

Ethical decision-making for multiple prescription dentistry

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Technology provides a selection of treatment choices for dental problems. Dental ethics must be applied to the development of a treatment plan and the selection of methods. Treatment options should consider the patient's circumstances and desires as well as the dentist's decision as it relates to best practices in dentistry.

This article presents four case studies that illustrate the process of ethical decision-making for the appropriate treatment.

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The art and science of dentistry has progressed very rapidly since the introduction of the high-speed handpiece in the 1950s.¹ There has been a paradigm shift from paternalistic management of obvious problems to a medical model of dental care, which includes prevention and management of dental disease and prosthetic rehabilitation to restore normal oral function. Discovery of the relationship between oral health and systemic disease has raised awareness concerning the importance of oral health. In 2000, the U.S. Surgeon General cited oral health as a major concern.² Advancements in technology offer a variety of solutions for managing similar dental situations and it is incumbent upon each practitioner, as a member of an ethical profession, to educate patients about their appropriate treatment options, allowing them to make autonomous treatment choices that are in their best interest.

It generally is understood that many treatment options are available for any given dental condition. A definite decision-making process helps to determine the appropriateness of each treatment modality. It also must be acknowledged that the ethically appropriate treatment for

a given patient may be different for the same patient at different times in his or her life.

Recognizing the importance of optimal oral health, coupled with the rapid advancements in technology, may lead the practitioner to be overzealous in treatment. A comprehensive plan of care that is appropriate for the patient should include the application of ethical principles in the development, acceptance, and implementation of treatment. The science of dentistry makes it possible to offer multiple options to patients; however, the art of dentistry includes the need to communicate with the patient and to apply ethical principles when making treatment recom-

mendations. The American Dental Association's Code of Ethics lays the groundwork; how the Code is applied reflects the dentist's individual values (see the table).³

It often is possible to achieve similar results from the application of different approaches to treatment or prevention.⁴ Having multiple options leads to what Sadowsky called the "moral dilemma of the multiple prescription in dentistry."⁵ One approach may be considered more beneficial than another at a given time. The options that a dentist offers and a patient selects can be influenced by changes in the patient's lifestyle or physical condition or a change in terms of available treatment methods. The clinician

Table. Ethical principles.³

Principle	Definition
Patient autonomy ("self-governance")	The dentist has a duty to respect the patient's rights to self-determination and confidentiality
Nonmaleficence ("do no harm")	The dentist has a duty to refrain from harming the patient
Beneficence ("do good")	The dentist has a duty to promote the patient's welfare
Justice ("fairness")	The dentist has a duty to treat people fairly
Veracity ("truthfulness")	The dentist has a duty to communicate truthfully

should share his or her reasons for recommending one treatment option over another; however, other reasonable treatment options should be presented as well. An ethical decision-making process is necessary when discussing the risks and benefits for the patient and arriving at an appropriate decision for treatment. Professional responsibility includes acting in a manner that promotes “good” for the patient. Ethical principles should be the underpinning for the plan of care and should affect all choices made concerning care management.⁶

Dentistry is a moral profession, guided by normative principles.⁴ As a result, dentists are obligated to choose a course of treatment that allows them to be “caring and fair in their contact with patients.”³ Although increased commercialism may be difficult to avoid, patient autonomy should be the overwhelming decision-making principle. Preservation of the profession of dentistry and the self-policing autonomy that it enjoys necessitates adherence to the normative picture.⁷ Members of the dental profession and of the community at large expect dentists to act ethically, according to a balance of certain norms: nonmaleficence, beneficence, justice, veracity, and respect for patient autonomy.³ The personal virtues of the dentist and the intrinsic values of the profession, the patient, and society must be considered when choosing appropriate treatment for any given situation (see the table).³

Codes of ethics describe expected standards of behavior for self-policing professions (dentistry, medicine, nursing, and so forth). Ethics also may be considered a mode of inquiry for processing the moral dimensions of an issue.⁸ To engage in ethics is to apply a proto-

col to matters of human concern. Normative ethics refers to an area of inquiry that investigates right or wrong conduct, looking at ethical principles and rules commonly associated with the situation and assessing duties and obligations.

Autonomy includes self-determination, confidentiality, and the right to select and/or to refuse treatment. The dentist must inform the patient of all reasonable and appropriate treatment options. This way, the patient is actively involved in treatment decisions. Dentists serve not only as diagnosticians but also as educators. Trust may be weakened if dentists limit the amount of information patients receive.

Too much information also can present a problem.⁹ The dentist must use good judgment when obtaining informed consent. Education may inform patients as to what they need but that may not be what they want. Autonomy involves decision-making from both the patient and the dentist. The right to refuse treatment is inherent in the principle of autonomy.¹⁰

Justice includes trust and kindness. Trust is built upon being honest; patients trust that dentists have a current working knowledge of modern dental techniques. As a result, continuing education is an ethical obligation of the dental profession (one which may or may not be required by law). If the patient requires treatment that is beyond the skill of the primary dentist, it is expected that the dentist will refer the patient to more qualified clinicians. Ethical decision-making reduces the tendency toward over-treatment; that is, a dentist should not perform a procedure that is not indicated simply to please the patient.¹¹

Veracity includes judgment concerning what to tell the patient.

Informed consent is an important component of decision-making; however, sharing all of the details about a case may complicate the process. The dentist must decide how much information to share with the patient. For example, fair fee structures are included in the principle of veracity; misrepresentation is considered to be untruthful.

Beneficence and nonmaleficence include benefits versus harm. Combined, this dichotomy is a utilitarian principle that includes acting in a manner that promotes the good of the patient. Even though a particular technique could address an immediate problem, the overall effect may harm the patient in a way that is not immediately apparent.

Weinstein has proposed a process for making ethical decisions for patient care. This process involves gathering relevant facts, including medical history and social factors, ascertaining possible treatment options, and answering questions concerning what course of treatment should be followed and why.⁷

The first step involves gathering all of the relevant facts, including medical history, dental history, and social factors. Relevant ethical principles are identified and a decision is made regarding conflicts. For example, when a patient requests a treatment that would knowingly render his or her condition more unstable or uncertain than at the time of the initial visit, the personal virtues of the dentist and the principles of nonmaleficence may conflict with the need to respect the patient’s autonomy.

Next, all of the treatment options available for the given situation should be ascertained (for example, a Class II carious lesion may be treated with an interim glass ionomer restoration, an interim zinc oxide/eugenol restoration,

a composite resin restoration, an amalgam restoration, a porcelain inlay, a resin inlay, or a gold inlay).

Finally, the dentist selects the appropriate treatment option by answering the questions “What should be done?” and “Why should it be done?” Although it is inherent in the process, perhaps a fourth step should be added: to arrive at a treatment option that is acceptable to both the patient and the dentist. Autonomy, or the patient’s decision about treatment, is an important ethical consideration.

This article presents four case reports that illustrate how ethical principles were applied in the decision-making process to determine the most appropriate treatment. The authors acknowledge that the treatment rendered is not considered to be ideal in these situations according to accepted standards. However, in each case, ideal treatment options were presented as part of the informed consent process. Weinstein’s model was used to guide the process.⁷

Case report No. 1

A 45-year-old woman sought treatment for a failing four-unit fixed partial denture (FPD) that had been placed more than ten years earlier (from teeth No. 6–9). She had recurring dental caries under the distal abutment crown that was inaccessible for repair without removing the FPD (Fig. 1). The right maxillary canine abutment was mobile and fractured at the gingival margin (Fig. 2); in addition, the patient had an Angle’s Class I occlusion with stable centric occlusion and anterior guidance. The patient had received a nine-unit, four implant-supported FPD (from teeth No. 19–27) more than a year earlier; it was in good condition. Medically, there was no

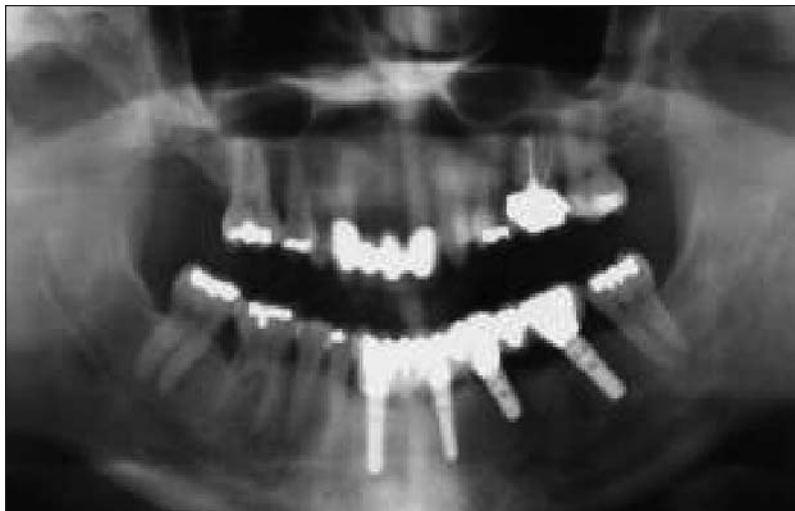


Fig. 1. A 45-year-old woman with a loose maxillary anterior FPD from teeth No. 6–9.



Fig. 2. A radiograph and occlusal view of the patient, indicating the recurrent caries that caused the existing FPD abutment to fail. The cavosurface of the healthy tooth after excavation is at the osseous crest.

contraindication to dental surgery. The patient wanted to receive the least costly restoration as quickly as possible. The function, esthetics, and durability of her previous FPD were acceptable to her. She was opposed to any type of removable prosthesis.

Based on the patient’s wishes, three treatment options were available. One option involved endodontic therapy on the right canine, crown-

lengthening surgery, individual abutment crown therapy for teeth No. 6 and 9, and removable partial denture (RPD) therapy. A second option involved the aforementioned endodontic therapy and crown-lengthening surgery plus FPD therapy, utilizing teeth No. 6 and 9 as abutments. A third option would involve extracting the right canine and placing implants in the sites of teeth No. 6 and 8, with an implant-



Fig. 3. The patient in Figure 2 after receiving appropriate endodontic therapy and phased FPD therapy. Note the favorable tissue response and esthetic appearance created by well-developed ovate pontics.

supported FPD and an independent crown on tooth No. 9. After thorough discussion, the patient chose the second of the three plans.

The existing FPD was removed, endodontic therapy was completed on tooth No. 6, and a pre-fabricated post and a bonded resin core were placed. A provisional FPD was fabricated and crown-lengthening surgery was completed from teeth No. 6–11. After ten weeks of tissue healing, a porcelain-fused-to-high noble metal FPD was fabricated and luted with resin-reinforced glass ionomer cement (Fig. 3).

The patient had enjoyed acceptable success with her previous four-unit FPD and understood that an implant-supported prosthesis would provide the best longevity and that crown-lengthening surgery is a subtractive therapy rather than additive.

Dental considerations of treatment choice

Periodontally sound teeth that have endured severe structural loss (that is, more than 50% of the coronal tooth structure) and still are deemed restorable usually require either a prefabricated or laboratory-made post and core

and a full-coverage restoration subsequent to endodontic therapy. For adequate retention, it generally is understood that the final crown margin should be at least 2.0 mm apical to the cavosurface margin of the core, creating a ferrule. This complex approach to restoration is technique-sensitive and the prognosis for the tooth as an abutment for a FPD is fair.

For healthy biologic width, there must be adequate space between the crown margin and the crestal bone. Osseous crown-lengthening surgery is indicated when coronal tooth structure loss is significant enough to compromise the biologic width when an ideal restoration is placed. This procedure is a subtractive approach that requires removing bone in an era when efforts are conscientiously being made to provide additive treatments that regenerate bone.

When a tooth is severely compromised, an alternative to the aforementioned therapy would be to extract the tooth and replace it with either an RPD or an implant-supported prosthesis. Although RPDs once were common practice, they have fallen out of favor in light of modern materials and techniques

that have improved the feasibility of fixed prostheses and in an era that places a high value on esthetics.

The costs associated with complex restoration of severely compromised teeth, the associated morbidity, and the unfavorable comparative prognoses suggest a need to consider utilizing dental implant therapy and/or FPD therapy as alternatives. The decision should be based on the patient's medical history and socioeconomic status, as well as proper ethical principles.

Ethical considerations

Autonomy

The patient was presented with all possible treatment options, including the option to do nothing with her failing FPD. As with all of the cases presented in this article, the patient was well-educated through discussion and commercially prepared video presentations. In addition, she had received implant therapy on her mandibular arch previously without complication.

Justice

The patient had been treated previously with a very functional and esthetic FPD. FPD therapy has been utilized for many years in conventional dentistry and there was no absolute contraindication for FPD therapy, since the abutment teeth were prepared and would have required crown therapy regardless of the therapy selected. The risks of crown-lengthening surgery (and the fact that bone would need to be removed) were discussed thoroughly. The patient clearly understood her condition and made an educated choice. The same clinicians who completed the previous implant therapy and prosthesis presented and performed this particular treatment, so the patient was not subjected to outside bias.



Fig. 4. An anterior view and a radiograph of a 64-year-old woman with failing restorations on her central incisors.



Fig. 5. The patient in Figure 4, after receiving a zirconia-based FPD that replicated the original position of the natural dentition in accordance with the patient's esthetic demands.

Nonmaleficence

Although it may be argued that crown-lengthening surgery removes bone, it also would allow the dentist to save the canine. Since all procedures were performed according to accepted protocols (with 2.5 mm of ferrule for abutment retention on tooth No. 6, while the abutment teeth had been prepared as abutments previously), no harm was caused to the patient. Healing discomfort and surgical involvement were similar to what would have resulted from implant therapy.

Benevolence

The benefits of implant therapy were superseded by the patient's concerns about the short-term cost of therapy. A plan for failure was discussed with the patient, who clearly understood that the lifespan of the FPD was expected to be shorter than that of an implant-supported prosthesis. The patient understood that failure could require either a removable prosthesis or a more costly implant-supported prosthesis. The patient benefited from crown-lengthening, endodontic therapy, and conventional FPD therapy because this plan provided

a stable, esthetic solution for her in accordance with her chief concerns.

Case report No. 2

A 64-year-old woman sought treatment for failing restorations of her maxillary central incisors (teeth No. 8 and 9). External root resorption was evident (Fig. 4). The patient had an Angle's Class II Division II occlusion and a moderate shift from centric occlusion to maximum intercuspal position without pain. There was steep anterior guidance and a high maxillary lip attachment. The patient was in good health with a history of seasonal sinusitis and was not taking any medications on a regular basis. Her dental history included multiple minimally acceptable alloy and resin restorations. More than 40 years earlier, the patient had received endodontic therapy on teeth No. 8 and 9; this therapy was followed by the placing of porcelain veneers that had been repaired multiple times. She had a history of sporadic recall visits and poor oral hygiene. The patient said that she wanted "whiter" incisors but she did not want the position or shape of her teeth to change.

Given these factors, four treatment

options were considered. The first option involved endodontic retreatment, bonded resin cores, and crown therapy on teeth No. 8 and 9. The second option involved extracting teeth No. 8 and 9, followed by phased FPD therapy. The third option involved extracting teeth No. 8 and 9, followed by phased removable denture therapy. The fourth option involved extraction of teeth No. 8 and 9, followed by implant replacement therapy for teeth No. 8 and 9 and implant-supported crowns.

The patient selected extraction and the FPD. Once that decision was made, teeth No. 8 and 9 were extracted and the maxillary lateral incisors were prepared for abutment crowns. Synthetic ridge preservation material (Bioplant, Kerr Dental, Orange, CA; 800.537.7123) was placed according to standard protocol and a provisional FPD was fabricated to allow for adequate tissue maturation. The preparations on the lateral incisors were refined and a four-unit zirconia-substructure FPD (Lava, 3M ESPE, St. Paul, MN; 888.364.3577) was fabricated for teeth No. 7–10. The FPD was luted with resin-reinforced glass ionomer cement (Fig. 5).



Fig. 6. A radiograph of a 62-year-old man with a failing cantilever FPD. No photograph was taken.

The prognosis of re-restoring teeth No. 8 and 9 was guarded due to the lack of substantial remaining root structure and external root resorption. The patient's esthetic demands and existing anatomy created a contraindication for RPD therapy. It was unclear whether the patient would be satisfied with implant therapy due to the uncertain gingival esthetic outcome, which currently is a risk factor for implants in the esthetic zone. Since the patient desired an exact duplication of the crowding of her original anterior teeth, an FPD was considered to be the best course of therapy.

Ethical considerations

Autonomy

The patient was presented with all reasonable treatment options, including the option to do nothing with her existing dentition. She was made aware of the anticipated difficulty of fabricating a prosthesis that would comply completely with her esthetic demands. The patient's desire to recreate her existing malocclusion was honored.

Justice

FPD therapy has been utilized in conventional dentistry for many years, with predictable outcomes. No absolute contraindication for FPD therapy exists in this particular case, although it would require altering the abutment teeth. However, when the patient's desired esthetic outcome was considered carefully, there were reasonable contraindications for an implant-retained prosthesis or RPD therapy. The dentist and patient had a frank discussion about the difficulties that would be encountered in meeting the patient's esthetic demands and the expected results of each treatment option were reviewed. The patient clearly understood her condition and made an educated choice. No guarantees or promises were made. It was made clear to the patient that her home compliance would determine the success of any treatment option and the relative fees for each treatment option were discussed openly and thoroughly.

Nonmaleficence

Since all procedures were performed according to accepted protocols and because the patient was clearly informed about all procedures prior to treatment initiation, no harm was caused to the patient. Healing discomfort and surgical involvement were within normal limits.

Benevolence

Since the patient's home hygiene practices were questionable, the success of dental implant therapy was uncertain. The potential need for future extraction might require a multi-tooth RPD; the design of such a prosthesis might be complicated by endosseal implants in the sites of teeth No. 8 and 9. A plan for failure was discussed with the patient, who

understood that the lifespan of an FPD most likely would be shorter than that of an implant-supported prosthesis. The patient understood that in the event of failure, her only choices of therapy might be a removable or implant-supported prosthesis. The patient benefited from phased FPD therapy in this case because it was the most predictable treatment option for meeting her demands and expectations.

Case report No. 3

A 62-year-old man had a failing cantilevered FPD that replaced the left maxillary central incisor (Fig. 6). Tooth No. 8, the single abutment, was mobile and elicited pain on percussion. An Angle's Class I occlusion existed with stable centric occlusion and anterior guidance. The patient had a history of acid reflux, asthma, chronic sinusitis, primary tension headaches, and arthritis; his current medications included Prilosec (AstraZeneca, Westborough, MA; 800.236.9933) and lactase. The patient had a history of excellent oral hygiene and compliance with recommended dental treatment. Seven years earlier, the same dentist had placed a crown that was not esthetic on tooth No. 7. Since the patient was an optometrist and had direct and close personal contact with the public, he did not want any long-term removable prostheses; he also was opposed to further tooth reduction unless it was absolutely necessary.

Three treatment options were considered. The first option involved endodontic therapy, with a new crown for tooth No. 8 and a single-tooth RPD. The second option involved performing endodontic therapy on tooth No. 8 and conventional FPD therapy from teeth No. 8–10, replacing tooth No. 9 with a pontic. The third option involved



Fig. 7. The patient in Figure 6, after receiving dental implants and an interim acrylic RPD. The existing crown on tooth No. 7 was made to match the existing cantilever FPD.



Fig. 8. The patient in Figure 6, after splinted, implant-supported crowns were fabricated to replace teeth No. 8 and 9. The crown on tooth No. 7 was replaced to provide a more esthetic result.

extracting tooth No. 8 and utilizing implant therapy to replace teeth No. 8 and 9. The patient selected the third option; in addition, he wished to replace the crown on tooth No. 7 with a more esthetic restoration.

Once a treatment plan was selected, tooth No. 8 was extracted and bovine bone was grafted for ridge preservation. Two endosseous dental implants were placed and an interim acrylic RPD (with no contact over the implant sites) was fabricated for esthetic function only (Fig. 7). Definitive implant-supported crowns were fabricated to replace teeth No. 8 and 9 and the crown on tooth No. 7 was replaced (Fig. 8). The restorability of tooth No. 8 was questionable and tooth No. 10 was virgin. Because of the patient's profession and his desire to avoid a removable prosthesis, a definitive RPD was contraindicated. The crown on tooth No. 7 was replaced at no fee to the patient.

Ethical considerations

Autonomy

The patient was presented with all possible treatment options, including the option to do

nothing with his existing dentition. He was made thoroughly aware of the difficulty of providing a prosthesis that complied with his esthetic demands. The dentist exercised professional autonomy by replacing the restoration on the lateral incisor at no fee because he was not satisfied with the result of his previous treatment.

Justice

There was no absolute contraindication for FPD therapy but there were relative contraindications for an implant-retained or removable prosthesis. The patient was given the same options for treating his condition as anyone else would have received in a similar situation. He also was clearly informed that his home compliance would determine the success of any treatment option.

Nonmaleficence

Since all procedures were performed according to accepted protocols and because the patient was clearly informed about all procedures prior to treatment initiation, no harm was caused to the patient. Healing discomfort and surgical involvement

were within normal limits. An interim RPD was fabricated during the healing period so that the patient did not have to endure social stigma due to missing central incisors.

Benevolence

Considerations for the patient's profession and psychosocial success solidified the selection of implant therapy over other treatment alternatives. This treatment choice created a situation that was more stable and predictable than his original prosthesis. The dentist's decision to replace the restoration on tooth No. 7 at no fee was made with the patient's best interest in mind.

Case report No. 4

On two different occasions (two years apart), a 62-year-old woman sought treatment for maxillary incisors that had fractured 2.0 mm coronal to the free gingival margin. Tooth No. 7 was the first to fracture (Fig. 9); tooth No. 10 fractured two years later (Fig. 10). An Angle's Class I second premolar bilateral occlusion had been restored previously, with stable centric occlusion and adequate anterior guidance.



Fig. 9. A radiograph and anterior view of a 62-year-old woman with a fracture just above the gingival margin on tooth No. 7.



Fig. 10. A radiograph of the patient in Figure 9 taken two years later demonstrates a similar fracture on tooth No. 10.



Fig. 11. A radiograph of the patient in Figure 9, after receiving a dental implant to replace tooth No. 7 while the gingival architecture was maintained.

The patient had a history of fibromyalgia, osteoarthritis, hypothyroidism, sleep apnea, hypertension, depression, anxiety, chronic sinusitis, and primary tension headaches. At the time of both visits, she was taking Prinivil (Merck & Co., Inc., Whitehouse Station, NJ; 800.444.2080), Zoloft (Pfizer, Inc., New York, NY; 800.223.0182), Xanax (Pfizer Inc.), Levoxyl (King Pharmaceuticals, Bristol, TN; 800.776.3637), Neurontin (Pfizer,

Inc.), Oxycontin (Purdue Pharma, Stamford, CT; 800.877.5666), and aspirin with calcium. A history of excellent home care and compliance with dental therapy was obvious upon the initial visit, but declining health and dexterity became evident by the time of the next visit two years later. The patient was pleased with her smile and did not wish to alter her gingival profile; she had been treated previously with dental implant

therapy to replace tooth No. 20 without incident.

The first treatment option involved endodontic therapy on the involved lateral incisor, crown-lengthening surgery, fabrication of a post and core, and crown therapy. The second option involved extraction of the fractured lateral incisor and phased FPD therapy, utilizing the lateral canine and central incisor as abutments. The third option involved extracting the fractured lateral incisor and utilizing an RPD. The fourth option involved extracting the incisor and utilizing implant replacement therapy, replacing the lateral incisor with an implant-supported crown.

Crown-lengthening therapy would alter the gingival profile significantly and expose the margins of the existing adjacent crowns. FPD therapy was contraindicated at both visits due to the cost already invested in crown therapy on adjacent teeth. Implant therapy appeared to be the best treatment option.

Although the patient was given the same four treatment options at both visits, she made a different choice each time. At her first visit, the patient requested implant replacement therapy because she had been pleased with the results of previous implant therapy. At the second visit, the patient's situation had changed and she was concerned about undergoing any additional surgery, leading her to choose the first option.

Tooth No. 7 (the first fractured tooth) was extracted atraumatically and an endosseous implant was placed immediately at the time of extraction. The patient declined to receive a provisional restoration. An implant-supported crown was fabricated (Fig. 11). When tooth No. 10 fractured similarly two years later, endodontic therapy was completed, a prefabricated post and resin core



Fig. 12. A radiograph of the patient in Figure 9, after conventional therapy was completed to restore tooth No. 10. An ideal ferrule was sacrificed to preserve biologic width.



Fig. 13. An anterior view of the patient in Figure 9, after receiving a conventional crown supported by a prefabricated post and core on tooth No. 10. The gingival architecture was maintained.

was placed (Fig. 12), and the tooth was restored using a porcelain-fused-to-high noble metal crown without osseous crown-lengthening surgery. (The biologic width violation was minimized to the greatest extent possible.) The patient's esthetic and functional needs were met appropriately with two different approaches to care (Fig. 13).

Ethical considerations

Autonomy

In both scenarios, the patient was presented with all possible treatment options, including the option to do nothing with her existing dentition. She was made aware of the difficulty that would result from crown-lengthening therapy. At her first visit, she was predisposed to dental implant therapy because of successful previous implant therapy; at that time, she declined a provisional prosthesis to reduce the cost of therapy. By the time of the second visit, she was aware of the decline in her health and was willing to accept the risks of a somewhat compromised

treatment option. She declined crown-lengthening surgery with the thorough understanding that it may be necessary in the future for optimal gingival health.

Justice

All reasonable treatment options were presented to the patient. Her medical history, desires, and capabilities were considered carefully and independently at the time of each presentation.

Nonmaleficence

Although the "ideal" protocol was not followed in the restoration of tooth No. 10, the patient was clearly informed about all procedures prior to treatment initiation and no harm was caused to her. Healing discomfort and surgical involvement were within normal limits. The patient's request for the course of therapy in both scenarios was reasonable.

Benevolence

Initially, implant therapy appeared to be the best treatment option with

the best possible prognosis, based on the patient's prior experience with dental care and the fact that removing the adjacent crowns to fabricate an FPD would subject those teeth to unnecessary trauma and lead to additional expense. By the time the patient sought treatment for tooth No. 10, it was apparent that elective surgical procedures should be avoided due to medical risks. Therefore, the patient's health at the time of each event was factored into the selection of a treatment modality for each situation.

Summary

In each of these case reports, ethical principles guided the plan of care. Patient autonomy was the last step in the ethical decision-making process. The dentist used knowledge and ability to answer the questions regarding why treatment was necessary, enabling the patient to make a sound autonomous decision. The principle of veracity was not noted for each case because it is a value of the authors to tell the truth about

treatment options within the limits of the information that is available and necessary to make a choice. Trust is considered an integral part of the dentist-patient relationship and is essential for informed consent.

Even as technology advances rapidly and aggressive marketing practices appear to be increasingly necessary, clinicians cannot be considered incompetent simply because they make decisions that other clinicians may view as inappropriate, provided there is sound scientific rationale behind the choice of treatment rendered in good faith. Providing treatment without informed consent devalues patient autonomy. Because dentistry is an ethical profession, the ethical obligations of the dentist must guide every treatment decision. If neither the patient nor the dentist are comfortable with the decision, there is no obligation for the dentist to treat the patient beyond stabilizing a life-threatening urgent condition. A dentist should not perform a treatment that would violate another ethical principle simply to support patient autonomy. Ethical utiliza-

tion of technological advances in dental medicine integrates the art and science of dentistry, personal values and beliefs, and a professional code of ethics into a decision-making framework for providing appropriate care.

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