

“John Grippo: A Modern Day Pioneer”



In 1987 I had the pleasure of meeting Dr. John Grippo for the first time. John Grippo was a dentist who had a successful private practice in Longmeadow, Massachusetts. He and his colleague, Dr. Jim Masi, an engineer, visited the UNC School of Dentistry to share their views regarding a phenomenon called stress corrosion. Dr. Grippo and Dr. Masi enthusiastically described a mechanism of tooth weakening that involved tooth flexural stresses in combination with the corrosion effects of acidic agents. The results of this study were later presented at the 13th Annual Northeast Bioengineering Conference at the University of Pennsylvania in 1987. Little did I know at the time that this inquisitive, highly motivated individual would become the central figure to whom the controversial subject of abfractions would be attributed.

From the time of these early studies, John Grippo became almost obsessed with investigating this phenomenon. In 1991, Dr. Grippo published a landmark article in this journal in which the term “abfraction” was coined as a descriptive term for noncarious cervical lesions (NCCLs) whose primary

pathogenesis owes to the effects of tooth flexural stresses concentrated in the cervical region of the tooth. In this issue of the *Journal*, we are once again honored to be able to feature an article from Dr. Grippo. Since the time of his original article in 1991, John Grippo has continued to work with immeasurable vigor to shed light onto this phenomenon and the multifactorial etiology of NCCLs.

For over 20 years Dr. Grippo has been on a mission to foster research and cultivate research relationships that would further explain this controversial theory. As an Adjunct Professor at Western New England College Department of Bioengineering, Dr. Grippo was instrumental in attaining a large grant that enabled the acquisition of an Instron Dynamic Testing Instrument and an Atomic Force Microscope. Through these efforts and others, he has tirelessly worked to promote studies related to the effects of stress (static) corrosion and cyclical fatigue on teeth. Dr. Grippo also has been involved or has fostered studies involving in vitro modeling, investigations of archaeological specimens, veterinary dental characteristics, and epidemiological studies involving non-tooth-brushing populations who exhibit NCCLs. Countless publications have resulted from a number of various researchers worldwide interested in this multifactorial phenomenon.

Why, might one ask, would anyone pursue such efforts so enthusiastically for all these years? Would the efforts of this private practitioner lead to inventions or patents? Would his work result in substantial financial gain? Why devote so much time and energy to such endeavors? In my opinion, it is because John Grippo has a genuine desire to answer a long-standing question regarding the etiology of NCCLs and in so doing, contributes immeasurably to the science of dentistry. Clearly there are those in dentistry that totally discount the role of tooth flexure in the etiology of NCCLs. Some promote with vigor alternative explanations that point to toothbrush and dentifrice abrasion as the primary causative factor for NCCLs. Based on the fine

work by Dzakovich and others, I believe that toothbrush and dentifrice abrasion undoubtedly are very significant factors in the etiology of NCCLs. However, it is incredibly myopic to ignore the mounting evidence base that also underscores the influence of other important factors including tooth flexural effects that clearly contribute to the localized weakening of teeth in the cervical region.

However, my intent is not to flame the fires of controversy with this editorial, but rather to acknowledge and recognize the efforts of an individual committed to heightening our knowledge of this enigmatic dental phenomenon. Goethe once said, "It is the differences in the opinions of good men that is knowledge in the making." Regardless of the exact

mechanisms involved in the pathogenesis of NCCLs, John Grippo should be commended for his tireless efforts to shed light on this dental condition. Individuals exhibiting his level of commitment to the pure pursuit of knowledge with no potential for financial remuneration are few and far between. For this, Dr. John Grippo should be congratulated for he truly is a modern day pioneer.

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