dental resins. Other options presented include restorations or guided tissue regeneration to cover the involved area(s), an option recommended by one respondent to the case (4). Recently, the use of lasers was reviewed by Kimura, who reported a wide variation in the efficacy of resolving dentinal sensitivity (6).

In the event that Angela's comfort cannot be attained by one of these modalities, a more extreme, but effective, measure would be intentional devitalization of the tooth or teeth, and subsequent endodontic therapy. The long-term success rate for teeth treated endodontically has been reported as high as 95 percent (7). This may be a solution for sensitivity localized to a few identifiable teeth, but may not be viable for generalized sensitivity.
The last option and most extreme treatment for dentinal sensitivity would be extraction, and tooth replacement with removable or fixed partial dentures, which may be tooth and/or implant retained. Depending on the dental implant location, 10-year success rates have been reported as high as 95 percent in the mandible and 81 percent in the maxilla. The question remains, however, what are reasonable alternatives for Angela?

(Un)reasonable Alternatives

The goal of periodontal therapy, as stated earlier, is to preserve the natural dentition. Several factors support the retention of Angela’s teeth. She is 45-years-old (a relatively young age), in good health (stable systemic condition), is 8 years post-periodontal therapy with good maintenance compliance and stable attachment levels, has molar-to-molar Class I dentition with Grade II molar furcations, has a good overall prognosis and a fair prognosis for her remaining molars and mandibular anteriors. Dr. Loflen has assessed that Angela is not a good candidate for dentures with/without implant support because of the quality and quantity of her remaining alveolar structures.

While she has reported mixed results with desensitization efforts during annual visits to her general dentist, Dr. McKinney, it appears that every reasonable alternative other than extraction has not been exhausted. One clinician wrote, “maybe endodontics should be considered to relieve the sensitivity and then she can make a decision not under the duress of pain.” Another clinician said that Angela, due to her age and sex, is a prime candidate for bruxism and recommended that she be fitted with “an acceptable bruxism appliance for a short period before any other treatment is considered.”

It is time for Dr. Loflen to communicate with Dr. McKinney and as a co-therapist make some recommendations regarding treatment of the sensitivity, or take a more active role in treatment. Since Ms. Francis visits Dr. Loflen quarterly, a more frequent assessment and/or treatment of the sensitivity during the maintenance appointment in Dr. Loflen’s office, may facilitate control and/or resolve the sensitivity. However, after exhaustion of every reasonable option for resolving the sensitivity problem, then a decision that may include intentional endodontic therapy and extraction may be made.

Is Angela a candidate for complete dentures with/without dental implants? If she is disappointed with her dentition now, how will she accept a prosthetic alternative? Informed consent is about “informing the patient of the proposed treatment, and any reasonable alternatives, in a manner that allows the patient to become involved in treatment decisions.”

What qualifies as reasonable alternatives for Angela? Are complete dentures with/without implant support a reasonable alternative? If the central goal of periodontal therapy is to preserve the natural dentition and promote appropriate and pain-free oral function, efforts must be made by both clinicians to address Angela’s sensitivity and to educate her about her oral health.

Conclusion

Periodontal disease is a chronic disease requiring careful coordination of treatment between the generalist and specialist. Angela is experiencing cold sensitivity, a common outcome of periodontal treatment and wonders if complete dentures with/without implants is a reasonable alternative. Both clinicians are obligated to diligently address her sensitivity and to promote appropriate and pain-free oral function by maintaining her stable periodontal condition, considering endodontic and fixed and/or removable partial denture alternatives. Complete dentures with/without implant-support are not reasonable alternatives for Angela.

References


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 8952, or E-mail to thasegawa@tambcd.edu.