GUEST EDITORIAL

The changing world of medically complex dental patients: Electronic health records and more

A decade or two ago, we did not foresee the dramatic turn of the complexity of the health history that dental patients present. Gone are the days of the mundane health questionnaires that largely focused on more common health issues—namely hypertension, diabetes, hypercholesteremia, and HIV. Many of these health conditions are now considered chronic and manageable. With appropriate drug and diet regimens, dental care for these patients can be routine and uneventful. However, in a world of blood transfusions, atrial fibrillation, cardiac catheterizations, cardiac and vascular graft procedures, organ transplants, renal dialysis, thrombocytopenia, bisphosphonate-induced osteonecrosis, and chemotherapy and/or radiotherapy, the complexity of medical history and systems evaluation is of a much higher magnitude. The list of medical complexities and comorbidities could and does go on. The way we screen and treat dental patients has changed forever. Dental practitioners have to recognize that as health care providers, we must be ever so vigilant since complex medical histories have become routine presentation among many patients. Practices have to continually adapt to the newly evolving medical history questionnaires—essentially, a history and physical—to be able to ask the right questions and capture all relevant medical information. Each complex medical problem needs special attention to minimize complications. One has to be astute to manage dental patients with serious medical conditions. In the past, these patients were often treated as inpatients in hospitals. With the introduction of more sophisticated medical treatment, most of the patients in this category have become ambulatory, and we find them as office-based patients now. To manage these patients, we have to start from scratch and record their histories, paying absolute attention to every detail of their previous medical encounters, both inpatient and outpatient; each and every drug they have ever taken (and their inherent ramifications and interactions); and every procedure they have undergone. Thankfully, technology has come to our rescue for some of these functions.

Electronic health records (EHR) are rapidly—and universally—replacing paper records. They quickly and accurately make data available. They can be easily accessed and/or transferred from another facility, and the entire EHR can be networked for quick access to the clinician chairside. A list of current medications for each patient can be easily accessed from within the EHR. Online and mobile applications such Epocrates or Lexi-comp are available to accurately check potential adverse drug reactions and interactions, so care can be taken with future prescriptions for patients with a history of polypharmacy. Contacting primary care physicians via email instead of fax has increased the accuracy of medical data. As more and more practices are incorporating EHR into their offices, privacy laws are becoming more stringent to maintain and protect patient data. Federal mandates such as the Health Insurance Portability and Accountability Act (HIPAA) in the United States are now necessary and integral components of medical and dental practices.

Patients on anticoagulants such as warfarin can be managed with appropriate dose adjustments (always being cognizant of risk:benefit concerns) and by obtaining a pretreatment prothrombin time and international normalized ratio (INR) from their primary care providers or even in the dental office itself. Of course, bridging with a low–molecular-weight heparinlike enoxaparin (Lovenox, Sanofi-aventis) might be indicated. Now, with many patients medicated with clopidogrel (Plavix, Bristol-Myers Squibb and Sanofi-aventis) and dabigatran (Pradaxa, Boehringer Ingelheim Pharmaceuticals), new dental/surgical

management protocols should be followed. A patient on renal dialysis can move to the dental chair with use of appropriate premedication, observing serum creatinine levels, and/or precautionary measures such as avoiding prilocaine or septocaine (due to low erythropoietin in these patients). We have to make sure that the antibiotic doxycycline is used carefully on dental patients with a history of liver disease, although it should never be used in patients with both kidney and liver disease. These selected medical issues represent just the tip of the medical iceberg. Again, thanks to technology, patients' primary care providers, nurse practitioners, or specialists are only an email or text away. The lessons to be learned from the changing world are that dental patients are no longer the patients we thought we were treating. Previous or current medical conditions, however complex, should not stop us from accepting them as our patients. As health care providers in the medical arena, we must be more knowledgeable, more aware of the general health conditions, and more vigilant, and we must expect these patients in our waiting rooms anytime. One of our dear colleagues and oral and maxillofacial surgeon Dr Maano Milles once said, "We have to remember that at the end of every tooth, there is a patient." If we do not accept a patient into our practice because of his or her complex medical condition, we have failed in our duties as healthcare providers.

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