

Talking with Patients

High Blood Pressure and Oral Health

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WHAT IS IT?

The pressure caused by the blood flowing in our arteries is called *blood pressure*. Blood pressure is measured both when the heart beats (*systolic* blood pressure) and when the heart is at rest (*diastolic* blood pressure), and hence referred to as two numbers. Blood pressure is measured in millimeters of mercury, or mmHg, indicating the amount of pressure required to push mercury up a graduated column in a blood pressure measuring device. For a healthy adult, the blood pressure should not be higher than 120/80 mmHg. According to the American Heart Association (<http://www.americanheart.org>), blood pressure that stays between 120–139/80–89 is considered prehypertension, while a blood pressure of 140/90 mmHg or higher is considered high blood pressure, or hypertension.

It is estimated that approximately 60 million people in the United States have or are being treated for hypertension,¹ and yet one-third of those with hypertension are not aware of it. That is why hypertension is often referred to as the “silent killer,” as it can be fatal when not diagnosed and properly managed.

Risk factors for high blood pressure include obesity, excessive alcohol use, excessive use of table salt, lack of exercise, and stress. Although everyone can be affected by the condition, high blood pressure runs in families, and is more prevalent in African-Americans than any other ethnic group. Also, the risk increases with age and is greater in men than in women.

HOW DOES IT AFFECT YOUR ORAL HEALTH?

The single most important contribution of dental professionals to the prevention of high blood pressure and its consequences is the constant monitoring of patients' blood pressure to identify individuals who might be hypertensive or prehypertensive. An accurate hypertension diagnosis can only be made by a physician, but it is helpful to check the blood pressure in the dental office in every patient visit for all patients.

No elective dental treatment should be rendered to patients with severe, persistent, or uncontrolled high blood pressure. Untreated prehypertensive and hypertensive patients should be encouraged to discuss the elevated high blood pressure readings with their physician. Hyper-

tensive patients who are undergoing medical treatment can receive dental treatment. Hypertensive patients who are prescribed antihypertensive drugs by their physician should take their blood pressure pills every day, including the day of the dental appointment, not just when they feel sick or have a headache.

Dental appointments may be associated with stress and anxiety, and this can further elevate the blood pressure of hypertensive patients. Care should be exercised during dental appointments to avoid two serious consequences of uncontrolled high blood pressure: cerebrovascular accidents (stroke) or myocardial infarction (heart attack). The very anxious dental patient may benefit from the use of antianxiety medications prior to stressful dental appointments. These can be prescribed by the dentist or physician. Some dentists may also use nitrous oxide/oxygen (“laughing gas”) to relieve stress from dental appointments.

Hypertensive patients should avoid high doses of local anesthetic with vasoconstrictors, such as epinephrine. Certain antihypertensive drugs can have side effects that affect oral health, such as dry mouth (which

increases the risk for cavities), altered taste, gum overgrowth, and oral lesions. If you have been diagnosed with and/or are being treated for hypertension, you should notify your dental care professionals about this medical condition, so that they can properly manage your dental care.

CONCLUSIONS

High blood pressure, or hypertension, is the abnormal elevation of the

pressure inside of the body's arteries. Hypertension can cause serious organ damage or be fatal when not properly diagnosed and treated. Because the condition has no obvious symptoms, many affected people might not be aware of it. The only way of knowing whether or not you have hypertension is to have your blood pressure monitored regularly, and to consult with your physician if your blood pressure is often higher than normal.

DISCLOSURE

The author does not have any financial interest in the manufacturers whose materials are discussed in this article.

REFERENCE

1. Little JW, Fallace DA, Miller CS, Rhodus NL. Dental management of the medically compromised patient. 6th ed. St. Louis (MO): Mosby; 2002, pp. 64–78.

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