## **DENTAL HYGIENE TODAY**



# The Medical History Update: Compromised or Complete?

### **Obtaining—and Maintaining—Patient Health History Information**



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he medical history and its subsequent ongoing medical updates are critical to ensuring safe and effective dental hygiene treatment planning and delivery of services. Although the initial medical history taken at the new patient examination is comprehensive, the practice of updating the medical history at ongoing appointments is often rushed in many offices, falling short of the mark. What we don't know may be placing both our patients and ourselves at increased risk.

First and foremost, dental hygienists need to be recognized as oral health experts with a primary focus on health promotion through the provision of preventive and therapeutic services. The integration of oral healthcare into the primary healthcare model provides accessible, evidence-based preventive healthcare with the intent to improve

the overall health of the public. The medical history update facilitates increasing awareness of our contributory role in the health-care community to overall health and wellness. The assessment phase of the dental hygiene process of care demands that we have full baseline data, complemented by ongoing updates, in order to ensure that we are providing the safest and best possible care in order to maximize treatment outcomes.

There are a number of health issues that need to be fully uncovered and explored prior to commencing any treatment. The following is a guideline as to which conditions may pose a concern and possibly be a requirement for further communication with the appropriate healthcare provider:<sup>1</sup>

- Any cardiac condition for which antibiotic prophylaxis is recommended in the guidelines set by American Heart Association
- Any other condition for which antibiotic prophylaxis is recommended or required
  - High risk of infective endocarditis
  - Any unstable medical or oral condition which may affect

the appropriateness or safety of scaling teeth and root planing, including curettage surrounding tissue

- Active chemotherapy or radiation therapy
- Significant immunosuppression caused by medication or treatment modalities
  - Any blood disorders
  - Active tuberculosis
- Drug or alcohol dependency of any type or extent that may affect the appropriateness or safety of scaling and root planing (SRP) including curetting surrounding tissue
- A medical or oral health condition with which the dental hygienist is unfamiliar or could affect the appropriateness, efficacy, or safety of the procedure
- A drug (or combination of drugs) with which the dental hygienist is unfamiliar; or, one that could affect the appropriateness, efficacy, or safety of the procedure.

#### THE NEW PATIENT MEDICAL HISTORY

The initial comprehensive and standard medical history form includes pertinent questions related to all body systems: head, eyes, ears, nose and throat, respiratory, cardiovascular, gastrointestinal, genitourinary, muscles, bones and joints, central nervous system, endocrine, and hematologic.

Blood pressure and vital signs should also be taken at the new patient initial assessment. Hypertension is one of the leading health problems and is often asymptomatic, thus earning the title of the "silent killer." This condition is manifested by blood pressure being persistently above specified limits and often precedes some of the most influential diseases in North America, including stroke, heart attack, kidney failure, and dementia. This is a very common "hidden" condition with 31.9% of noninstitutionalized adults ages 20 and older with hypertension.<sup>2</sup> Blood pressure should always be taken on patients whose medical history indicates a need. Furthermore, if a patient's history is clear, it is wise to always have a baseline assessment and both prudent and proactive to intermittently monitor as symptoms are often nonexistent.

#### THE MEDICAL HISTORY UPDATE PROCESS

The luxury of an excess amount of time in our dental hygiene appointment is generally not the norm. The appointment is full

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with making certain that all aspects of the dental hygiene process of care are reflected both in our services and our documentation. The medical history often becomes rushed with the typical question being asked at a recare or supportive therapy appointment, "Are there any changes in your health since the last visit?" We do not always provide the date of the last visit as a reference point for our patients. How

may we ever expect to educate our patients about the oral-systemic health connection when we place such little importance on updating their medical history?

At the very least, we should be asking the following questions at each and every update:

- "Is there any change in your health history since your last visit?" (Provide the date and specifics of last visit to the patient.)
- "Are you taking any medication?" (Include any new medications as well as any change to dosage of previously documented medication.)
- "Are you allergic to any medications, foods, metals, or latex?"
- For female patients: "Are you pregnant?"
- "Are you seeing a physician for any specific health condition at the present time?"
- "Have you had any heart problems, hip, knee, or joint replacements since your last visit?"
- "Have you been hospitalized for any health reason since your last visit?"

## CLINICAL RESOURCE FOR DENTAL HYGIENE PRACTICE

A clinical resource was developed to enable dental hygienists to acquire additional information within a limited space of time (Figure 1). The

within a limited space of time (Figure 1). The new protocol may be introduced as follows:

"Recent research indicates a strong relationship between the mouth and the body. Since we now know how closely they are related, we are going to be asking you some questions about your family history and your overall health that we may not have asked you about before. This additional information will assist us in providing the best possible care to maintain your oral health and overall wellness."

The patient would be provided with the easy check-box style form upon arrival to the dental practice. Upon completion, the dental hygienist would review and document only pertinent information that need be reflected in the patient record. This provides an ease and ability to tailor the patient education, further validating the importance of preventive and therapeutic measures as they relate to oral health and overall wellness.

The following questions are included on the medical history update form:

Patient Name:	Date:
we are going to be asking you some questions al	etween the mouth and the body. Since we now know how closely they are related bout your family history and your overall health that we may not have asked you sist us in providing the best possible care to maintain your oral health and overal
Any changes in your health since your last de	ntal visit? Yes No If yes, please list:
What medications are you taking?	
Any changes in medication dosage or medicat	tions?
What over the counter or 'herbal/natural' su	oplements are you taking on a regular basis? Please list:
Are you taking any <b>b</b> isphosphonates in the pa	ist or presently?
Do you have a persistent sore throat, hoarser  Yes No If yes, please provide details:	ness, ear ache or feeling of something being caught in your throat?
Have you had any <b>sur</b> gery or been hospitalize If yes, please expl <b>ain</b> :	
Are you being treated for any medical proble if yes, please explain:	m presently? Yes No
Have you ever taken antibiotics prior to havir If yes, please explain:	g your teeth cleaned or before dental work?
Any allergies to drugs, food, metal or latex? If yes, please list:	☐ Yes ☐ No
History of illness o <b>r di</b> sease in family? If yes, please expl <b>ain</b> :	
Have you been diagnosed with diabetes?   Diet-controlled  Medication controlle	
Have you had any <b>he</b> art problems or a knee, I If yes, provide de <b>tails:</b>	nip or prosthetic joint replacement?
Female clients; Are you pregnant?	
How would you rate your level of stress prese	would you rate your general health at this time?  Intly?Low Moderate High  or dosely related is the health of your mouth to your overall health in you
1 RDH Connection Inc. Dental Hygi	ene Practice Forms

Figure 1. Medical History Update Form.

## "Any Changes in Your Health Since Your Last Dental Visit?"

This information may serve to create an alteration in the patient's dental hygiene care plan.

## "What Medications Are You Presently Taking?"

"Any Changes in Medication Dosage or Medications?"

"What Over-the-Counter or Herbal/Natural

## **Supplements Are You Taking on a Regular Basis?**"

The use of herbal supplements in North America is steadily growing raising concerns about drug interactions, contraindications to initiating dental hygiene services, and patient care. Many patients are self-prescribing these. Consider the patient who is taking a glucosamine chondroitin supplement on a daily basis—this would provide an excellent opportunity to speak about the consequences of a chronic inflammatory condition such as peri-

odontal disease and its burden on systemic health. Further education could be provided as to the release of matrix metalloproteinase-8 (collagenase) and its involvement in disease processes, such as arthritis. The most commonly documented interactions include prolonged bleeding and the potential for drug-herb interactions. Supplements often referred to as the 4 Gs—garlic, gingko, ginseng, and ginger—should all be discontinued 7 days prior to surgical intervention as they may affect both platelet aggregation and blood glucose levels.

#### "Are You Taking Any Bisphosphonates in the Past or at Present?"

Bisphosphonates are regulating drugs which inhibit bone resorption and are primarily used in the treatment of osteoporosis, Paget's disease, bony metastatic lesions, and hypercalcemia of malignancy.

BRONJ is bisphosphonate-related osteonecrosis of the jaw. The overwhelming majority of BRONJ diagnoses, however, were associated with intravenous administration of bisphosphonates (94%). Only the remaining 6% of cases arose in patients taking bisphosphonates orally.<sup>3</sup>

Although the total prescriptions for oral bisphosphonates exceeded 30

million in 2006 (in the United States), less than 10% of bisphosphonate osteonecrosis were associated with patients taking oral bisphosphonate drugs.<sup>4</sup> Studies have estimated that BRONJ occurs in roughly 20% of patients taking intravenous zoledronic acid for cancer therapy and in between zero percent and 0.04% of patients taking orally administered bisphosphonates.<sup>5</sup>

"Do You Have a Persistent Sore Throat, Hoarseness, Ear Ache, or Feeling of

#### Something Being Caught in Your Throat?"

A study released by the National Cancer Institute confirms that Human papillomavirus (HPV) oropharyngeal cancers have risen an astounding 225% from 1998 to 2004.<sup>6</sup>

If this trend continues, oral cancer will become the nation's leading HPV-related cancer within the present decade, surpassing cervical cancer. Both the medical and dental communities have been alerted to this emerging pandemic.<sup>7,8</sup> Subtle symptoms may include, however are not limited to the following: a continuous sore throat, feeling that something is caught in the throat, unilateral ear pain, tongue that tracks to one side when protruded, continual lymph node enlargement, and hoarseness. There is an urgent need for change in our oral cancer screening protocols.

## "Have You Had Any Surgery or Been Hospitalized Since Your Last Visit?"

"Are You Being Treated for Any Medical Problem Presently?"

#### "Have You Ever Taken Antibiotics Prior to Having Your Teeth Cleaned or Other Dental Work?"

SRP instrumentation has mechanical limitations and can leave bacteria behind in the periodontium. A number of studies have been initiated to evaluate the frequency of periodontopathic and other subgingival anaerobic and facultative bacteria remaining in the bloodstream following SRP.

In a study conducted by Lafaurie et al<sup>9</sup> published in the *Journal of Clinical Periodontology*, 80.9% presented positive cultures after SRP with 19% presenting positive cultures 30 minutes after the procedure. Among the most frequently identified were *Porphyromonas gingivalis*. The study concluded that SRP induced bacteremia is associated with anaerobic bacteria in patients with periodontal disease.<sup>9</sup>

## "Any Allergies to Drugs, Food, Metal, or Latex?"

An allergy to latex may be to the latex proteins or the powders used with latex gloves. There are approximately 250 different proteins in gloves. Allergy testing may be indicated to determine the specific cause. When client has latex allergy avoid all latex items, ie, rubber cub, gloves, local anesthetic agents with a latex diaphragm, and latex rubber dams. Some patients possess a latex-fruit syndrome which involves antibodies that cross-react with latex proteins. Some of the foods noted are avocado, banana, and kiwi fruit.

"History of Illness or Disease in Family?"

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#### "Have You Been Diagnosed With Diabetes (Type I, Type II, Prediabetes, Diet-Controlled, Medication-Controlled, or Under Control)?"

The number of new cases of diabetes changed little from 1980 through 1990 but began increasing in 1992. From 1990 through 2010, the annual number of new cases of diagnosed diabetes almost tripled. The rise in the incidence of type II diabetes cases is associated with increases in obesity, decreases in leisure-time physical activity, and the aging of the US population.<sup>10</sup>

Although about 33% of US adults have prediabetes, II with awareness of this risk condition being low, less than 10% of US adults with prediabetes report that they have ever been told that they have prediabetes. I2

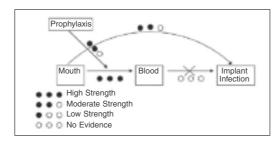
## "Have You Had Any Heart Problems or Do You Have a Pacemaker?"

Most pacemakers today are designed with an electronic filter or shield, and most dental procedures are unlikely to interfere with a shielded pacemaker. Persons fitted with cardiac pacemakers, defibrillators, and other active implanted medical devices have been cautioned that some types of electronic equipment might interfere with the operation of the device. Interference has been reported; however, single beat inhibition or temporary rate increase has not been considered to be clinically significant. Although no instance of interference has ever been reported to DENTSPLY Professional, their recommendation (found in the manufacturer's instructions for for the Cavitron SPS Ultrasonic Scaler with Steri-Mate Handpieces) is that the handpiece and cables be kept 6 to 9 inches away from any device and their leads during use.

## "Have You Had a Knee, Hip, or Prosthetic Joint Replacement?"

A recent guideline published by the American Association of Orthopaedic Surgeons following a comprehensive review of the literation shows that dental procedures are not risk factors for subsequent implant infection, and furthermore that antibiotic prophylaxis does not reduce the risk (Figure 2).<sup>13</sup>

Based on the best current evidence and a systematic review of published studies, 3 recommendations have been created to guide clinical practice in the prevention of orthopedic implant infections in patients undergoing dental procedures. The first recommendation is graded as limited; this recommendation proposes that the practitioner consider changing the long-standing practice of routinely prescribing prophylactic antibiotics for patients with orthopedic implants who



**Figure 2.** Overview of the quality of evidence between dental procedures and orthopaedic implant infection.

undergo dental procedures. The second, graded as inconclusive, addresses the use of oral topical antimicrobials in the prevention of prosthetic joint infections. The third recommendation, a consensus statement, supports the maintenance of good oral hygiene.<sup>14</sup>

#### "Have You Had a Bone Mineral Density Test?"

Female clients: "Are You Pregnant?"

"On a Scale of One to 10 (10 Being Highest), How Would You Rate Your General Health at This Time?"

## "How Would You Rate Your Level of Stress Presently?"

Adrenal fatigue is a collection of signs and symptoms known as a "syndrome" that results when the adrenal glands function below the necessary level. This syndrome is most commonly associated with intense or prolonged stress. It may also arise following acute or chronic infections such as influenza, bronchitis, or pneumonia. An estimated 80% of people experience adrenal fatigue and the physical symptoms of stress at some point in their lives, yet it is frequently overlooked and misunderstood by the medical community.<sup>15</sup>

# "On a Scale of One to 10 (10 Being Highest), How Closely Related is the Health of Your Mouth to Your Overall Health, in Your Opinion?"

This last question provides the ability to evaluate the patient's dental IQ as well as his or her perception of the relevance of the health of one's mouth with systemic health.

#### **CLOSING COMMENTS**

Our complex body of knowledge and skills is to be used in the service of others to whom we are accountable. In a fast-paced environment, we must continually find ways to gather the information we require to enhance our treatment outcomes and provide valuable patient education. A comprehensive medical history update is the first step to fulfilling both of these professional obligations. Always act in the safety of your patient, you and your team, and your practice. And always remember, first *do no harm*.

The Medical History Update Form is available through RDH Connection. Please e-mail info@rdhconnection.com to receive a copy.◆

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