SJIF Impact Factor: 5.464

WORLD JOURNAL OF ADVANCE HEALTHCARE RESEARCH

ISSN: 2457-0400
Volume: 5.
Issue: 3.
Page N. 330-332
Year: 2021

Review Article www.wjahr.com

FOR HEALTH SAKE-PATIENT ADVOCAY FROM DENTIST TO PHYSICIAN

Suril Chandresh Dave*

A/9/61 Goyal Intercity A Bloc Near SAL Hospital Drive In Road, Ahmedabad, Gujarat, India.

Received date: 23 March 2021 **Revised date:** 13 April 2021 **Accepted date:** 03 May 2021

***Corresponding author: Dr. Suril Chandresh Dave**

A/9/61 Goyal Intercity A Bloc Near SAL Hospital Drive In Road, Ahmedabad, Gujarat, India.

INTRODUCTION

An advocate is "one who speaks, pleads, or argues in favor of. " Every day, 12,500 Americans turn 50 years old.[1] Two in every 3 will contract heart disease;[2] one in 4 will become diabetic; and 6 of 10 will manage more than one disease which doubles needed doctor visits, worsening our present physician shortfall.[3] At least 50% have periodontitis,[4] a bacterial infection that can cause chronic inflammation.5 Patients are twice as likely to become diabetic if they have periodontitis[6] and at least double their chance for cardiovascular disease.[5] Because 70% of Americans will see their dentist this year,[7,8] dentists have the opportunity, as health advocates, to co-manage care with a patient's physician. Here's how it can be done.

MINI CASE REPORTS

A Case As Treated in the Office of Walter Below, DDS

A 61-year-old male patient of record in the dental practice of Dr. Walter Below (Westlake, Ohio) was found to have nine 4.0-mm periodontal pockets with 10 bleeding sites. The standard of care for adiagnosis of Type II periodontitis would have been treating this patient with scaling and root planing (SRP), with 3-month periodontal maintenance follow-up appointments. However, Dr. Below looked deeper and discovered a way to reduce health risks before serious symptoms could erupt.

The patient's updated health history revealed mitral valve prolapse, high blood pressure, and that statins with daily baby aspirin had been previously prescribed by the patient's physician. The patient did not have any further appointments scheduled with his physician.

His family medical and dental histories revealed that his mother had suffered from stroke, diabetes, cancer, and hypertension, then died from heart disease at age 70. His father had a history of heart disease, diabetes, and hypertension before dying from a heart attack at age 68. His father had periodontal disease and both parents had tooth loss.

The patient tested positive for pathogenic red bacteria: Porphyromonas gingivalis (PG), Tannerella forsythia (TF), and Treponema genticola (TD). A blood sample was sent for analysis and later showed C-reactive protein (CRP) was at 6.3mg/L, indicating 6 times more inflammation than normal. The glycated hemoglobin (A1c) was measured at 6.3% (elevated). The patient's physician was directly contacted and requested that the patient appoint with him before leaving the dentist's office that day.

Both the dentist and physician then co-managed this patient's care for 6 months. The physician continues to monitor medications and heart function and has recommended a diabetic workup. Periodontal therapy included laser bacterial decontamination before deep SRP to remove plaque and calculus without bacteremia. Laser assisted periodontal therapy (LAPT) was used to remove necrotic gum tissue to promote healing and kill pathogenic bacteria. To keep the bacteria in remission postoperatively, home care was replaced with Disease Control Kits (CloSYS rinse and toothpaste [Rowpar Pharmaceuticals]; Oralbiotic Research's Hydrabrush and Oral Care Technologies' Hydrofloss; and periodontal formula by Avalon Laboratories and Osteogenesis from Telos Labs).

A Case As Treated in the Office of Bradley Parker, DDS

A 50-year-old female patient of record in the dental practice of Dr. Bradley Parker(San Bruno, Calif) was found to have 14 probe scores higher than 3.4 mm with 17 bleeding sites. The updated patient health history

revealed that the patient had a heart attack 5 years prior at age 45. She was diagnosed as prediabetic and prescribed Metformin and had high blood pressure with no prescribed medication. She did not have a next-scheduled appointment with her physician.

Her family medical and dental histories revealed that her father had a heart attack with bypass surgery and died from heart disease in his 60s. Her mother had a history of diabetes and died in her 70s. Both parents were hypertensive. Her mother also had gum disease and tooth loss, resulting in dentures.

The patient tested positive for pathogenic red bacteria (PG, TF, TD). A CRP score of 3.7 mg/L is 300% higher inflammation than normal. The A1c of 7% showed elevated glycated hemoglobin at diabetic level despite current medication.

Initially, the physician was not available to discuss this case before the patient's scheduled treatment consultation appointment, and, in addition, the patient had also initially declined the suggested periodontal therapy.

However, after successfully contacting the physician and after being presented a co-management plan by her dentist andphysician, she began 6-month perio therapy including SRP, LAPT, and the Disease Control Kit as described above. She also returned to her physician for a diabetic workup and for medication management.

KEY ADVOCACY COMPONENTS

Updated health history—Often skipped, this step asks the patient's age at occurrence and if a future appointment to manage medications has been scheduled with the physician.

Detailed family health history—If the parents had inflammatory diseases, the patient could be going down the same path.

Blood pressure—Hypertension is the second highest reason patients visit their physician,[9] and recent research supports inflammation as a cause.[10] Imagine the impact dentistry can have on health if periodontal therapy can eliminate a key cause of high blood pressure!

Full periodontal probing—Six or more periodontal sites measuring 4.0 mm warrant an enzyme test for red bacteria.

Enzyme test for red bacteria (BANA test [Oratec])—This low-cost test takes 5 minutes to scan the most dangerous pathogenic "red" complex bacteria: PG, TF, and TD.

Blood sample sent for A1c and CRP testing —In-office finger stick test is sent to outside lab for processing.

Set separate review of findings/treatment plan appointment—The combination of personal and family health histories, plus blood pressure, enzyme pathogen, and A1c and CRP testing bridges the connection between mouth and body and requires a focused appointment to review and treatment plan.

Periodontal therapy with SRP using laser decontamination, laser assisted periodontal therapy and Disease Control Kits (as described previously)—The 100 practices I work with confirm this combination has the best outcomes for removing plaque, calculus, necrotic tissue, and controlling bacteria long term.

Co-management with physician—Even if the A1c or CRP test is normal, you may choose health advocacy if the patient has more than 6 probe sites greater than 3.4 mm, tests positive for red bacteria, and has any combination of the following: high blood pressure, medication for any inflammatory disease, or at-risk immediate family health history. Physician consults are best performed before the patient returns for the "review of findings" appointment. It gives the call urgency for the physician and power to the importance of case acceptance for the patient.

THE AUTHOR'S VIEW

Assuming that one hygienist sees about 1,200 patients yearly: Applying statistics, the hygienist can help prevent 7 heart attacks, alert 34 patients with high A1c, reduce A1c in 22 patients, and even save 2 lives of diabetics who put periodontal disease in remission. Multiply this by 174,100 US hygienists for a potential health impact of 7.4 million lives, before even considering other inflammatory diseases! After reviewing hundreds of practices, I find that only about 10% of patients with tissue damage measuring at least 4.0 mm (pockets) get treated for periodontal disease. Instead, the patients are "watched" as inflammatory causing bacteria increases their risk for heart attack, stroke, diabetes, cancer, even pre-term birth, the patients all the while believing pink toothbrush bristles are nothing to worry about. These are not isolated cases from 2 special practices. No matter your insurance partners, if you do not get more than 50% of physicians agreeing to co-manage your patients, it is probably because you simply need to learn how. How many patients can you help avoid serious systemic diseases caused by inflammation? You won't know if you don't look.

REFERENCES

1. Immersion Active. 50+ facts & fiction. immersionactive.com/resources/ 50-plus-facts-and-fiction. Accessed February 1, 2014.
2. Go AS, Mozaffarian D, Roger VL, et al. Heart disease and stroke statistics—2013 update: a report from the American Heart Association. Circulation, 2013; 127: e6-e245.
3. Wolff JL, Starfield B, Anderson G. Prevalence, expenditures, and complications of multiple chronic conditions in the elderly. Arch Intern Med, 2002; 162: 2269-2276.
4. CDC: Half of American adults have periodontal disease. perio.org/consumer/ cdc-study.htm. Accessed February 1, 2014.
5. Genco R, Offenbacher S, Beck J. Periodontal disease and cardiovascular disease: epidemiology and possible mechanisms. J Am Dent Assoc, 2002; 133(suppl): 14S-22S.
6. American Diabetes Association. Periodontitis associated with development of type 2 diabetes and its complications— oral disease treatment can help control high glycemic levels [press release]. June 6, 2008. diabetes.org/newsroom/ press-releases/2008/ periodontitis-associated-with.html. Accessed February 1, 2014.
7. Centers for Disease Control and Prevention. Table 90. Dental visits in the past year, by selected characteristics: United States, selected years 1997-2011. cdc.gov/nchs/hus/ contents2012.htm#090. Accessed February 1, 2014.
8. Centers for Disease Control and Prevention. Dental visits in the past year— 1997, 2004, and 2005. cdc.gov/features/dsdentalvisits. Accessed February 1, 2014.
9. Centers for Disease Control and Prevention. National Ambulatory Medical Care Survey: 2010 Summary Tables (1, 9, 13). cdc.gov/nchs/data/ahcd/ namcs_summary/ 2010_namcs_web_tables.pdf. Accessed February 1, 2014.
10. Engström G, Lind P, Hedblad B, et al. Long-term effects of inflammation-sensitive plasma proteins and systolic blood pressure on incidence of stroke. Stroke, 2002; 33: 2744-2749.