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Practice Based Dental Research - Advancing and Improving Dental Practice

Gary L. Stafford
Marquette University, gary.stafford@marquette.edu

Dental examinations don’t just begin and end in the oral cavity. It is imperative that we, as dentists, extend our scope to the head and neck. After all, did we not study head and neck anatomy in dental school? There are many approaches to a recall examination, but one of the aspects that should not be neglected is the palpation of the thyroid gland.

A close-up of the thyroid palpation exam.

The thyroid is a butterfly shaped gland that sits at the base of the neck, superior to the clavicles, and anterior to the esophagus. The function of this gland are in metabolism, growth and development, and temperature. The palpation of this gland begins with the clinician positioned behind the patient and using the fingertips to roll through the gland while the patient swallows.

The act of swallowing allows the thyroid to move upward in an effort to isolate it from other oral structures. Once isolated, as your fingers roll through the gland, the clinician should look for asymmetry of the gland, enlargement or small lumps or nodules. With frequent palpation of the gland during recall exams, one learns to become more proficient and the fingertips become more discerning. Once an abnormality is detected, a formal medical consult is sent to the patient’s primary care physician. It is important to include the location, size, firmness/softness and to follow up with both blood work and an ultrasound of the gland. Blood work alone may not demonstrate any abnormalities, thus, the ultrasound is necessitated.

Concern for the patient is crucial. Once informing a patient of any lumps or nodules, their thoughts immediately race to cancer. Diffferential diagnoses can be given which span that of a goiter, benign nodules and cancer. The patient must be reassured that further testing is required.

Patients with thyroid abnormalities may be experiencing some of the symptoms or displaying the signs even without a diagnosis. Some signs and symptoms are changes in weight, muscle joint pain, menstrual or fertility issues, cholesterol issues, depression, anxiety and fatigue or lack of energy.

Practice-based dental research – advancing and improving dentistry

Gary L. Stafford, DMD
MUSOD Department of General Dental Sciences Chair gary.stafford@uw.edu

Published in 1919, an article by Dr. William J. Gies in the first issue of the Journal of Dental Research eloquently states the importance of research to the profession of dentistry.

"Research is the nonstop in the chronometer of science. It is the register of a profession’s achievement and standing. With it there is life, growth and effectiveness, and enthusiasm in those who devote themselves to the high calling of a profession. Without research, however, empiricism, stagnation, inefficiency, and discouragement impair the usefulness of those who earnestly seek to render their best professional service."

Sadly, research has not always been an undertaking that dental practitioners value and many view it as purely an academic activity conducted by others for the benefit of those who aren’t obliged to participate in the process. This scenario, where the practitioner is disengaged from any sort of scholarly activity, leads us one step closer to becoming a victim rather than a profession.

Historically, there has been a gap between those who perform research and those that practice clinical dentistry, with most of these individuals firmly entrenched in one camp or the other.

The objective of contemporary dental education is not to make every dentist a scientist, but rather to make every dentist a man or woman of science.

Only by becoming a person of science there any hope that the practitioner will be able to acquire and assimilate new knowledge and adapt to the changes in practice and in the professions that the future always requires.

The general trend in dental education has been to become more evidence-based and the Marquette University School of Dentistry has been at the forefront in this curricular evolution.

Our graduates are well-versed in not only the methodology of evidence-based practice, but more importantly, they recognize its value in practical clinical application.

Now is the time for our more experienced practitioners to join our new colleagues, dispel old beliefs and open themselves to an exciting way of helping advance the science of dentistry by challenging the notion that only "researchers" can and should do research.

Funded by the National Institute of Dental and Craniofacial Research, the National Dental Practice-Based Research Network or FBRN was implemented to bridge the gap between research and dental practice thereby helping dental professionals directly improve the efficiency and effectiveness of dental care.

Enrolling a large number of participating dentists in a variety of practice types and locations will result in more reliable outcome measures, while contributing to the development of knowledge that can improve oral health on a national scale.

There is no cost to join and enrolling in the network is as simple as completing the enrollment questionnaire at www.nationaldentalreb. org where you are allowed to choose one of three levels of participation:

- Informational – receive newsletters and correspondence
- Limited – receive newsletters, correspondence and participate in surveys
- Full – receive newsletters and correspondence, participate in surveys and engage in research.

Thanks to the strength of Wisconsin Dental Association membership, we have the potential to significantly influence the success of this important program.

Your enrollment, even at the informational level, will help us toward achieving this goal.

In the coming months, I hope to provide more insight into evidence-based practice and the National Dental FBRN at WDA continuing dental society meetings.

Until then, I would be happy to answer any questions you might have at gstafford@uw.edu.