

What Dentists Should Know About Sickle Cell Disease

Bill P. Devine, DMD

INTRODUCTION

The medical history should be a communication between the patient and the dentist. A good history will reveal a patient's medical problems, concerns, ideas, and expectations. Understanding medical conditions on a patient's medical history is of utmost importance in providing the patient with the best possible individualized standard of care. Taking the time to get to know a patient, and what's going on in their lives, can certainly help us to create a great patient/provider relationship. You cannot stress the importance of this relationship too much. It is vital, especially to those who have chronic diseases. This paper gives an overview of sickle cell disease and some dental concerns the disease presents to the dentist.

Sickle cell disease is an inherited blood disorder that affects red blood cells. Normal red blood cells contain hemoglobin A. People with sickle cell disease have red blood cells containing mostly hemoglobin S, an abnormal type of hemoglobin. Sickle cell anemia (SCA) is the most common form of sickle cell disease (SCD). The disease results in a person not having enough healthy red blood cells to



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The author has no declared potential conflicts of financial interest, relationships and/or affiliations relevant to the subject matter or materials discussed in the manuscript.

This manuscript has been peer reviewed.

ABSTRACT

The medical history should be a communication between the patient and the dentist. A good history will reveal a patient's medical problems, concerns, ideas, and expectations. Understanding medical conditions on a patient's medical history is of utmost importance in providing the patient with the best possible standard of care. Sickle cell disease is an inherited blood disorder that affects red blood cells. Normal red blood cells contain hemoglobin A. People with sickle cell disease have red blood cells containing mostly hemoglobin S, an abnormal type of hemoglobin. These mutated sickle cells do not have the smooth motion needed for oxygenation and deoxygenation. One of the main concerns in sickle cell disease is the reversible extreme pain episodes called "sickle cell crisis." Pain episodes occur when sickle cells clog small vessels, depriving the body of adequate blood and oxygen. Treatment of the sickle cell patient should be a team approach between dentist, patient, and physician. Dental treatments should be conservative and stress free for the patient. Prevention of dental disease and infections are of the utmost importance to the sickle cell patient. If your patient has sickle cell disease, know about it and talk to your patient about the disease. Maintaining excellent oral health to decrease the possibility of oral infections will ensure the best care for these patients.

KEY WORDS: communication, sickle cell disease (SCD), sickle cell anemia (SCA), blood inherited disorder, sickle cell trait, crisis, African Americans, deoxygenation, hemoglobin, supporting dentist, prophylactic antibiotics, and infection.

Tex Dent J 2013;130(11): 1123-1127.

Career Transition and Dental School Faculty Development Program

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THE PROBLEM — LOSS OF DENTAL FACULTY, TRAINING NEEDED

Academic dentistry, as a career track, is not attracting sufficient numbers of new recruits to maintain a corps of skilled dental educators. Since 2000, more than 10% of dental school faculty members have left education for private dental practice or retirement. In 2005, vacant faculty positions in dental schools were reported as 417, and in 2007, dental schools reported an average of 7 vacant faculty positions per institution (1).



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Disclaimers: None. Federal grant support; U.S. Health Resources and Services Administration; D84HP19953. This article has been peer reviewed.

ABSTRACT

Academic dentistry, as a career track, is not attracting sufficient numbers of new recruits to maintain a corps of skilled dental educators. The Faculty Development Program (FDP) at the University of Texas Health Science Center at San Antonio Dental School received federal funds to institute a 7-component program to enhance faculty recruitment and retention and provide training in skills associated with success in academics including: (1) a Teaching Excellence and Academic Skills (TExAS) Fellowship, (2) training in research methodology, evidence-based practice research, and information management, (3) an annual dental hygiene faculty development workshop for dental hygiene faculty, (4) a Teaching Honors Program and Academic Dental Careers Fellowship to cultivate students' interest in educational careers, (5) an Interprofessional Primary Care Rotation, (6) advanced education support toward a master's degree in public health, and (7) a key focus of the entire FDP, an annual Career Transition Workshop to facilitate movement from the practice arena to the educational arm of the profession.

The Career Transition Workshop is a capstone for the FDP; its goal is to build a bridge from practice to academic environment. It will provide guidance for private practice, public health, and military dentists and hygienists considering a career transition into academic dentistry. Topics will be addressed including: academic culture, preparation for the academic environment, academic responsibilities, terms of employment, compensation and benefits, career planning, and job search / interviewing. Instructors for the workshop will include dental school faculty who have transitioned from the practice, military, and public health sectors into dental education.

Objectives of the Overall Faculty Development Program:

- Provide training in teaching and research skills, career planning, and leadership in order to address faculty shortages in dental schools and under-representation of minority faculty.
- Provide resident and faculty training in cultural and linguistic competency.
- Develop and conduct a collaborative interprofessional education project with a Pediatric Medicine department, a nursing school, and other health professions' education programs.
- Provide faculty and residents with financial support to pursue a master's degree in public health; and
- Provide support and assistance for dental practitioners desiring to explore a transition into the educational environment.

KEY WORDS: academic training, career choices, career transition, dental faculty, mentorship

Tex Dent J 2013;130(11): 1115-1122.