Scaling: A Regulatory Viewpoint
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The primary role and objective of each Dental Assisting Regulatory Authority is that of public protection. Each skill approved for delegation to a dental assistant must be considered carefully to ensure that our public protection mandate is met. Over the course of several years, the Saskatchewan Dental Assistants' Association has considered the issue of dental assistants providing scaling services. As a regulatory authority we believe that the risk to the client outweighs the benefit. The following document provides an overview of our areas of concern.

The current trend towards scaling training for dental assistants is geared towards patients with healthy gingival and periodontal tissues or plaque associated gingivitis, pockets of 3mm or 4mm and less and no overt or radiographic signs of alveolar bone loss. The term healthy mouth is of interest, as broadly one would suspect that the clients might include children. That myth is debunked by the research conducted by the American Academy of Periodontology. The research paper entitle "Periodontal Diseases of Children and Adolescents*, states that *"Epidemiologic studies indicate that gingivitis of varying severity is nearly universal in children and adolescents. These studies also indicate that the prevalence of destructive forms of periodontal disease is lower in young individuals than in adults. Epidemiologic surveys in young individuals have been performed in many parts of the world and among individuals with a widely varied background. For the most part, these surveys indicated that loss of periodontal attachment and supporting bone is relatively uncommon in the young but that the incidence increases in adolescents aged 12 to 17 when compared to children aged 5 to 11."*[1]. All this leads to the next conclusion by the American Academy of Periodontology, *"…children and adolescents should receive periodontal evaluation as a component of routine dental visits".*[2]

Most clearly, the periodontal condition of children and adolescents becomes a rationale for the boundaries of the training to include 'plaque associated gingivitis'. Returning to the experts, the American Academy of Periodontology states *that "Plaque-induced gingivitis is defined as inflammation of the gingival in the absence of clinical attachment loss."*[3]. The definition is followed by a six point plan for treatment considerations, only <u>one</u> of which is debridement [scaling]. The Academy also presents a four point plan for outcome assessment.

The next consideration would be that of periodontal loss, and the discernment of when does gingivitis become periodontitis? The American Academy of Periodontology states that *"Chronic periodontitis is defined as inflammation of the gingiva extending into the adjacent attachment apparatus. The disease is characterized by loss of clinical attachment due to destruction of the periodontal ligament and loss of the adjacent supporting bone.*[4]*".* The document goes on to describe the clinical features of the disease stating that it can occur in both primary and secondary dentition. Signs would include edema, erythema [redness] and gingival bleeding upon probing, I suspect similar to gingivitis. It further states that that slight to moderate destruction is *"characterized by periodontal probing depths up to 6mm with clinical attachment loss of up to 4mm.*[5]*".*

Authorities in dental hygiene education define healthy tissue calculus depth at 3mm and calculus located at 4mm is then considered to be an unhealthy mouth. Presuming that the removal of

calculus to a depth of 4 mm can be taught; since it may only be a partial treatment we need to consider "could the prevalence of deeper calculus place the client at risk"? The response is yes, the client may be at risk. Foundations of Periodontics for the Dental Hygienist by Nield-Gehrig & Willmann teaches about "Abscess of the Periodontium" stating that *"Some authors have theorized that in certain instances the opening of a periodontal pocket can become restricted in size because of the improvement in tissue tone. This improvement of tissue tone can result in trapping bacteria and fluids in a pocket, leading to an abscess of the periodontium".* Additionally, *"Incomplete calculus removal has also been implicated in the formation of an abscess of the periodontium. When this occurs, it is usually in a site with a deep probing depth where the calculus deposits are removed only in the most coronal aspects of the pocket near the gingival margin. It is theorized that removal of coronal deposits allow the gingival margin to tighten around the tooth, like a drawstring of a pouch, preventing drainage of bacterial toxins and other waste products from the pocket. Bacteria remaining in the deeper aspects of the periodontal pocket can result in the formation of an abscess".*[6]

Deeper subgingival calculus must be detected and removed, as any dental assistant who has had the privilege to assist a Periodontist will have had the experience assisting of periodontal surgery (laying flaps to remove deeper calculus). One would presume if another health care provider needs to probe for additional calculus and then remove it, perhaps they should have provided the complete treatment. Will there be another more extensively qualified health care provider available for the client evaluation?

At the heart of dental hygiene education and practice in Canada is the role of clinical assessment; data collection and a sensible plan of care. According to Nield-Gehrig & Willmann Dental *"members of the dental team need to be aware of the relationship between non surgical and surgical periodontal care throughout the treatment planning process"*[7]. and continuing, indicate that in addition to debridement [scaling] the treatment plan will include elimination of plaque retentive areas, and correction of systemic risk factors. Clearly a typical treatment plan extends far beyond scaling and that surgical intervention may be required through the reevaluation assessment phase of care.

In a letter to the Canadian Dental Assistants Association in 2005, the Canadian Academy of Periodontology, stated, *"In fact, the Canadian Academy of Periodontology would find it difficult to support an argument in favour of any training program that included subgingival instrumentation that was not equivalent to current curricula for the training of a dental hygienist".* Statement such as this should not be taken lightly and should not be disregarded by governments and agencies with public protection at the heart of their mandate.

What about liability? What happens if scaling is incomplete and calculus remains undetected? What is the liability or legal responsibility for calculus left? The dental assistant (and dentist) could be held legally liable for undetected calculus, even though the dental assistant could not legally remove it. Is the act of scaling assuming more responsibility and liability than appropriate for a dental assistant with a ten month education program, followed by a 6 month module?

The Saskatchewan Dental Assistants' Association is the governing body for dental assistants registered in Saskatchewan. Our primary responsibility is that of public protection. As health care professionals controlled by The Dental Disciplines Act and Regulatory Bylaws, our first concern

must be that of client care. Each skill considered by the dental assisting profession must be evaluated using this basic premise. Is there clear and compelling indication that this is a valuable client service? What is in the best interest of the public? Are we really benefiting our client's ultimate health care needs?

The SDAA wishes to advance the profession of dental assisting and the scope of practice for dental assisting. At the same time the regulatory authority must ensure that dental assistants are adequately educated, balanced by ethical considerations resulting in the highest standard of client care. The SDAA will advance the dental assisting profession in Saskatchewan through the work to the extent of our scope of practice. We see many opportunities for dental assistants in preventive/restorative dentistry through private practice, the federal Children's Oral Health Initiative and provincial initiatives to provide dental care in long term care facilities. We invite other professional associations and regulatory authorities to follow our lead.

Bibliography

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4. "Parameter on Chronic Periodontitis With Slight to Moderate Loss of Periodontal Support*", Parameter of Care Supplement, Periodontal; May 2000 (Supplement)", pg 853
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