

Medical Consultations for Medically Complex Dental Patients

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ABSTRACT In order to discuss the issue of the medical consultation letter for medically complex dental patients, information is provided with regard to the specifics of the process. Medical, dental, and legal implications are discussed. Specific scripting and format are provided.

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The quality of interdisciplinary cooperation and information-sharing is one of the most important issues for advancing the health of our dental patients.¹⁻³ Many medical conditions may require the attention of dental clinicians such as antibiotic prophylactic considerations, potential bleeding problems, HIV health issues, anemia, hypertension, cardiac disease, diabetic control, asthma, drug history, gastroesophageal reflux, psychiatric considerations, pregnancy, adrenal suppression, bulimia and overall health (ASA category). In the past, various health practitioners have criticized poor interdisciplinary communication and advocated for a standardized procedure with regard to consultation letters written by dentists.^{2,4-6}

Furthermore, a basic understanding of medicine and medical and dental health implications is a necessity regarding the construct of successful interdisciplinary consultation letters.^{3,5,7-9} The American Society of Anesthesiologists physical status classification is used around the world by medical anesthesiologists and

other clinicians as an assessment of the preoperative physical status of patients. The ASA was established approximately 160 years ago and this group established a measurement of physical status in order to standardize the physical health evaluations of anesthesia patients. An ASA status of 1 describes a patient without systemic disease; an ASA status of 2 describes a patient with mild systemic disease; an ASA status of 3 describes a patient with severe systemic disease that limits activity but is not incapacitating; and an ASA status of 4 describes a patient with incapacitating systemic disease that is a constant threat to life.¹⁰

There are many questions regarding medical consultations for dental patients that demand straightforward answers. When and why is a consultation letter necessary? What information is required within the consultation letter? What information should be requested from the patient's physician? What is the proper layout for the letter? What are the various protocols involved in dental treatment?

There are several very good reasons (when and why) for referring dental patients for medical consultations: 1) The patient requires a medical evaluation and/

or therapy; 2) The dentist requires specific medical information (i.e., the results of laboratory tests and/or blood studies) that may influence the patient's dental therapy; and 3) The dentist requests a change in the patient's medical therapy in order to benefit the patient's oral condition.

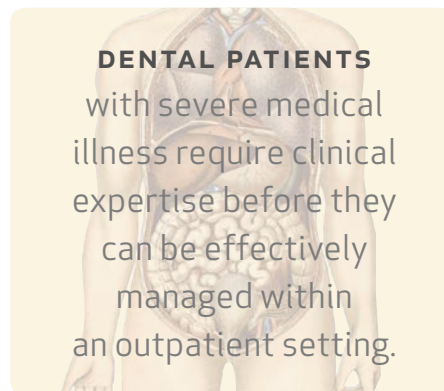
1. THE PATIENT REQUIRES A MEDICAL EVALUATION AND/OR THERAPY.

When the dentist evaluates a patient and makes a determination that the patient may have a health condition beyond the dentist's capabilities to treat, it is imperative the patient be referred to the proper clinician and facility. Such conditions as general health, hypertension, cardiovascular diseases, diabetes, kidney disease, pregnancy, active infectious diseases (i.e., tuberculosis), gastroesophageal reflux disease, HIV/AIDS, and many other medical conditions are potential health concerns, which may necessitate a medical referral.¹⁰⁻¹² Furthermore, dental patients with severe medical illness require clinical expertise before they can be effectively managed within an outpatient setting. This category is essentially a referral to another clinician with greater expertise within the necessary medical discipline. A consultation letter helps as an aid for the clinician to whom the patient has been referred and encourages communication between the patient's physician and dentist.

2. THE DENTIST REQUIRES SPECIFIC MEDICAL INFORMATION THAT MAY INFLUENCE THE PATIENT'S DENTAL THERAPY.

Many patients report a medical history of heart murmur or mitral valve prolapse. Such information is important but may require further detail in order to best treat the patient under the specifications of the American Heart Association. For instance, the results of an echocardiogram determine whether there is regurgitation or the murmur is merely functional or innocent. With regurgitation, antibi-

otic prophylaxis is necessary for several dental procedures, according to the 1997 AHA recommendations. However, if the diagnosis of a functional heart murmur is determined, antibiotic prophylaxis is not required for dental procedures. Other specific medical information a dentist may require includes specific medical diagnoses such as unstable asthma, unstable angina, or a determination of esophageal



ulcers, and a specific diagnosis of gastroesophageal reflux disease. For instance, the dentist may observe tooth enamel loss consistent with gastroesophageal reflux disease or bulimia, and need help in establishing the diagnosis in order to move the patient onto a successful therapeutic pathway. The patient may have an existing history of diabetes and symptoms such as dry mouth or slow healing oral infection. Such a clinical presentation should alert the patient's dentist to have the patient evaluated by a physician. The dentist may determine the patient is anemic through both the medical history and clinical evaluation. Therefore, dentists contemplating dental surgical procedures may request relevant blood studies to evaluate the patient for anemia.

Patients may demonstrate anemia due to a red beefy tongue, oral burning, the lack of filiform papillae of the dorsal

tongue, blanched appearance of the nail beds and gingiva, change in coloration, and a history of decreased energy.¹⁰⁻¹² Furthermore, dentists may require a culture and sensitivity assay to determine the best antibiotics for use against a particularly recalcitrant oral infection. Some patients may report questions regarding their previous medical history such as whether or not a childhood disease was consistent with rheumatic heart disease.¹⁰⁻¹² Therefore, there are any number of clinical presentations and patient histories in which evaluation and clarification from the patient's physician may aid in the patient's further dental treatment.

3. THE DENTIST REQUESTS A CHANGE IN THE PATIENT'S MEDICAL THERAPY IN ORDER TO BENEFIT THE PATIENT'S ORAL CONDITION.

Patients with transplanted kidneys are sometimes placed on both cyclosporine and a calcium channel blocking agent. When these patients manifest the drug side effect of drug-induced gingival overgrowth, it is very difficult to render successful periodontal therapy. It is often necessary to ask the patient's physician to consider changing the patient's anti-hypertensive calcium channel blocking agent to another anti-hypertensive medication of another anti-hypertensive class of drugs in order to decrease the side effect.^{13,14} A dentist should not change the patient's anti-hypertensive medication. Furthermore, even if the dentist could change the drug regimen, it would be improper to do so without a consultation. It is important for the patient's primary care physician to have complete knowledge regarding the patient's cardiac care. Another example of asking for a change in anti-hypertensive medication is when a drug side effect of oral burning or oral lichenoid lesion secondary to an ACE-inhibitor is suspected.

Withdrawing the ACE-inhibitor anti-

hypertensive medication and replacing it with another drug of another class of anti-hypertensive drugs is sometimes necessary to determine whether the ACE-inhibitor drug is involved as a cause of the patient's oral burning or oral lesion.¹⁵

What information do you place within the consultation letter?

Typical information that aids the process of the consultation should be included within the consultation letter. This information includes the patient's name, age, ethnicity, gender, chief complaint, address and other contact information, your name (the referring clinician's), address, and other contact information.¹¹

What is the proper layout for the letter?

The consultation letter should contain the referring doctor's name, address, and contact information. It should contain the patient's name, address, and contact information. It should note the patient's chief complaint, age, gender, and ethnicity. It should describe the reason for which the patient is being referred and the specific questions related to the patient's health that require answers.^{10,11} It should describe exactly where the physician is to respond. An example of the format is provided in **TABLE 1**.

What information do you require from the patient's physician?

Foremost within the consultation letter is the specific reason (or reasons) you are seeking a consultation. Therefore, the requested information is specific with regard to the aforementioned reason or reasons.

What are some of the clinical protocols?

Protocols provide clinical guidelines for practitioners. Current thinking is that some medical legal protection of

TABLE 1

111 Anywhere Road
WhateverTown, WhereeverState
555-555-5555, fax 555-555-1111

Dr. Whoever
222 Anywhere Road
WhateverTown, WhereeverState

Re: Mr. John Smith, 34 yowm

Dear Dr. Whoever:

Please evaluate Mr. Smith's medical condition regarding the proposed dental therapies, (extractions). Mr. Smith reported a heart murmur at his last physical. Please report the results of his echocardiogram and we will follow the current AHA guidelines.

Sincerely,

Dr. Whatsmyname

Please respond below or on the back or on a separate page. Thank you.

Physician's Reply:

the clinician is provided for those clinicians who follow published protocols.

The most well-known protocol is the AHA antibiotic prophylaxis protocol for endocarditis that was last published in 1997.^{10,11} However, it is anticipated a new protocol will be published in the future.

Another well-known protocol is the antibiotic prophylaxis total joint replacement protocol. The latest total joint replacement protocol was published in 1997.¹⁰⁻¹² This protocol states that patients with joint replacement may be prescribed antibiotic prophylaxis under some specific conditions, but does not mandate the necessity of antibiotic prophylaxis in any situation.

A recent protocol was expounded upon that provided blood pressure guidelines for dental patients. In 2004, Merin formulated dental hypertension guidelines based on a review article by Herman et al.^{16,17} Patients with extremely high blood pressure values should be referred immediately while other patients with less severe hypertension may merely require a medical consultation. Some hypertensive patients may continue with routine dental therapy and some only emergent care until the blood pressure values are controlled.

Relatively recent guidelines have utilized the International Normalization Ratio to provide guidelines regarding medications, which increase bleeding potential, and when and when not to have such patients stop taking these medication previous to dental procedures that involve hemorrhage. Taking a patient off such medications may lead to drug rebound, which may result in a serious blood clot. This protocol has evaluated the relative dangers associated with withdrawing such medications and risking embolism and death, and continuing such medications and risking hemorrhage from extraction or other dental surgical procedures.¹⁸⁻²²

In the treatment of HIV-infected patients, it may be necessary to attain such information as viral load, CD4 count, white count, platelet count, CBC and differential, ASA, and drug history. Having the specific information and applying this information to published guidelines allows for competent practice of dentistry upon immune-compromised patients.²³

Other guidelines for medically complex patients are provided for within such texts as Burkett's *Oral Medicine Diagnosis and Treatment*, *Dental Management of the Medically Compromised Patient*, *Principles and Practice of Oral Medicine*, *Internal*

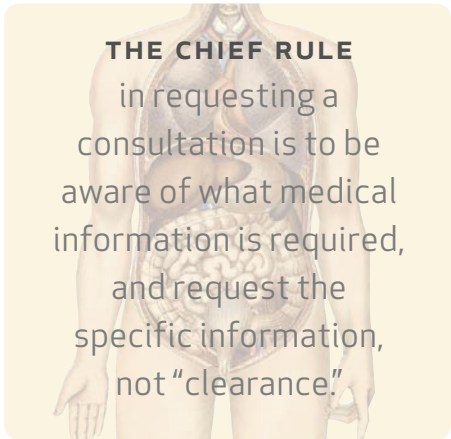
Medicine for Dentistry, Textbook of Oral Medicine, Medical Problems in Dentistry, and the Clinician's Guide to the Treatment of the Medically Complex Dental Patient, among others.^{10-12,24-27} It is important for dentists to realize the information within texts is time-dependent and medical and dental guidelines are often updated. Furthermore, routine dental treatment for many medical conditions including HIV-infection is often unimpeded by these guidelines.²³ However, some patients with many of these and other medical conditions may require medical evaluation and intervention.

Discussion

Clinicians who merely ask physicians for advice and then follow such advice even when the advice contradicts accepted current protocols have lost the medical legal protection of the established protocols.²⁸ Unfortunately, many physicians may provide misinformation including protocols they were taught during their medical school education and not the current versions.²⁹ This may place the dentist who requested the medical consultation in a legal no man's land. If the dentist follows the incorrect physician recommendations and the patient has a problem, the dentist has violated the protocol. If the dentist follows the protocol, he has violated the physician's recommendations the dentist requested. Whatever the dentist does after the problematic medical consultation is legally questionable.

Furthermore, clinicians who ask physicians for advice when established current protocols cover the particular topic do not endear themselves to knowledgeable physicians. The major problems involved within the medical consultation process can be eliminated by asking specific questions and asking for facts rather than opinions.

It is incumbent upon practicing dentists to be knowledgeable concerning medical conditions that impact upon the practice of dentistry. Dentists need to be able to ask educated questions regarding the medical conditions of their dental patients to their patients' physicians. When a request sent to a physician asks vague questions such as "Is it all right to treat this patient?" the physician may



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in requesting a
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not understand the information required or the context, and may send a vague or noncommittal reply. These vague replies are often stored in patients' charts as alleged legal protection, but they rarely assist the dentist in treating the patient effectively. The chief rule in requesting a consultation is to be aware of what medical information is required, and request the specific information, not "clearance."¹⁰ In order, to facilitate many dental medical consultation letters, recommended scripting is provided in **TABLE 2**.

Specific concerns regarding plausible medical consultation for dental patients include information necessary for the elucidation of AHA guidelines. This information might include the results of the patient's echocardiogram, bleeding issues such as an INR, a determination of unstable or stable angina, or asthma,

the results of a biopsy report, a definitive drug history, the results of previous blood studies, and the patient's ASA status.

With regard to medical and dental therapy, there are sins of commission as well as sins of omission. It would be an error to treat a dental patient with a cardiac valve disorder without antibiotic prophylaxis when the AHA protocol recommended such. But it would be an error to cover a dental patient with antibiotics when the protocol did not recommend antibiotic prophylaxis. Furthermore, antibiotics unnecessarily prescribed have the potential to increase bacterial resistance.^{28,30,31} Unnecessary coverage increases the possibility of adverse drug reactions such as side effects and allergic reactions.^{28,31} In the authors' opinion, many clinicians mistakenly believe that when in doubt, the correct policy is to always prescribe antibiotic coverage for medical-legal protection. However, there are any number of negative consequences, that may result due to misprescribing unnecessary antibiotics.

There are instances when physicians or patients have advocated therapy such as antibiotic prophylaxis when such is inappropriate. This situation is often a dilemma for the dentist. It is suggested that under such situations, the dentist explain the particular protocol to the physician and/or patient. Hopefully, the dialogue can be carried out in nonjudgmental fashion and result in the proper maintenance of the protocol. However, it may be necessary for the dentist to refuse to cooperate in the violation of the protocol but allow the patient's physician to carry out the problematic prescription.^{28,32} An example is a plastic surgeon's admonition to the dentist to use antibiotic prophylaxis prior to dental therapy for a patient with a breast implant. As there is no data or protocol to support antibiotic prophylaxis and, therefore, no medi-

TABLE 2

Scripted Suggestions for Questions Regarding Medical Health Consultation

This patient's blood pressure is currently _____. Please evaluate this patient's blood pressure and, if necessary, treat the patient's hypertension.

The patient demonstrates a dental condition consistent with enamel erosion secondary to gastric reflux. Please evaluate this patient for gastroesophageal reflux disease and potential treatment.

This patient reports a history of _____ (kidney disease, HIV positivity, cardiac disease, breast cancer, etc.) please report this patient's ASA status.

This patient reports a complicated drug history. Please provide a summary of the patient's present drug regimens.

The patient reports a history of positive HIV status. Please report the patient's WBC, viral load, CBC and differential, and T-cell count.

The patient reports a history of anemia. Please report the patient's most recent CBC and differential.

The patient reports a history of psychological issues. Please report back concerning this patient's ability to undergo dental therapy of anticipated _____ (low, moderate, high) stress.

The patient reports an allergy to local anesthesia, please evaluate this patient with regard to local anesthesia allergy and report back your conclusions.

The patient reports a history of allergy for a number of antibiotics including _____. Please evaluate this patient's antibiotic allergy concerns.

The patient reports a history thrombocytopenia, please report the patient's present platelet level and treat if necessary.

This patient reports a history of _____ (asthma, angina), please report whether or not this patient's condition is stable or unstable.

The patient reports a history of congenital cardiac malformation. Please confirm the patient's present condition.

The patient reports a history of cardiac disease. Please report the patient's present condition and recent cardiac disease history.

The patient reports a history of heart murmur/mitral valve prolapse. Does this patient currently have a heart murmur? If the patient does have a murmur, please report the results of the patient's echocardiogram and if regurgitation is present, the patient will be premedicated for dental treatment according to the current AHA regimen.

The patient currently reports taking medication to decrease clot clotting potential. Please evaluate the patient's bleeding potential with an INR. If the patient's INR is greater than 3.5, please consider discontinuing the patient's current anti-coagulation medication for a period of time previous to the patient's scheduled surgical dental procedure. This dental surgical procedure is designated as having a _____ (low, moderate, high) probability for bleeding problems. Patients with moderate and high probability procedures for bleeding problems may require medication adjustments at lower INR values.

The patient reports a medical history significant for past steroid use. Please report on the patient's adrenal function and previous history of steroid medications. Patients with adrenal insufficiency require evaluation for corticosteroid prophylaxis with regard to stressful dental procedures.

The patient reports she is pregnant. Please advise regarding the specific time of the due date. Please advise if the pregnancy is at risk and therefore requires special considerations.

The patient reports a previous history radiation for oral cancer therapy. Please confirm the cancer diagnosis, the dosage of radiation to the head and neck region and the dates of therapy.

This patient has been diagnosed with drug-induced gingival overgrowth (hyperplasia). As this patient is presently taking more than one drug known to provoke this condition, it is hoped that you may eliminate one of the inducing drugs and replace the discontinued drug with a drug from another pharmacotherapeutic category. Please advise.

This patient has oral mucosal lesions consistent with oral lichen planus or another similar autoimmune condition. There is the potential that one of his/her present drug prescriptions _____ may be the etiological trigger for this manifestation. Please consider changing the present drug regimen to another drug from a different drug category in order to further investigate this possible connection.

cal rationale for such a prescription, the indication for such is questionable. The dentist may advise the physician to confer with the patient separately and keep any antibiotic prophylaxis information only between the patient and the physician.

Pregnancy is a normal healthy condition. Women undergoing a normal pregnancy should not require a medical consultation. Routine dental treatment including necessary imaging is acceptable. The protocol for pregnancy is to avoid elective procedures during the first trimester (the second trimester is preferred for dental treatment), and to avoid aspirin, NSAIDs, nitrous oxide, tetracycline, and doxycycline. Of course, teratogenic drugs should be avoided as well.^{10-12,33-35}

There are always exceptions to the rule. There are instances in clinical patient care in which the clinician, through individual knowledge of the particular patient, may legitimately decide to disregard a particular protocol. It may help to gain information from the physician concerning the individual health issues of that particular patient. Nonetheless, the clinician may determine that in his or her best clinical judgment, a particular clinical course of action is appropriate.

Any procedure contemplated by clinicians should begin with a risk-benefit analysis. Do the benefits outweigh the risks? Are the risks sufficient to refer the case to a specialist or to a hospital facility? Procedures such as antibiotic AHA prophylaxis benefit very few as only one in a very large number are anticipated to suffer from SBE after dental therapy. However, the few are anticipated to have fairly severe health consequences with an approximate 10 percent risk of death. At a certain point, the risks of an adverse drug reaction to the antibiotic prophylaxis may outweigh the risk-benefit odds ratio and health consequences compared to SBE

infection secondary to dental causation. Therefore, it is important for dentists to have an appreciation for a comparison of risks and benefits. In patients with greater health risks, the clinician must evaluate referring the patient to a hospital facility for dental care. Patients with an ASA classification of four should be considered for dental care within a hospital environment.

Furthermore, some patients may have variable laboratory reports. For example, the INR may vary widely from time to time in some patients. Therefore, it may be important for these patients, and other patients, to be considered for dental therapy within a hospital setting. Also, the nature of the surgery should be factored into the decision regarding blood thinning medications. More strenuous surgical procedures such as multiple extractions and bony surgery may place patients at greater risk with respect to hemorrhage.

In conclusion, the medical consultation letter is a valuable part of many patients' dental care. It is important for dental clinicians to have an appreciation for dental patients' medical conditions and how these conditions may impact dental therapy. It is necessary for dentists to gather pertinent medical information in order to aid the clinical decision process in determining which clinical procedures are appropriate and whether the patient should be considered for medical, dental specialty, or hospital referral. It is important to understand that physicians for the most part have only a limited understanding of dentistry just as dentists for the most part have only a limited understanding of medicine. As it is impossible to be comprehensive within an article, readers are directed to texts for further information. Furthermore, it is important for dentists to be able to establish working communication between physicians and dentists in order to best serve the health needs of the patients. ■■■■

REFERENCES

1. Lamey PJ, Samaranyake LP, Glass GW, Communication between a specialist dental hospital department and referring general dental practitioners: an attempt at clinical audit. *Community Dent Oral Epidemiol* 5(5):277-8, 1987.
2. Korbmacher H, Kahl-Nieke B, Optimizing interdisciplinary cooperation for patients with orofacial dysfunctions. Presentation of an interdisciplinary diagnostic referral sheet. *J Orofac Orthop* 62(3):246-50, 2001.
3. Wynn RL, Cardiovascular drugs and dental considerations. *J Calif Dent Assoc* 28(7):519-26, 2000.
4. Navarro CM, Onofre MA, Sposto MR, Referral letters in oral medicine: An approach for the general dental practitioner. *Int J Oral Maxillofac Surg* 30(5):448-51, 2001.
5. Zakrewska JM, Referral letters-how to improve them. *Br Dent J* 78(5):180-2, 1995.
6. Brown RS, Bottomley WK, The well-written consultation letter: opening up the way to physicians' referrals. *Tex Dent J* 109:17-9, 1992.
7. Tejani A, Epstein JB, et al, A survey assessing the impact of hospital-based general practice residency program on dentists and dental practice. *Spec Care Dentist* 22(1):16-22, 2002.
8. Lifshay FM, Evaluation of and treatment considerations for the dental patient with cardiac disease. *NY State Dent J* 70(8):16-9, 2004.
9. Ordell S, Stenstrom B, Aspects of the quality of information contained in radiological referrals. *Swed Dent J* 26(3):135-40, 2002.
10. Greenberg MS, Glick M, (eds.) *Burket's Oral Medicine, Diagnosis and Treatment*, 10th edition, BC Decker: Hamilton, Ontario, 2003.
11. Little JW, Falace DF, et al, *Dental Management of the Medically Compromised Patient*, 6th edition, Mosby: St. Louis, 2002.
12. Sonis ST, Fazio RC, Fang L, (eds.) *Principles and Practice of Oral Medicine*, 2nd edition, WB Saunders Co: Phila., 1995.
13. Bokenkamp A, Bohnhorst B, et al, Nifedipine aggravates cyclosporine A-induced gingival hyperplasia. *Pediatr Nephrol* 8(2):181-5, 1994.
14. Rossmann JA, Ingles E, Brown RS, Multi-modal treatment of drug-induced gingival hyperplasia in a kidney transplant patient. *Compendium* 15(10):1266-70, 72-4, 1994.
15. Brown RS, Krakow AM, et al, Scalded mouth syndrome caused by angiotensin converting enzyme inhibitors: two case reports. *Oral Surg Oral Med Oral Pathol Oral Radiol Endod* 83(6):665-7, 1997.
16. Merin RL, Hypertension guidelines. *J Am Dent Assoc* 2004;135:1220-2.
17. Herman WW, Konzelman Jr JL, Prisant LM, New national guidelines on hypertension: A summary for dentistry. *J Am Dent Assoc* 135(5):576-84, 2004.
18. Evans IL, Savers MS, et al, Can warfarin be continued during dental extraction? Results of a randomized controlled trial. *Br J Oral Maxillofac Surg* 40(3):248-52, 2002.
19. Scully C, Wolff A, Oral Surgery in patient on anticoagulant therapy. *Oral Surg Oral Med Oral Pathol Oral Radiol Endod* 94(1):57-64, 2002.
20. Blinder D, Manor Y, et al, Dental extractions in patients maintained on oral anticoagulant therapy: Comparison of INR value with occurrence of postoperative bleeding. *J Oral Maxillofac Surg* (6):518-21, 2001.

21. Meehan S, Schmidt MC, Mitchell PF, The international normalized ratio as a measure of anticoagulation: Significance for management of dental outpatient. *Spec Care Dentist* 17(3):94-6, 1997.
22. Beirne OR, Koehler JR, Surgical management of patients on warfarin sodium. *J Oral Maxillofac Surg* 54(9):115-8, 1996.
23. Patten LL, Glick M, (eds.) Clinicians Guide to HIV Infected Patients. BC Decker: Lewiston, NY, 2002.
24. Scully C, Cawson RA, Medical Problems in Dentistry Internal Medicine for Dentistry, 5th edition. Elsevier: Edinburgh, 2005.
25. Prabhu SR, Textbook of Oral Medicine. Oxford Univ Press: Oxford, 2004.
26. Rose LF, Kaye D, 2nd edition. Internal Medicine for Dentistry, Mosby: St Louis, 1990.
27. Tyler MT, Lozada-Nur F, (eds.) The Clinician's Guide to the Treatment of the Medically Complex Dental Patient. BC Decker: Lewiston, NY, 2001.
28. Pallasch TJ, Premedication and informed consent. *J Am Dent Assoc* 135(4):146,148, 2004.
29. Shrout MK, Scarborough F, Powell BJ, Dental care and the prosthetic joint patient: A survey of orthopedic surgeons and general dentists. *J Am Dent Assoc* 125(4):429-36, 1994.
30. Slots J, Pallasch TJ, Dentists' role in halting antimicrobial resistance. *J Dent Res* 75(6):1338-41, 1996.
31. Pallasch TJ, Antibiotic prophylaxis: Problems in paradise. *Dent Clin North Am* 47(4):665-79, 2003.
32. Siegel MA, To premedicate or not to premedicate. *J Am Dent Assoc* 135(2):144, 146, 2004.
33. Hilgers KK, Douglass J, Mathieu GP, Adolescent pregnancy: A review of dental treatment guidelines. *Pediatr Dent* 25(5):459-67, 2003.
34. Haas DA, Pynn BR, Sands TD, Drug use for the pregnant or lactating patient. *Gen Dent* 48(1):54-60, 2000.
35. Moore PA, Selecting drugs for the pregnant dental patient. *J Am Dent Assoc* 129(9):1281-6, 1998.

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