What's new in CAMBRA?

By Shirley Gutkowski, RDH, BSMD, FACE

As you may know, CAMBRA stands for Caries Management By Risk Assessment. It doesn't sound new or innovative for most clinicians because we believe we practice this way. Clinicians believe that they practice this protocol by looking into the mouth, seeing debris (the risk) and telling patients that they need to brush or floss to remove the soft deposits that have accumulated on the teeth (caries management).

This strategy worked for a long time. We can see it work by the declining edentulous rate. Somehow, over time, the focus of treating caries has shifted to repairing caries lesions — the ones caused by the bacterial infection. This is akin to treating diabetes complications by amputating gangrenous appendages and calling it treatment.

Prevention is not really hitting all the high points, and this is partly because of confusing dental language.

Bacteria cause holes in the teeth, and CAMBRA impresses this idea on students by reducing quotas for drilling and filling and increasing the requirements for managing the disease. The requirement for saliva testing, bacterial testing and treatments that center on cariology receive more emphasis. Even today, some schools do not teach cariology as a separate class, but introduce bits and parts of cariology into other classes.

The CAMBRA dental students of today elevate the patients' risk profile into a diagnostic tool to help launch a treatment plan that doesn't center on surgically altering teeth and placing prosthetics in an effort to reestablish the biological dimensions of the tooth.

It's a difficult undertaking. The dentists employed to manage the student clinic are of the surgical mindset, filling the holes in the teeth. When the new CAMBRA graduates are released into the public, they are often at odds with their employers.

The traditional dentist removes the infected part of the tooth, never really dealing with the cause of the damage. The current thought is that there's no money in risk management.

The national board exams also do not reflect the CAMBRA focus on caries control protocols.

The Western CAMBRA meeting this past year focused on continually refining the language of dentistry and finding ways to reflect this educational model in the board exams. Dr. M. Fontana led a committee in the Cariology Special Interest Group (now a Section) on terminology at the American Dental Educators Association (ADEA). Together with other interested parties, the group created a “standardization of dental terms” to be used in dental programs. The glossary is published in Dental Clinics of North America, August 2010 (Dent Clin N Am 54 (2): 335-440).

Over the past five years or so, these issues — of clinical instructor's focus and standardizing dental language — are being ironed out at the schools. The liaison between CAMBRA and the dental examining boards has been working too. Requirements for drilling still far outweigh the requirements for including caries management recommendations, or even considering caries risk when establishing recall intervals.

While the idea of CAMBRA is working its way into the stream of traditional dentistry, the CAMBRA team is working on getting top of the cause to educate dental and dental hygiene students about the management of caries and going beyond damage control. Language drives clarity and change.

What's interesting about the language change is the list of words to be retired. Words such as “watch.” Watch has never been a technical term. The word “watch” in the context of caries management has traditionally been used to monitor an area. Without further treatment, “watch” really described passivity on the part of the practitioner to wait until the area had progressed to the point of cavitation and needing a restoration of some kind.

In the recent past (Dec. 2010), the FDA again addressed the safety of amalgam as a restorative for diseased enamel. The salient point that was never addressed, the elephant...
A new year, a chance to reflect

As the calendar turned to 2011, many made resolutions about what they will or will not do in the new year. Things such as improving health, managing time better or spending more time with family likely appeared on many people’s lists. While many partake in this tradition, very few actually follow through with their plan for the entire year. This happens for a number of reasons. The most likely reason is that resolutions are not well thought or planned out. Simply stating what will be done is not enough to ensure success.

Reflecting why a particular goal is important, how the goal will be met and within what amount of time the goal will be reached assists with actual goal completion. While many resolutions are personal, I challenge readers to make a professional resolution:

Reflect on your professional life from 2010. If your position is a clinical hygienist, assess your production: Are you as productive as you could be? Are the products you are utilizing as effective as they can be? Is your schedule as efficient as it should be?

These are only a few examples of areas you could choose to reflect upon. After careful consideration, select one aspect that you want to improve upon in 2011. Document why this change or improvement is necessary. For example, an increase in production may be necessary in order to justify a raise.

Incorporating a new product may improve patient oral health more successfully than a product the office has been utilizing for several years. A more efficient schedule may improve patient flow and satisfaction.

Once you have selected an area for improvement and documented why this is necessary, document specifically how you will accomplish the task. To increase production you may make a commitment to be sure each patient is up to date on his or her full mouth X-rays or Panorex X-rays.

If you want to implement a new product to assist with caries reduction, you may need to research different products and make a decision about which one is best to implement into your office. In order to make your schedule more efficient, rearranging existing appointments may be necessary.

Next, document how long you feel will take you to implement these changes. The three examples provided would certainly not take a year to implement. Maybe you plan on a six-month completion date.

Finally, it is also necessary to post the goal in an area where you can see it every day. Check in on your progress at predetermined intervals to be sure you are still on track. Once the goal has been achieved, decide what you will do next and repeat this process.

Every successfully completed resolution that you cross off your list will make it easier to complete the next one.

Who knows, perhaps by this summer, you may have achieved each of your new year resolutions and you will need to make a new list!

Best Regards

Angie Stone, RDH, BS

Pulpdent trains dental assistants at Greater N.Y. Dental Meeting

Pulpdent was invited to train 40 dental assistants on the subject of “New Technology Resins for Provisional Restoration” during the Greater N.Y. Dental Meeting on Nov. 29.

The educational program was sponsored by the American Dental Assistant Association Foundation (ADAAF), which provides continuing education and valuable demonstrations by selected manufacturers to further the knowledge and skills of the member dental assistants.

Larry Clark, director of clinical affairs for Pulpdent, first presented a scientific program on the three provisional technology groups: acrylics (PMMa), bis-acrylics and rubberized-urethane®.

The strengths, weaknesses and clinical techniques for the three different chemistries were reviewed in detail. The scientific session was followed by a hands-on workshop and demonstration using Tuff-Temp, the new rubberized-urethane provisional material from Pulpdent.

Tuff-Temp’s rubberized-urethane is strong, impact resistant and fits tightly on the teeth. Breakage and debondings are minimized or eliminated. The material has the convenience and handling of a modern automix system, but does not shrink, stretch, break, debond or lose its margins like bis-acrylics.

It has the strength of powder and liquid acrylics, but eliminates the mixing, odor, shrinkage, heat generation, loose fit and recommendations.

Tuff-Temp grinds and powders, producing crisp and accurate margins that do not soften or distort. Finishing instruments do not gum up or clog. Tuff-Temp is dual cure. It both self-cures and has a fast light cure option that is also ideal for use with a clear vinyl polysiloxane template.

Pulpdent manufactures high-quality products for the dental profession, including adhesives, composites, sealants, cements, etching gels, calcium hydroxide products, endodontic specialties and bonding accessories. For more information, call (800) 345-4542 or visit www.pulpdent.com.
in the tissue, was that prebiotic the oral pH and providing the miss- components of saliva, thus for- fering the reasons for the amalgam in the first place, could treat many ing of these lesions.

Following are some of the impor- tant glossary terms from Dental Clinics of North America. These definitions are quoted from the entry: Defining Dental Caries for 2010 and Beyond. References for the definitions can be found in the source for the following summary.

Caries process
The caries process is the dynamic sequence of biofilm-tooth interac- tion that can occur over time on and within a tooth surface.

This process involves a shift in the balance between protective factors (that aid in remineralization) and destructive factors (that aid in demineralization) in favor of demineralization of the tooth struc- ture over time. The process can be arrested at any time.

Demineralization
Demineralization is the loss of cal- cified material from the structure of the tooth. This chemical process can be biofilm mediated (i.e., car- ies) or chemically mediated (i.e., enamel erosion) from endogenous or endog- enous sources of acid (e.g., from the diet, environment or stomach).

Caries lesion/caries lesion
A caries/caries lesion is a detect- able change in the tooth structure that results from the biofilm-tooth interaction occurring due to the distinct cariogenic oral factors and the clinical manifestation (sign) of the caries process. “People have dental caries, teeth have caries lesions.”

Although attempts have been made in the literature to separate the term “caries lesion” from “cari- ous lesion” (and in some cases to delineate the term “carious”) — in some instances the latter is being used to refer to an “active” lesion — we find that applying those dis- tinctions to everyday practice can be confusing, and thus we suggest that both terms can continue to be used interchangeably.

Caries lesion severity
This is the stage of lesion pro- gression along the spectrum of net mineral loss, from the initial loss at a molecular level to total tissue destruction.

This involves elements of both the extent of the lesion in a pulpal direction (i.e., proximity to the den- to-enamel junction and pulp) and the mineral loss in volume terms. Net demineralized and cavitated lesions are, for example, two specific stages of lesion severity.

Noncavitated lesion (a.k.a. incipi- ent lesion, initial lesion, an early lesion or white-spot lesion)
A noncavitated lesion is a car- ies/caries lesion whose surface appears macroscopically intact. In other words, it is a caries lesion without visual evidence of cavi- tation.

This lesion is still potentially reversible by chemical or chemically means.

White-spot lesion
This is a noncavitated caries/cari- ous lesion that has reached the stage where the net subsurface mineral loss has produced change in the optical properties of enamel, such that these are visibly detect- able as a loss of translucency, resulting in a white appearance of the enamel surface.

However, it must be noted that although initial lesions appear as a white, opaque change to the naked eye, not all white-spot lesions are either initial (beginning lesions) or incipient, as they may be present for many years and may involve enamel and/or dentin.

Brown-spot lesion
A brown-spot lesion is a noncavitated caries/carious lesion that has reached the stage where the net subsurface mineral loss — in conjunction with the acquisition of intrinsic or exogenous pigments — has produced changes in the optical properties of enamel, such that these are visibly detectable as a loss of translucency and a brown discoloration, resulting in a brown appearance of the enamel surface.

Microcavity/microcavitation
This is a caries/caries lesion with a surface that has lost its original contour/integrity, without visually distinct cavity formation. This may take the form of localized “widening” of the enamel fissure mor- phology beyond its original features within an initial enamel lesion, and/or a very small cavity with no detectable dentine at the base.

Caries lesion activity (net progression toward demineralization)
The summation of the dynamics of the caries process resulting in the net loss of mineral over time from a caries lesion (i.e., there is active lesion progression).

Active caries lesion
A caries lesion from which, over a specified period of time, there is net mineral loss, that is, the lesion is progressing. Criteria include visu- al appearance, tactile feeling and potential for plaque accumulation.

Lesion is likely active when sur- face of enamel is whitish/yellowish opaque (with loss of luster); feels rough when the tip of the probe is moved gently across the surface.

Lesion is in a plaque stagnation area, that is, pits and fissures, near the cervical and approximal sur- face below the contact point.

In dentin, lesion is likely active when the dentin is soft or leath- ery on gently probing. The term active caries should be avoided and replaced by active caries lesion.

Arrested or inactive caries lesion
A lesion that is not undergoing net mineral loss, that is, the enamel lesion in a specific lesion is no longer progressing. It is a scar of past dis- ease activity.

Clinical observations to be taken into consideration for assessing caries lesion activity include visu- al appearance, tactile feeling and potential for plaque accumulation.

Lesion is likely inactive when sur- face of enamel is whitish, evidence of lesion arrest but also one or more of other definite changes, includ- ing increased mineral concentra- tion (remineralization), increased radiodensity, decreased size of white-spot lesions, increased hard- ness of the surface and increased surface sheen compared with a pre- vious matte surface texture.

For the day-to-day clinician some of this sounds like an academic exercise. Attention to the details in terminology for even a week can make very positive changes in the practice and healthier patients will emerge.