The Practicing Academic

The Department of Periodontics and Allied Dental Programs (DPADP)

"The End of Year Issue" December 2013

Chairman's Corner:

As we get to sign off on 2013, I would like to take a moment to reflect on all that happened during the year. The year came in with a bang and is leaving with a bang. I would say that is typical of every year at IUSD. It is not for the feint of heart!!!

Diana Yates, our dental assistant supervisor celebrated her 40th year in the Department. Think about that for a minute and reflect on it. 40 years of her life, Diana has given in service to the Department. What exemplary service it has been!!! Thank you Diana!!! You are the best.

Sharon Baggett celebrated her 25th year IUSD. This is remarkable in consistency and loyalty to the Department. Thank you Sharon!

2013 of course was the 'year of accreditation'. All the work that went into being ready paid off handsomely. We did very well. Good job everyone!!!

We said good bye to a group of residents while welcoming another group of residents. The circle of life continues in our Department and our school. Our faculty and staff worked very hard to make sure we were and are addressing the needs of our students and our residents and ultimately through this training serving the population of Indiana. Kudos to all of you!!

We also bid farewell to Dr. Henry Swenson,

Dr. Robert Detamore and Dr. Cullen Ward. They made a big difference in our lives and in the life of our Department and IUSD. They will be missed.

2014 is shaping up to be an exciting year and I am excited to be part of another productive year for the Department and the School.

In this issue of our newsletter, we start with my personal reflection of my journey from India to Indiana. It is an excerpt taken from a book I am writing. As with any writing of a personal nature, it does take some courage to let it out. Dan Shin wrote an excellent piece on how we have been addressing the education needs of our students. Kay Rossok reflects on her career change and the power of positive thinking. Carole Walters writes about coming full circle and Liz Ramos writes about evidence based dentistry.

In addition, I have chosen to feature case reports from several residents as well as from an incoming resident who was involved with interdisciplinary treatment with a current resident.

I hope you enjoy reading the newsletter as much as I enjoy putting all this information together.

I wish all of you a Happy Holiday Season.

Merry Christmas and a Happy New Year!

My Journey

I come from a 'normal' middle class family having grown up in Madras (now called Chennai) in India.

Madras is the capital city of the Indian state of Tamil Nadu, which is located on the Coromandel Coast off the Bay of Bengal, is the fourth most populous metropolitan area and the sixth most populous city in India. It has a population of 4.68 million and an extended metropolitan population of nine million. The economy has a broad industrial base in the automobile, computer, technology, hardware manufacturing and healthcare industries. The city is India's second largest exporter of

software, information technology (IT) and information-technology-enabled services (ITES). A major chunk of India's automobile manufacturing industry is based in and around the city, which leads it to be called as 'The Detroit of Asia'. Madras is an important center for Carnatic music and hosts a large cultural event, the annual Madras Music Season, which includes performances by hundreds of artists. The city has a vibrant theatre scene and is an important center for the Bharata Natyam, a classical dance form. The Tamil film industry, the second largest film industry in India, is based in Chennai.

Well, now that I have dazzled you with all you wanted to know about Madras, let us get back to the protagonist of the story, ME!! What is 'normal', you ask? Well, my parents had 3 children, me included. I was the middle child who had an older brother and a younger sister. We lived in a middle class neighborhood where there were several other families with similarly aged children. I was quite a social being with a fairly well developed sense of humor. It was not long, before, I had found several like-minded kids who wanted to play the same games that I did. My evenings and weekends were filled with games of cricket, field hockey, riding around on our bikes and playing cops and robbers, war and other such thrilling pass times. My memories of childhood were really wonderful, that is, until I realized that I had developed a stammer!!! This was a 'discovery' of life changing proportions. Does one develop a stammer or does a stammer appear one day and your life becomes miserable until you, well, your life becomes miserable. I clearly remember my English teacher in grade school, I think it was, 4^{th} or 5^{th} grade, asking what had happened to me. How did I go from being the kid who wanted to read in class to that kid who hated to be called on and shrank back in horror at the mere thought of being called on to read? Why did she ask me what happened? What kind of a question was this? What happened!!!! Did she think I was faking it? Who would ever fake something like this? OMG, this was a terrible event/affliction/curse, all of the above and the question she asked was

unacceptable. It was momentous as you can imagine.

I can laugh about it now, but back then it was the worst thing that could have happened to me. When you start to say something, ‘as in talk’, and realize that abject humiliation was only seconds away, well, it makes you ponder. The more you ponder, the less you say. The less you say, the more you ponder. Oh the agony that everyday seemed to bring me was palpable. In spite of it all, I survived my schooling days. My stammering was a constant reminder that getting excitable about things only made the whole experience of speaking that much worse. However this never stopped me from getting excited and making many experiences terrible. I guess I learned slowly. My being a slow learner changed when I started high school. In India, this is referred to as grades 11 and 12. I guess I suddenly learned that it was time to take things seriously. I became quite focused and set about my course of action, which was to improve my grades with what I would call ruthless efficiency. Ruthless here referring to what I would subject myself to, which, was extended periods of studying through the night, only being kept company by many a rotten mosquito. It was a wonder that I did not come down with malaria. I guess the mosquitoes took pity on someone who stammered. I got into dental school via the traditional route. ‘Didn’t get into medicine’!!! I guess it was here that I set out to find myself. Being away from home for the first time was liberating. Having learnt to play the guitar through watching others and being able to hold a tune meant that I was always part of the ‘cool crowd’. At least in my mind I was. Now being part of the ‘cool’ crowd gave me a bit of a swagger, stammering not withstanding at least in my mind. I would sing at some of the school’s events and I also participated in some of the inter school competitions in the city. My claim to fame at that point was being named ‘best vocalist’ in one of the major inter school competition, where several schools competed. My band won it all. I had arrived!!!! I just didn’t know where I had arrived or where I was going. Now back to the first 2 years of dental school away from home. A group of us would usually go to the lake to discuss metaphysical concepts

as 16 and 17 year olds usually do. Once we were done debating existential issues, I remember sitting by the lake and strumming on my guitar while doing my best David Gilmour impersonation. Those halcyon days of yore indeed were wonderful!! Following my sophomore year, I transferred back home as my father died and I was needed back. Not the best of times but we persevered. My biggest reason for sadness is that he never got to see me do the things I did and have done and he missed out on 2 vibrant and wonderful grand kids. I was too spacy and not yet sure where I was going while he was around.

Dental school was good. I did well. Actually, I excelled. Did I mention that I was/am a humble person? Following my BDS, I took the All India exam and was accepted into the Periodontics program at the Madras Dental College. Periodontics definitely was and is my natural dental home. Completing my training in India and then applying to and being accepted to IUSD's program was a dream come true. Sitting in front of 'the man with the voice of god' in the office that became mine 16 years later was a magical experience. My residency training in the Department was a lot of work but I truly enjoyed everything about it. My research at Eli Lilly Labs for my Master's project and the subsequent fellowship year at Lilly was fun. Oh, I was broke all the time, but I still am!!! When I started my search for a faculty position, I was set on joining IUSD. I went to 5 schools to interview and I looked at these experiences as opportunities to gain frequent flier miles, in addition to the experience of course. When Dr. Hancock, finally asked me if I wanted to join the faculty I was overjoyed. I asked when my interview was going to be scheduled. He looked at me and said, 'what interview, just sign here!! Now maybe I am using my poetic license, but hey this is my poem! I have been at IUSD now for 22 years. I have learnt about making a life for myself and my family and also the roller coaster ride that is the world of academia. I am and will always be grateful to IUSD.

Things I have learnt about life and academia

1. Life is hard work. If you let up, then you lose.

2. A helping hand is always useful but you have to learn to help yourself.
3. Academia is not what it used to be. Dental schools are changing. While Neal Peart from the band Rush wrote the line, 'conform or be cast out', I think what Alvin Toffler wrote is more pertinent; "The illiterate of the 21st century will not be those who cannot read and write but those who cannot learn, unlearn and relearn". We need to learn to adapt and not be too set in our ways.
4. 'What have you done for me lately' is just the way that it is. Academia is no exception. The faster you learn this lesson the more comfortable you will be with yourself.
5. In everything we do, if we realize that there will always be those who don't agree and criticize us then we will come to accept that we can't please everyone.
6. Reading the 'Desiderata' by Max Ehrmann and 'Do it Anyway' by Mother Teresa should be mandatory. The opening line from the Desiderata always rings in my head and it reads; "Go placidly amid the noise and haste, and remember what peace there may be in silence"
7. If you are not a genius, learn to be indispensable. You will have a longer career if you are indispensable.
8. Slowly but surely start showing the world what makes you unique. We have enough boring people around.
9. As Garrison Keillor says, 'be well, do good work, and keep in touch'.

"It matters not how strait the gate,
How charged with punishments the scroll,
I am the master of my fate
I am the captain of my soul"
From Invictus by William Ernest Henley

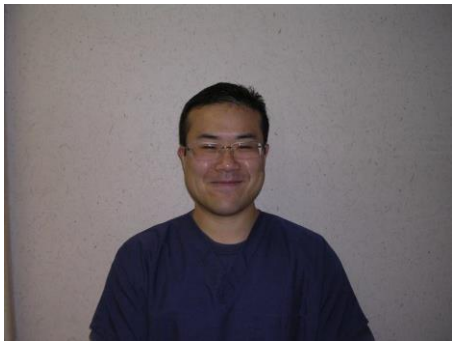
The AAP Foundation Wins the William J. Gies Award

The AAPF has been awarded the William J. Gies award for outstanding achievement by a public or private

partner in support of dental education. This is truly a great honor for the foundation. The award will be presented on March 17th during the ADEA meeting in San Antonio. I hope to see some of you there in attendance.

Ongoing Change Spurs Steady Progress in IUSD Periodontal Education

Daniel Shin DDS, MSD



At the 2013 ADEA/AAL ITL (Institute for Teaching and Learning) meeting, Dr. Bill Hendricson drew this insightful comparison to illustrate the perils of ineffective teaching in today's academic world. His discourse reached a highpoint when he posed several weighty questions:

1. What factors motivate the current generation of students to learn?

2. What changes can we, as educators, implement to promote learning in the 21st century?

The means of educating today's generation lies in understanding the crux of these two thoughtful questions. After all, as Dr. Hendricson explained, a positive teaching environment conducive to learning can only be cultivated if the educator fully recognizes the cognitive maturity level of their students, accounts for factors which promote active student learning, and employs a proactive approach to continuously evolving the curriculum so that it stays compatible with the growth, development, and maturity of each generation of students. Conversely, if an educator fails to take these factors into account, neglects to engage the students' interest, remains insulated in his/her "comfort zone," and/or does not make the effort to perform the necessary adjustments to the curriculum, the likelihood of cultivating a nurturing learning environment greatly diminishes, and consequently, its negative impact may not only be confined to the current generation of students, but also metastasize to successive generations.

"*At any single point in time, a poorly skilled surgeon, who lacks the right 'brains' or skill level, can harm a single patient. A poor educator, on the other hand, can harm an entire generation of students.*"
Bill Hendricson, Ph.D.
Senior Consultant, AAL
Assistant Dean for Education and Faculty Development, University of Texas Health Science Center at San Antonio Dental School
August 15, 2013
"*Are We Teaching with Our Students' Brain in Mind?*"

Fittingly, our department is at the forefront of delivering effective teaching methods consistent with 21st century dental education. We continuously review, discuss, and tweak our teaching strategies and methods so as to strengthen our capacity to rouse this

generation's motivation to learn and to appeal to their interest in finding out more about our specialty. Within the school, our department already enjoys a stellar reputation of actively engaging the current crop of students in *all* aspects of their training. This is evidenced by our extensive participation in the clinical and didactic training of both predoctoral students and graduate residents and by our active involvement in PBL (Problem-Based Learning) activities, GLA (Group Learning Activities), CTS activities, vertical learning groups, interdepartmental guest lecturing, interdisciplinary graduate training, graduate research projects, and continuing education courses. In all, our department distinguishes itself as being 1) *receptive* to the shifting expectations, demands, and needs of today's generation of students, 2) *flexible* in making curriculum changes, if required, and 3) *proactive* in creating an environment that facilitates learning in the 21st century. In the 18 months that I have been here, the department has made sweeping changes in the clinical and didactic training of both predoctoral and graduate students. Here are a few:

PREDOCTORAL LEVEL:

- **Portfolio Self-Assessments:** As designed by Dr. John, each DS3 student is expected to write self-reflective papers on their experiences in performing a dental prophylaxis, periodontal maintenance, SRP, and a surgical assist. The impetus behind the portfolio assessment is to engage the student dentist in deliberate self-reflection about what they are learning in periodontics, how they are learning it, and how they are applying their current knowledge in periodontics to the treatment and management of a periodontitis patient. In the self-assessment, the student steps back from the learning process to think about their learning strategies and assess their progress as learners. This type of assessment is intended to encourage the students to become independent learners and increase their motivation to learn.
- **Suturing Workshop**: In response to the predoctoral students' growing interest to learn more about the surgical aspects of periodontology, predoctoral students are provided with a hands-on instructional course on suturing techniques. Last year, Dr. John singlehandedly provided the hands-on suturing course to all 104 D3 class.
- **Revamping the T641, T720C, and T730 Periodontics Module**: Drs. John, Ramos, and I review and revise our course syllabi to provide our students with the most up-to-date concepts in our specialty. As a result, D3 students are now provided with lectures ranging from implant dentistry to esthetic dentistry to interdisciplinary treatment planning.
- **Resident Participation in Predoctoral Didactic Courses**:

Several of our residents have expressed an interest in pursuing academics upon graduating. To provide them with the 'teaching experience,' several of them have presented lectures to the predoctoral students. Two of our senior residents, Dr. Mahogany Miles and Dr. Brittany Lane, performed marvelously when they lectured to D1, D3, and IDP students. We are very excited to give this same opportunity to several junior residents who are also interested in pursuing academics.

- **Instrument Sharpening Workshop**: Previous predoctoral students were graduating without a solid foundation in instrument sharpening. Recently, Dr. Walters stepped up to the plate to correct this deficiency. Once a week, Dr. Walters uses her lunch hour to meet with a group of 10-12 D3 students/session and reviews with them instrument sharpening methods and provide one-on-one tutoring.

GRADUATE LEVEL

- **Updating the Case Defense Format**: Dr. Blanchard revised the format of 3rd year case defense to more closely simulate the ABP board exam.
- **Introduction of the PICO (Patient, Intervention, Comparison, and Outcome) Method to the Recent Advances Course**: Dr. Ramos introduced the PICO method to help residents better comprehend the nature of evidenced-based periodontal articles. The PICO strategy enables residents to identify the strengths and weaknesses of each article.
- **Group Learning Activities and OSCE Examinations in the Dental Implantology Course**: Dr. Prakasam reconstructed this course to be more resident-centered. The Group Learning Activities create an active learning environment that encourages greater participation and discussion between clinicians from different departments (Perio, GPR, Oral Surgery, Endo, Prosth, and Grad Operative).

As someone who completed IU perio residency less than 5 years ago, I can say that our department has undergone significant changes to meet the shifting demands of 21st century dental education. As a result, we have made much progress in the ways we provide instruction and guidance to the current generation of students, and we remain nimble enough to adapt and overhaul our teaching methods, when necessary. Regrettably, some may argue that change is unnecessary, creates too much entropy, and disturbs what worked well in the past. I would disagree. As Robert F. Kennedy once eloquently expressed *"Progress is a nice word. But change is its motivator."*

Turning a Negative into a Positive – Life After You Can No Longer Practice

Kay Rossok, LDH

"It is not the strongest of the species that survives, nor the most intelligent that survives. It is the one that is the most adaptable to change." - Charles Darwin

Allow me, please, to begin this article by introducing myself to those who do not know me. My name is Kay Rossok and I am Assistant to the Chair for the Department of Periodontics and Allied Dental Programs. I am also a licensed dental hygienist.

The purpose of this article is to not only share my personal story, but to give others who may be facing similar professional challenges some options to consider in the event they can no longer practice.

My "story" began in 1985. I had been practicing dental hygiene in two Bloomington, Indiana area private practices since graduating from Indiana University – Purdue University Fort Wayne and becoming licensed, in 1979. Pregnant with my first child, I noticed a tingling in my right hand while using the *Cavitron*. My physician diagnosed carpel tunnel syndrome from repetitive motion, aggravated by the pregnancy. It was anticipated that the sensation would disappear as soon as my son was born. To put it lightly, this did not happen.

I continued to practice, in hopes that time would heal my hand. I am embarrassed to say that it took me several years and cortisone injections, to finally submit to consultation for surgical treatment. It was becoming more difficult to obtain the tactile sensitivity that was necessary to remove deposits or smooth roots. In addition, I was concerned that my patients' oral health was at risk. The preliminary tests showed that the cubital region of my arm and the carpel canal were now damaged. I was given only a **10 percent** chance of regaining usage of my arm to pre-injury status, even with the assistance of a TENS unit. To make matters worse, my left hand was now beginning to signs of carpel tunnel syndrome. It was immediately evident that I had let the injury go untreated too long. I was forced to make a decision about my professional future.

Dentistry was changing at a rapid pace and my hands could no longer keep up with the quadrant periodontal maintenance practiced. I sat back and examined my skills beyond "scaling teeth". At first, I thought that I had nothing to offer outside of a dental practice. Keep in-mind that I was educated in the pre-computer age.

The first step to finding a new career path was to look deeper into my education as a dental professional and see how those years of college could benefit me in other areas. I was surprised to see the options available with a dental background: education, sales, other avenues of patient care, to cite a few. Allow me to remind you of some examples of the numerous qualifications that we as dental professionals possess:

1) experience working with people of all types
2) medical knowledge and familiarity with medical terminology
3) self-motivation, initiative, and learning skills
4) written and oral communication skills
5) "salesmanship" (think of presenting treatment plans)
6) ethical training
7) problem solving and researching issues
8) organizational skills
9) patient education

I could go on and on, but the general idea is that dental education gives us a well-rounded background on which to build.

The next step was to identify my second career "passion". This is very important when making

a major change in professions. My passion was a combination of history, dentistry, and library science.
The third step is to decide if further education would be required. Look at your options for expanding your knowledge base.

The last step, and this is will definitely affect the final decision, is to examine the financial impact the choice of positions would have. I made the personal decision to work a part-time position in a less stressful environment while my children were young.
Now, the job search began. After a short time unemployed, I was fortunate to obtain a part-time circulation/clerical position at the IU School of Dentistry Library. Bingo…my dental background, combined with motivation to learn was my key to securing the position. The School offered to train me in basic clerical and computer skills. I enrolled in the General Studies Bachelor Program, as well as, took advantage of any training opportunities IU offered. In time, I was promoted to a full time position as the caretaker of the historical items that had been donated to the library. (I was beginning to see the connections between my "passions" and my education.) This position allowed me to travel to the National Museum of Dentistry, in Baltimore, to research and co-author a monograph on the history of the Oral Health Research Institute, and to work on projects with such great dental historians as Dr. Arden Christen and Dr. Miles Standish.

In time, I was ready to further my knowledge and experience and work with different programs within the School. I have held clerical positions in the Dean's Office and the Dental Assisting Program prior to my current position. A very enjoyable part of my jobs was to attend community and high school events to share information about the dental profession. Every change has somehow called upon that dental education and experience that I questioned so many years ago.
In closing, I just want to remind all dental professionals that we don't just "clean or fix teeth" like many lay persons think. There are many aspects to our profession that can be used in either sales, education, management, service or other forms of patient care. I can say that, with a few exceptions, my career change has been a very positive experience and working with other dental professionals remains a joy.

My Journey Coming Full Circle Back to IUSD

Carol Walters DDS, MS

That spring day in 1977 became a defining moment in my life. I arrived home from work as a dental hygienist and picked up the mail before going inside. At the top of the mail I saw the return address "Indiana University School of Dentistry". I knew this was IT. Would I be accepted to dental school? Or not be accepted?
The beginning of my journey started with attending the Dental Hygiene program at IUSD. My Dental Hygiene training was under the tutelage of *the* Rebekah Fisk. She was an intimidating task master for sure! Each clinic day we lined up for "inspection". Miss Fisk resembled a drill sergeant as she walked up and down the line checking to see that our hair didn't touch our collar, no visible jewelry, fingernails no longer than fingertips (and of course no polish), white shoes, shoe laces and hose sparkling clean, and uniform ironed and hemmed below the knee. Not only were our appearance standards high, but our clinical standards were as well. We all feared, but ultimately respected and admired Miss Fisk and her team.
My ten years as a practicing hygienist were not only rewarding, but also an ongoing learning experience. I was fortunate to work with several dentists in Indiana and Colorado during that time. I learned and gained experience from

each of them. An important turning point occurred for me while practicing in Colorado. My boss took our team to a life changing CE course given by Dr. Bob Barkley. (Please read this article if you are not familiar with him: http://www.frazeronline.com/article_display.cfm?aid=11) . Dr. Barkley started me on a lifelong journey of learning and practicing effective communication techniques thus allowing patients to "co-diagnose" and therefore turn their needs into wants.

After these years of practicing dental hygiene, I became frustrated with my inability to offer *more* in the way of periodontal therapy to my patients. I began to consider the possibility of returning to school to become a DDS and then a periodontist. My family encouraged me to explore this goal as my father had been a role model in returning to college at age 30.

My initial meeting with the Associate Dean of IUSD was not encouraging. He told me they did not look favorably upon accepting dental hygienists into dental school and to have any chance of having the admissions committee even take a look at my application I would need to submit exceedingly high grades for the thirty hours of required pre-dental courses. Instead of discouraging me, that statement made me more determined to see if I could cut the mustard!

I continued to work part time as I pursued my pre-dental courses. One by one I checked them off so I could apply for the dental class of 1977. So, back to that spring day when I picked up the mail and knew the fate of my future was in that envelope. I could not wait to go inside. I ripped open the envelope and read the first line which started with "Congratulations". I screamed and cried. My neighbor came running out thinking I'd been injured. This was the biggest accomplishment of my life and the beginning of a professional career that led to more and more rewarding achievements.

My colleagues usually make a distressed face when I say that my four years as a dental student were the best years of my life. Yes, it was extremely difficult, stressful and physically demanding. That is exactly what made each step a motivating factor and a tremendous sense of achievement. I thrived on the ever increasing challenges and discovered a strength and desire I never knew I had.

Following graduation with my DDS from IUSD I was fortunate to be accepted to the Graduate Periodontal Program at the University Of Michigan School Of Dentistry. Leaving my "safe home" at IUSD caused apprehension but I felt it was important for me to get a different perspective. The years in Graduate school were equally challenging, but in a much different way. I learned how to gather scientific evidence, collate the evidence and extrapolate it in order to create evidence based, appropriate treatment plans for patients.

My journey following Graduate school included starting and growing a new solo practice. What an exciting, empowering time to be able to practice dentistry the way *I* wanted to practice. Additionally I spent several years in practice management consulting: specifically focusing on effective communication with patients and staff. Practice management consulting peaked my interest in utilizing information technology to track and analyze practice statistics. And those interests lead me to yet a new challenge: that of selling and training specialty practice management software. For several years I traveled coast to coast training Periodontal and Oral Surgery offices on their new software. These experiences lead me to realize how much I enjoy teaching.

When I moved back to Indiana I was tiring of traveling three out of four weeks per month. After "9/11" traveling became increasingly more difficult. I began considering the next stage of my life and career. Visiting my friends and classmates at IUSD gave me the reminder of that feeling I had as a dental student. Being back at IUSD felt like "home" and I knew that this is where I was destined to be.

Dr. John took a chance on me and I was hired as clinical faculty. After that first week I knew I was in the right place. I discovered that I have more knowledge and experience to share with our future dentists than I realized. It is incredibly rewarding for me to share with the students and encourage their desire to learn. Having this opportunity to contribute my knowledge and skills in this special place has

definitely given me a special warmth and personal satisfaction in coming full circle back to IUSD.

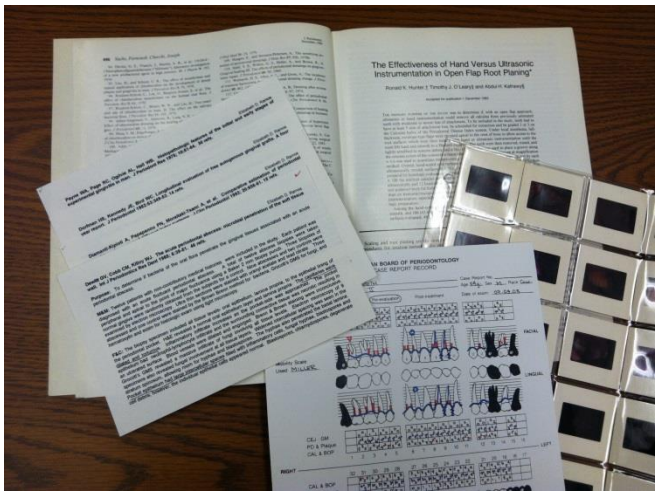
Evidence-Based Decision Making in Dentistry

Elizabeth D. Ramos, D.D.S., M.S.D.

Do you remember…

- Carrying a stack of 20+ articles in your briefcase every week?
- Succinctly articulating the purpose, methods & materials and findings of a study on one side of a 5”x8” index card? (occasionally, sneaking a few remarks on the back)
- Standing before your mentors, presenting your best work and being asked to defend your treatment choices? (Many of those answers based on what you wrote on those 5”x8” cards)

From our early years as periodontics residents, the practice of evidence-based decision making was the foundation of our training.



In the 1990s, “evidence-based medicine” (EBM) was a buzzword in the practice of medicine. Because of his work at McMaster University and later at Oxford University, Dr. David L. Sackett, a physician with a degree in epidemiology, has been credited for introducing EBM and for the change in medical education which subsequently occurred (Cohen 1996). His impact has affected the way physicians practice medicine. By using the research available in conjunction with clinical experience (or in the case of residents/students, the experience of their faculty), practitioners are able to discuss treatment and deliver patient care with a more individualized approach (Sackett & Rosenberg 1996). In his 1996 article, Dr. Sackett eloquently stated that “Good doctors use both individual clinical expertise and the best

available evidence, and neither alone is enough" (Sackett et al 1996).

The American Dental Association modified Dr. Sackett's concept and describes Evidence-based Dentistry (EBD) as:

> "an approach to oral healthcare that requires the judicious integration of systematic assessments of clinically relevant scientific evidence, relating to the patient's oral and medical condition and history, with the dentist's clinical expertise and the patient's treatment needs and preferences."
>
> (http://ebd.ada.org/about.aspx)

Evidence-based dentistry has its own pioneers- one within our specialty. Periodontics has been recognized for its rich tradition in the practice of EBD. Controlled longitudinal clinical trials initiated almost 50 years ago by Dr. Sigurd P. Ramfjord and his team at the University of Michigan introduced the idea of comparing periodontal therapies and outcomes of treatment. His work encouraged other investigators in our discipline. He set an example not just in the practice of periodontics but in the practice of dentistry. Dr. Ramfjord was also instrumental in the first World Workshop in Periodontics which met in Ann Arbor, Michigan in June 1966. The meeting provided a venue for colleagues to critically review and discuss clinical concepts in periodontics. Participants may have challenged some of the dogma of the time and outlined areas for future research. Similar workshops have continued over the decades. The first World Workshop in Periodontics began the transition from the practice of dentistry based on expert opinion alone to one which also considers the science (Robertson & Kornman 2013).

Figure 1 EBD.pdf

Figure 1 is included with the permission from Dr. Jane L. Forrest, EdD, RDH, Ostrow School of Dentistry, University of Southern California.

What is evidence-based decision making in dentistry? Dr. Jane L Forrest from USC School of Dentistry illustrates this concept of how decisions regarding patient care are made

(Figure 1). Treatment recommendations are made after considering the patient's specific situation in the context of the following 4 domains: Experience and Judgment; Scientific Evidence; Patient Values/Preferences; and Patient/Clinical Circumstances (Forrest 2009). Experience and judgment are acquired during the years as a student, as a resident and as a practitioner. Through numerous patient encounters, a provider expands his/her empirical knowledge. A critical appraisal of the scientific evidence is necessary to determine the applicability of a study to a clinical question (Sackett et al. 1996). Figure 2 lays out the hierarchy of clinical evidence. The highest level of clinical evidence is the Systemic Review and the Meta-Analysis; Opinions and Editorials are considered the weakest clinical evidence. Although animal studies and bench studies are at the bottom the hierarchy, this type of research may be indicated prior to moving up the pyramid (Forrest 2009). A treatment or intervention typically follows a course to determine its effectiveness (Pini Prato 2013). Typically, novel therapies are initially published as case reports or case series. The findings are often followed by cohort studies and randomized control trials. The best evidence available may fall anywhere in the hierarchy. Based on a practitioner's experience, he/she determines if the scientific evidence is sufficient to answer the clinical question asked (Sackett et al. 1996). With evidence-based decision making, practitioners are challenged to scrutinize their experiential and scientific knowledge in conjunction with the patient's preferences and circumstances (Sackett 1996, Forrest 2009). The patient's preferences and circumstances may include their medical status, dental condition, cultural beliefs, chief complaint, financial ability, etc. This information can be ascertained in the interview and discussions with the patient. Optimal decisions for our patients' care are made at the intersection of the four domains (Forrest 2009).

Figure 2 EBD.pdf

Figure 2 is included with the permission from Dr. Jane L. Forrest, EdD, RDH, Ostrow School of Dentistry, University of Southern California.

The 5 steps in practicing evidence-based decision making (Forrest 2009; Sackett & Rosenberg 1995) are described below:

1. Structure the patient problem into a focused question. (PICO question: P=Patient/Problem; I= Intervention; C= Comparison; O= Outcome)
2. Efficiently find the best available evidence to answer the question
3. Critically appraise the literature to determine its applicability to the clinical question
4. Integrate the scientific evidence with clinical expertise and patient values and circumstances
5. Evaluate the outcome

Time, access to resources and inadequate training have been identified by practitioners as barriers to evidence-based decision-making in dentistry (Evidence-Based Medicine Working Group 1992, Straub-Morarend 2013). From a survey of dentists licensed in Iowa (Straub-Morarend 2013), time was considered the greatest obstacle stated by dentists who graduated in the 1990s and 2000s. For dentists who graduated in the 1970s and 1980s, time and training/skills equally impeded the practice of EBD. For those who graduated prior to 1970, reported access to resources as a major barrier followed by training in EBD. Compared to the general dentist, only a small percentage of specialists felt they did not have enough training in evidence based decision making.

As periodontics residents, we were trained to practice evidence-based decision making in dentistry. As practitioners, we have the opportunity to promote these skills. We can be leaders in our individual dental communities as the practice of "dentistry" continues to evolve into the practice of "evidence-based dentistry."

Suggested resources:

The following articles provide basic information and concepts to share with colleagues to promote the practice of EBD:

Forrest JL. Introduction to the basics of evidence-based dentistry: Concepts and Skills. J Evid Base Dent Pract 2009; 9:108-12.

Pini Prato G, Pagliaro U, Buti J, Rotundo R, Newman MG. Evaluation of the literature: Evidence assessment tools for clinicians. J Evid Base Dent Pract 2013; 13:130-41.

Websites of interest:

https://www.dentistry.iu.edu/index.php?cID=951

http://www.ncbi.nlm.nih.gov/pubmed/

http://ebd.ada.org

http://www.cebd.org/

http://ohg.cochrane.org/cohg

References:

1. Cohen L. McMaster's pioneer in evidence-based medicine now spreading his message in England. Can Med Assoc J 1996; 154(3):388-90.
2. Evidence-Based Medicine Working Group. Evidence-based medicine. A new approach to teaching the practice of medicine. JAMA 1992; 268(17):2420-25.
3. Forrest JL. Introduction to the basics of evidence-based dentistry: Concepts and Skills. J Evid Base Dent Pract 2009; 9:108-12.
4. Pini Prato G, Pagliaro U, Buti J, Rotundo R, Newman MG. Evaluation of the literature: Evidence assessment tools for clinicians. J Evid Base Dent Pract 2013; 13:130-41.
5. Robertson PB, Kornman KS. Evidence-based outcomes of periodontal therapy: A legacy of Sigurd P. Ramfjord. JADA 2013; 144(11):1230-33.
6. Sackett DL, Rosenberg WM. The need for evidence-based medicine. J R Soc Med 1995; 88:620-24.
7. Sackett DL, Rosenberg WM, Gray JA, Haynes RB, Richardson WS. Evidence based medicine: what it is and what it isn't. BMJ 1996; 312:71-72.
8. Straub-Morarend CL, Marshall TA, Holmes DC, Finkelstein MW. Toward defining dentists' evidence-based practice: Influence of decade of dental school graduation and scope of practice on implementation and perceived obstacles. J Dent Educ 2013; 77(2):137-45.

Department News

Department Publications in 2013

I wanted to present a complete listing of all the department publications in 2013. We are a busy place, just in case you doubted it ☺

1. **Nozrati E**, Eckert GE, **Kowolik MJ**, Ho JG, Schamberger MS, Kowolik JE. 2013 Gingival evaluation of the pediatric cardiac patient. *Pediatric Dentistry* 35:456-62

2. **Wahaidi VY**, Eckert GE, Gregory RL, **Kowolik MJ**, Galli DM 2013 The *in vitro* response of human peripheral blood neutrophils to Fusobacterium nucleatum. *International Journal of Clinical Dentistry* 6: 59-66

3. Medina-Solís CE, Pontigo-Loyola AP, Pérez-Campos E, Hernández-Cruz P, Ávila-Burgos L, **Kowolik MJ**, Maupomé G. 2013 Association Between Edentulism and Angina Pectoris in Mexican Adults 35 Years of Age and Older: A Multivariate Analysis of a Population-based Survey. *Journal of Periodontology* DOI: 10.1902/jop.2013.130186

4. Reina E, Al-Shibani N, Allam E, Gregson KS, **Kowolik M**, Windsor LJ 2013. The effects of *Plantago major* on the activation of the neutrophil respiratory burst. *Journal of Traditional and Complementary Medicine* 3: 268-272

5. **Swaminathan V, Prakasam S, Puri V**, Srinivasan M. Role of salivary epithelial toll-like receptors 2 and 4 in modulating innate immune responses in chronic periodontitis. *J Periodontal Res*. 2013, in press.

6. **Prakasam S**, Srinivasan M. Evaluation of salivary biomarker profiles following non-surgical management of chronic periodontitis. *Oral Dis*. 2013, in press.

7. **Lee SJ, Prakasam S**, Eckert G, Maupome G, **John V**. Consensus training: an effective tool to minimize variations in periodontal diagnosis and treatment planning among faculty and students. *J Dent Edu,* August 2013, in press.

8. **John V, Lane B**, Chu G. Complications associated with the placement and restoration of dental implants- a case report series. *J Indiana Dent Assoc*, Summer Issue, 2013, in press.

9. Sterio TW, Katancik JA, **Blanchard SB**, Xenoudi P, Mealey BL. A prospective, multicenter study of bovine pericardium membrane with cancellous particulate allograft for localized alveolar ridge augmentation. *Int J Periodontics Restorative Dent*. 2013; 33:499-507.

10. Janardhanam SB, **Prakasam S, Swaminathan VT**, Kodumudi KN, Zunt SL, Srinivasan M. Differential expression of TLR-2 and TLR-4 in the epithelial cells in oral lichen planus. *Arch Oral Biol.* 2012; 57:495-502

11. Bottino MC, Thomas V, Schmidt G, Vohra YK, Chu TM, **Kowolik MJ**, Janowski GM. Recent advances in the development of GTR/GBR membranes for periodontal regeneration--a materials perspective. *Dent Mater*. 2012; 28:703-21

12. **Khaled M**, Al Shibani N, Labban N, Batarseh G, Song F, Ruby J, Windsor LJ. Effects of resolvin d1 on cell survival and cytokine expression of humangingival fibroblasts. *J Periodontol* 2013;84:1838-1846.

13. **Hassan M**, Ghoneima A, Liu S, **Prakasam S**. Comparison of amnion chorionic allograft membrane to dense polytetrafluoroethylene membrane in ridge preservation procedures: a clinical and radiographic study. *J Periodontol* (submitted Dec 2013)

14. **Hindman R**. Laser Periodontal Therapy for Bone Regeneration; The Journal of the Indiana Dental Association; Spring 2013 Vol 92 No 2 Page 32

15. Dental Implant safety checklist: A Delphi Study, **A. Christman**, S. Schrader, **V. John**, S. Zunt, G. Maupome, & **S. Prakasam** *(JADA: To be Published in February 2014)*

16. **Prakasam S***, Srinivasan M. Evaluation of salivary biomarker profiles following non-surgical management of chronic periodontitis. Oral Dis. 2013 Feb 14. doi: 10.1111/odi.12085. [Epub ahead of print] PubMed PMID: 23496245*)*

17. **Swaminathan V, Prakasam S***, Puri V, Srinivasan M. Role of salivary epithelial toll-like receptors 2 and 4 in modulating innate immune responses in chronic periodontitis. J Periodont Res 2013; doi: 10.1111/jre.12066. © 2013 John Wiley & Sons A/S. Published by John Wiley & Sons Ltd

Our Annual Holiday Appreciation Lunch

We had our annual holiday appreciation lunch on December 16th at the Campus Center. It was a chance to just sit down and eat some good food and appreciate all that we do on a daily basis. We also had some fun games along with a gift exchange/white elephant game thanks to the efforts of Dr. Rana Shahi.

Carol Walters- Paradise Won

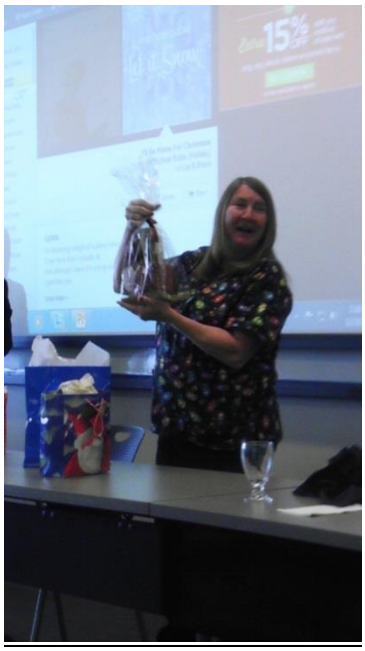
Paradise in the process of being lost

Paradise regained

The official Delegation

The Sweet Smell of Victory

Want to exchange my hat for a bottle of whatever you have



Hey I Won Something Too!!

Resident Case Reports

I am featuring case reports by 3 current residents and one incoming resident. These case reports serve as a good sampling of the varied treatment options that we provide for our patients.

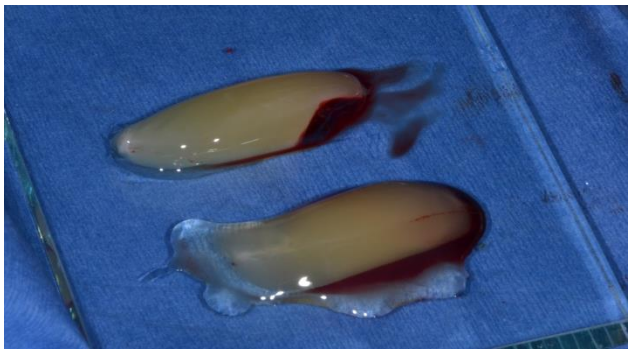
Dr. Bindu Dukka, BDS, MPH (2nd Year Resident)

61 year old female patient with an unremarkable medical history and a non-smoker. Treatment plan included: Extraction of #23,24,25,26 with Ozone therapy prior to extraction to help decrease the bacterial load, Site development for future implant placement, using FDBA+ PRP and PRF (Platelet rich plasma/platelet rich fibrin)

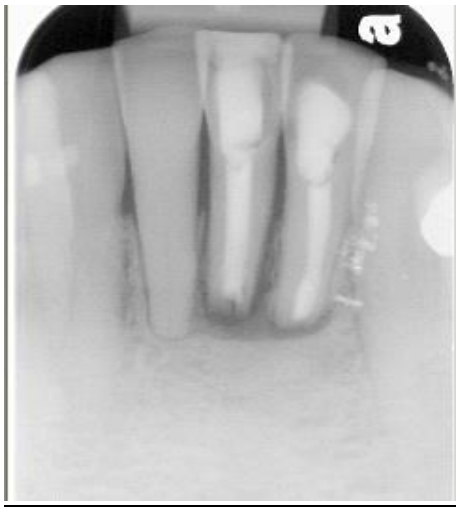
Ozone Apparatus (Courtesy Dr. Michael Gossweiler)

Initial Presentation

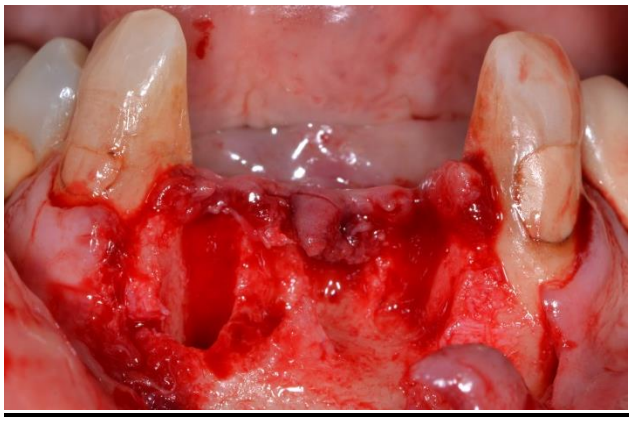
PRF



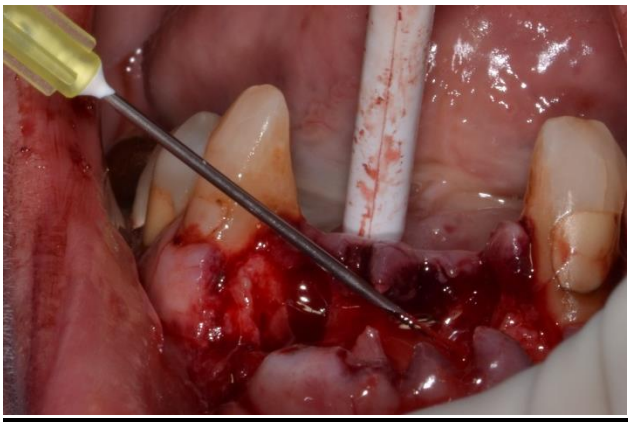
Pre-Op Radiograph



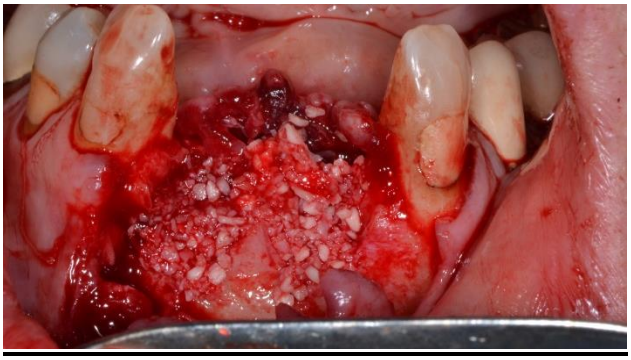
Following Extraction



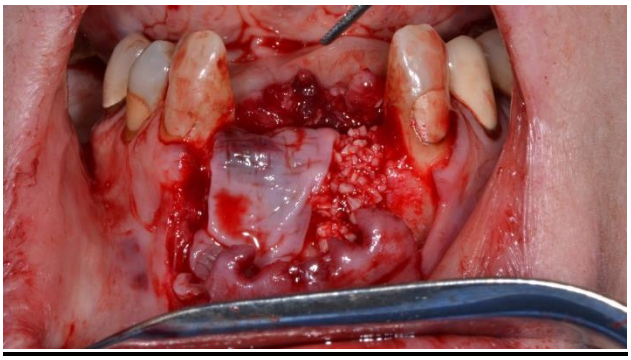
Flushing with Ozonated Water



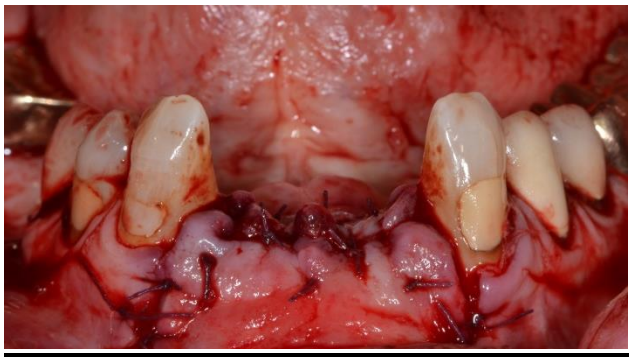
Graft in Place

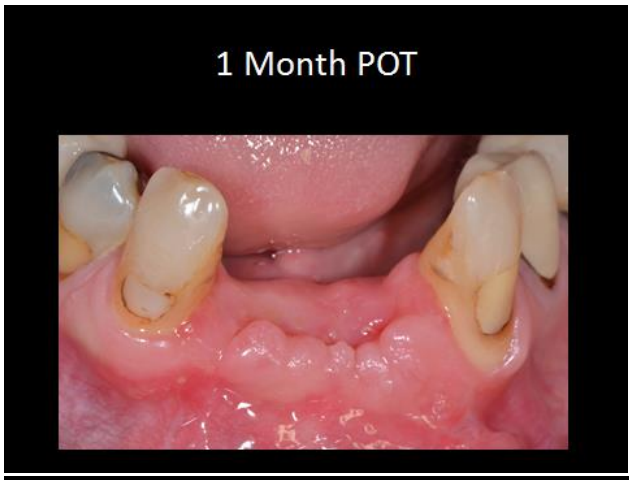


PRF Membrane placed

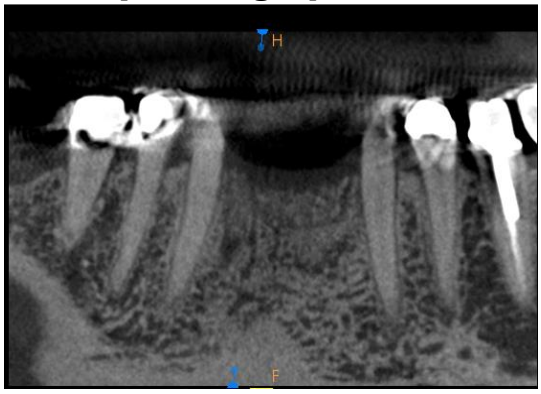


Site Closed





Post-Op Radiograph



Patient is scheduled for implant placement

.

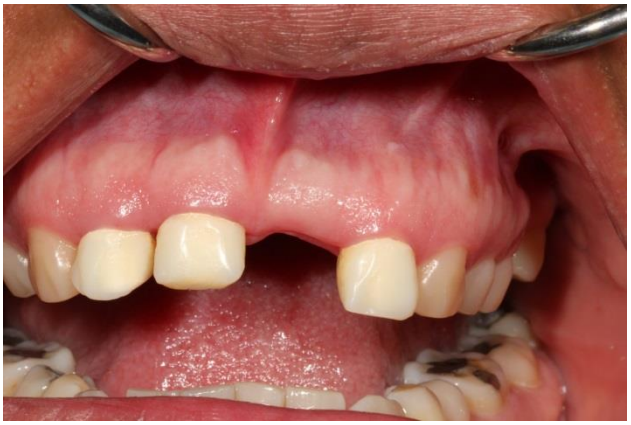
Ridge Augmentation to enhance Fixed Partial Denture Fabrication

Sayij Makkattil, BDS, MDS (3rd Year Resident)

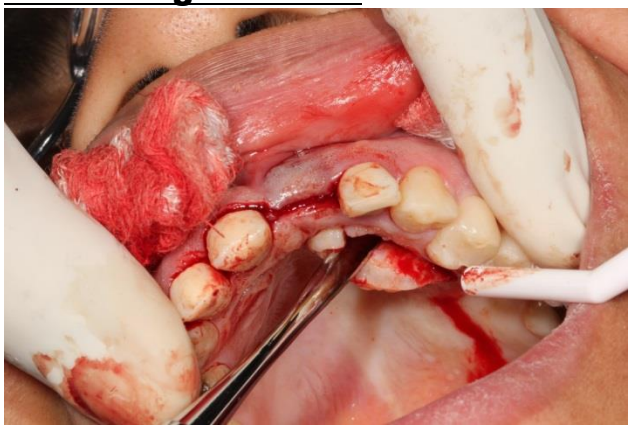
Tatiana de Bedout, (DDS) (4th year dental student/Incoming Resident)

33 year old female, presented with no significant medical history. She had a chief complaint of “My front crowns are broken”. Treatment plan included ridge augmentation with a connective tissue graft followed by a fixed partial denture from #7-#10

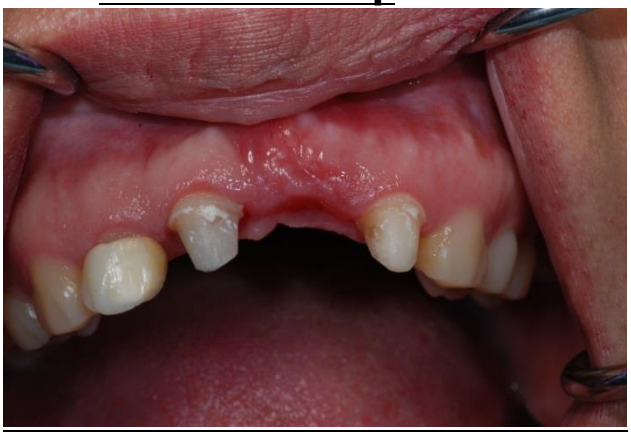
Initial Presentation



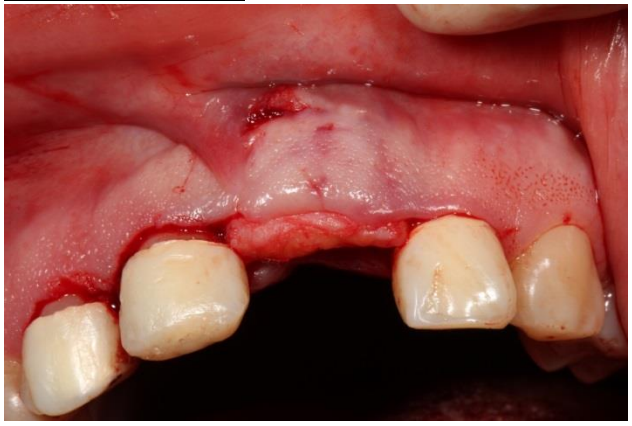
Harvesting the Graft



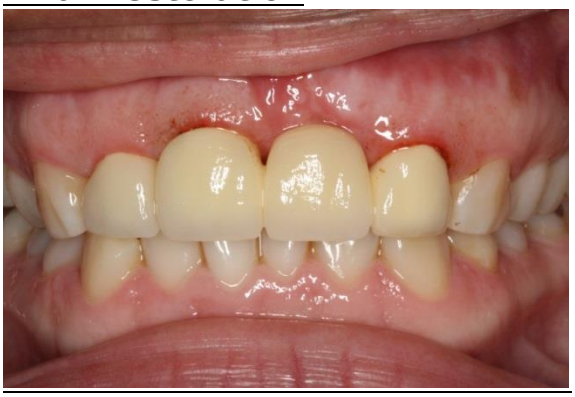
8 Weeks Post-Op



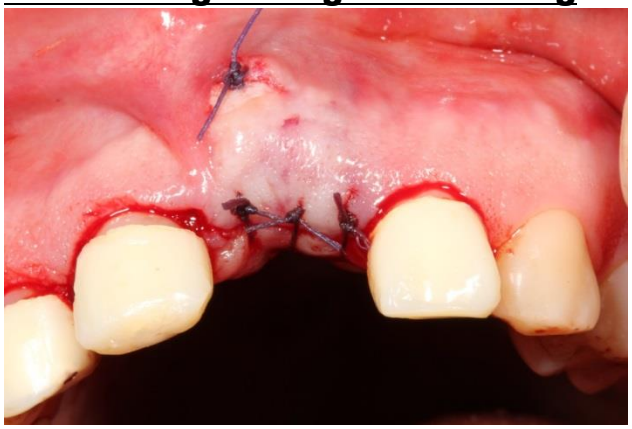
Graft in Place



Final Restoration



Crown Lengthening and Suturing



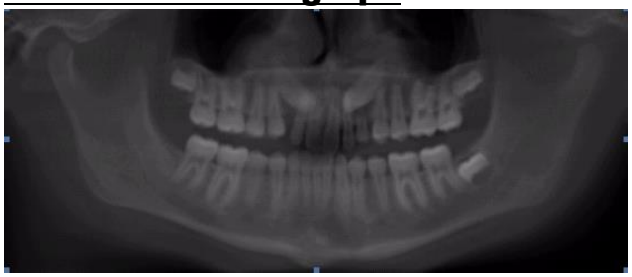
Exposure of Impacted Canine Teeth

Dr. Brittany Lane, DDS (Third Year Resident)

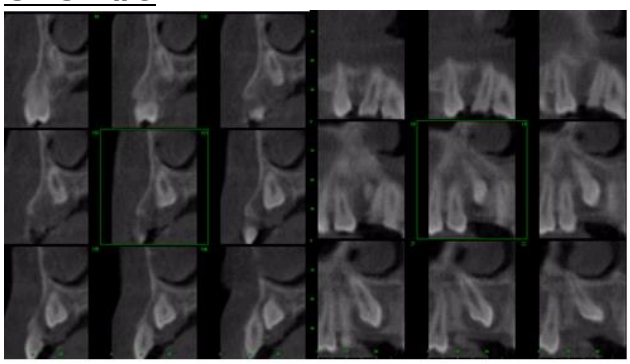
A 15 year old male presented to the graduate clinic. Medical history included the Ehler Danlos syndrome along with findings

suggestive of Marfan's syndrome. He had impacted canine teeth which were planned for surgical exposure.

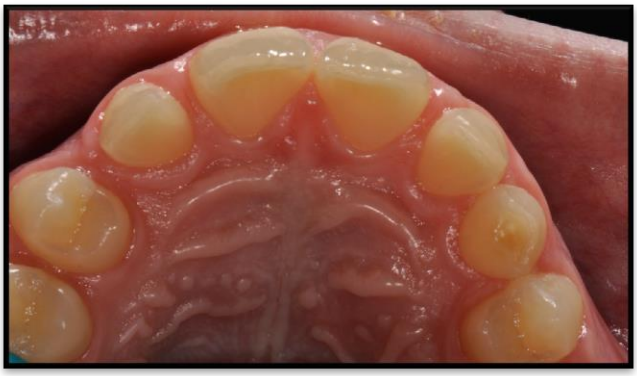
Panoramic Radiograph



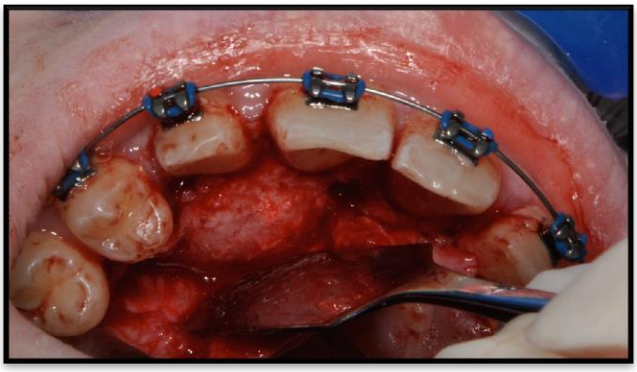
CBCT #6



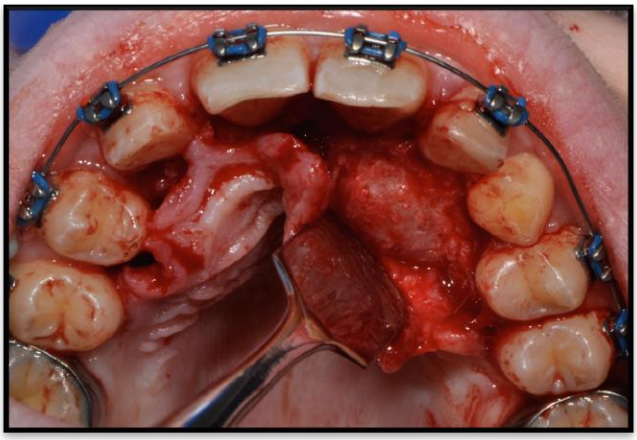
Maxillary Anterior Palatal View



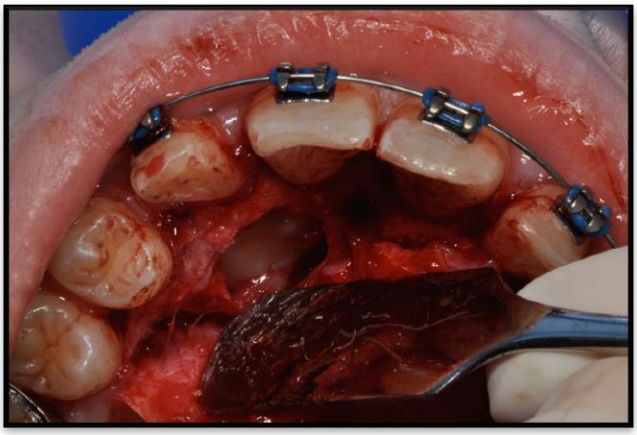
Flap Reflection- Palatal Bulge #6



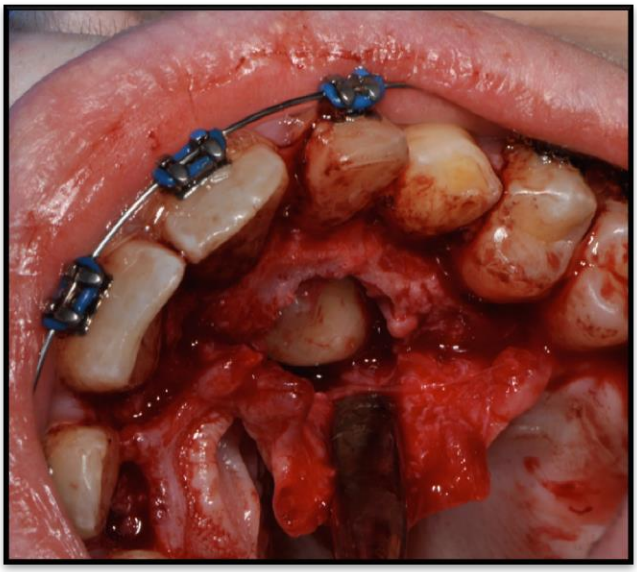
Flap Reflection- Palatal Bulge #11



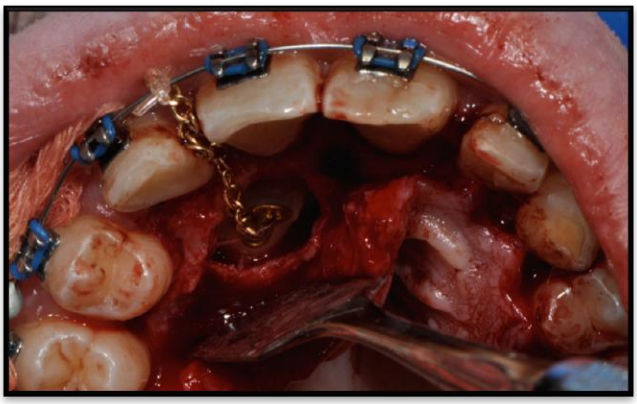
Exposure of #6



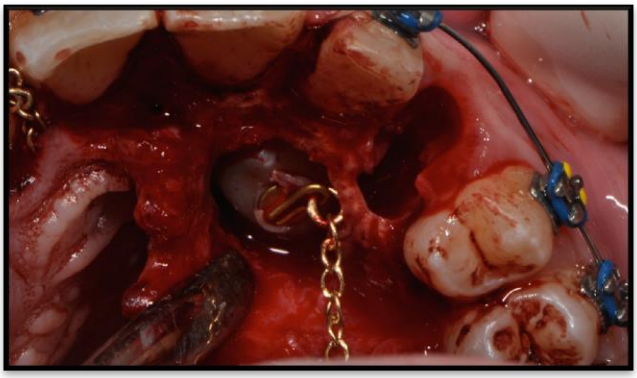
Exposure #11



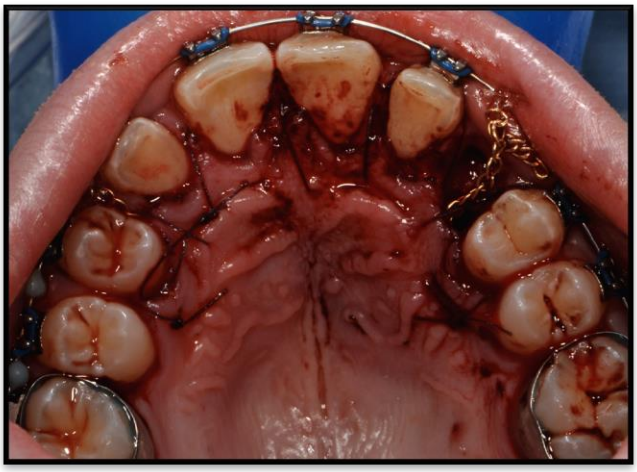
Bonding of Gold Button to #6

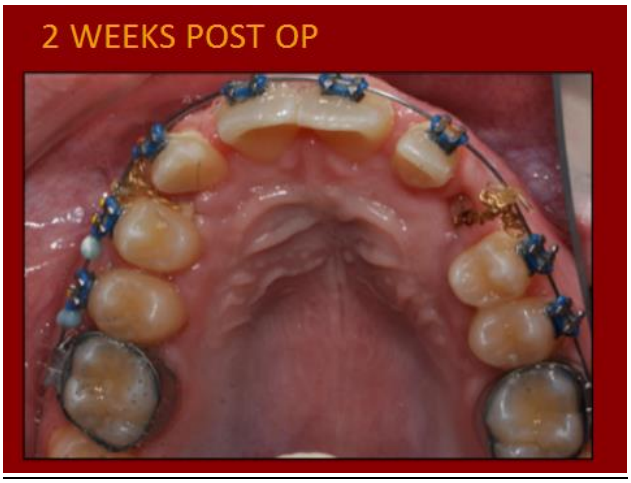


Bonding of Gold Button to #11

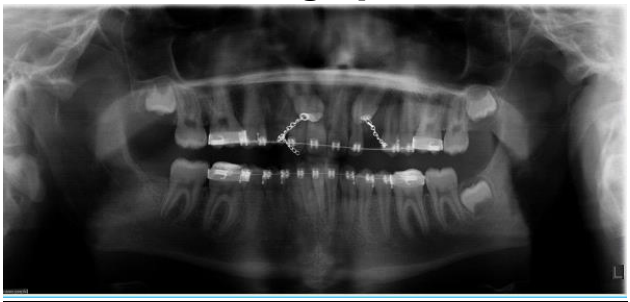


Suturing





Panoramic Radiograph at 3 Months



Treatment is continuing for the patient

Upcoming Events

January 3rd- Faculty Appreciation and Calibration

Continuing Education

February 7th- Faculty Focus Series - Periodontics: Risk Assessment, Implant Considerations and Ergonomics - Drs. Siva Prakasam, Dan Shin, Vanchit John, Ms. Lisa Maxwell and Ms. Michelle Priest

Emergency Drills Spring/Fall 2014

January 28th- Testing Stations- Faculty
Oxygen Use- Dr. Prakasam
Emergency Kit Evaluation- Kathy Thompson
Use of the Epipen- Kathy Thompson
Use of the Glucometer- Dr. Shin

February 25th – Second Year Residents- Allergic Reaction/ Anaphylaxis

March 25th- Third Year Residents- Angina (Chest Pain)/ MI

April 29th– First Year Residents- Seizure and Vomiting

June 24th- Emergencies from the Staff's perspective

July 29th- IV Sedation Emergencies- Dr. Michael Gossweiler

August 26th- Second Year Residents- Hypoglycemia

September 30th- Third Year Residents- Syncope and Foreign Body Obstruction

October 28th- First Year Residents- Syncope and Stroke

November 25th- Faculty- Syncope and Asthmatic Attack/ Bronchospasm

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