

# Classification of Periodontal and Peri-implant Diseases and Conditions

**Please note: The following is a transcription that has been taken verbatim from the presenter's audio. Any edits will be noted.**

## Video Transcript

Marianne Dryer: Hello everyone, it's a pleasure to be here to present my favorite topic to lecture on the AAP classification updates for perio.

This course was up on dentalcare.com. Thank you very much P&G for asking me to renew and update this course. So I hope you like it, I hope you learn a lot from it and it's really a great way to take this new classification system and I think you'll find it very useful from a communication piece. So again I am Mary Ann Dryer, and I am currently the dental hygiene program director at Cape Cod Community College south of Boston, Massachusetts.

I've also done some corporate curriculum development and I'm also obviously an independent speaker and curriculum designer. So very happy to be here. I wanted to provide this QR code that you go ahead and use, and it's got a relatively lengthy handout that you can utilize and the handout has a lot of hyperlinks. So you know a lot of this material can go into more depth and more self-study so I invite you to use this QR code and I will also put my email address at the end of the presentation. I welcome any questions that you may have. It still is a relatively new subject and lots of questions still around it so I hope those get answered tonight and if not, I would hope that you would email me and reach out for some answers.

So the classification of periodontal and peri-implant diseases and condition started in a

workshop that was in Chicago in the United States. We frequently call this the American Academy of Periodontology Classifications, the AAP classifications, but it was very much a global system and it was designed side by side with the European Federation of Perio, and it was meant to be created in the sense of a global classification system that had transportability not only in the United States but all over the world. So really a very interesting system that was a very big group effort and we'll talk about that a little bit more in a few minutes.

So tonight's presentation we're obviously going to discuss the staging and grading which is the brilliance behind this classification system. We're going to look at some evidence-based protocols for specific types of perio. We'll see how periodontal disease classification has changed according to this new classification system. We'll look at patients who might benefit from adjunctive strategies, patients that might benefit from this type of classification system.

We are finding with this staging and grading and using this system we're seeing a lot more perio cases being related to systemic entities. So if nothing else I think that this is brilliant in that respect because it really speaks to those non-responders, perio patients that just don't seem to be responding. We'll talk a little bit towards the end about individualized home care strategies and again I think if you think about this classification system in the

brilliance of it from a nomenclature from a communication piece you can only imagine that the home care regimens are just as understandable when you're talking in terms of staging and grading and you're talking in terms of evidence-based protocols because this was developed very much from the evidence and so I will provide you kind of a protocol outline that you can utilize to get your office going with this staging and grading classification.

I want to thank Oral-B Crest for again inviting me back to present another one of these presentations that is a little more updated than the one I put out about three years ago but I do appreciate all of you that have watched the original one and I think that again tonight you'll get a little bit more depth on the topic.

So after lecturing on this particular topic for the past three years or so I have kind of pulled the common questions that people keep having. So I put together some vast facts on the updated AAP classification system and these are really the core things that people are struggling with. Very important to remember that staging and grading is a classification it is not a diagnosis. That being said it very much aids us in coming to the proper diagnosis but in and of itself it's a classification system.

This new system redefines not only periodontitis but health and gingivitis as well. In the older system we didn't really have parameters around health and what that was as a classification and in order to determine gingivitis and periodontal disease we have to have a very good understanding of what is health. So that's that's part of this new system. Very important to recognize that this system talks about clinical attachment level versus pocket depth and I think that's been the biggest hurdle from people not adopting the system. We have always identified our perio patients and our healthy patients for that matter in terms of pocket depth and bleeding and we don't use bleeding with this new system either. So keep in mind we're going to be speaking several times during this presentation about CAL and whether you're

talking about clinical attachment level or clinical attachment loss.

Powerful communication tool I cannot state that enough. This if used correctly truly helps your patients understand their disease and they're not going to move forward with treatment they're not going to understand their disease until we can communicate it better. So if you utilize this classification system strictly for the power of the communication, I think that's wonderful. So keep that in mind as we go through it.

Another very important point is this new system is meant to drive the appropriate treatment plan. It also provides for the first time I think very definitively, your patient's prognosis. In dentistry dental hygiene maybe more so we really don't speak about a prognosis. We speak about the treatment, we speak about what they have going on, we speak about what we're going to do for them but we don't really talk about what their individual prognosis is and frankly whether you go to the medical doctor or the dentist for that matter and they diagnose you with a problem you want to know how you will respond to it not necessarily how Bob or Jim or Kathy will respond to it you want to know how you will respond to it with your age you know risk factors etc. so this really provides a built-in prognosis that we weren't really utilizing before.

Think about this as well the assessment process that you're currently doing is really not going to change that much. I think again people are thinking this is going to be a big change it's going to be very disruptive it's really not. The assessments that you're currently doing you're still going to do those but it's going to take you to a place of that staging and grading and individualizing your patient's care. At the end of the day don't over complicate this I love the fact that this is recorded you can go back and listen again and I know sometimes with my Boston accent you might have to go back and listen again a little bit more closely but try not to over complicate it there's still some subjectivity on this and that's okay but I truly believe that we're relaying our patients

diseases in much better terms with the system versus the way we're doing it before.

So I think most of you I have seen this slide or seen this statistic and it speaks to the disease status and globally really this speaks to the United States but in the United States about 50% of Americans are walking around with periodontal disease and that's not gingivitis, gingivitis is a much higher number and truly at the end of the day I think the itis we should be focusing on is gingivitis.

Oftentimes I will present this program and show this slide and people kind of look and say yeah I know that I think we've become complacent with not being able to really turn perio around especially those early cases and those are the ones that are most difficult to classify truth be told when you're talking about gingivitis versus a Stage I perio but something has to happen to turn these numbers around we have too much disease going on access to care certainly is an issue but I think it's also comes down to us as practitioners you know do we need to improve our identification of this disease do we need to look a little bit deeper in understanding why our patients are exhibiting forms of inflammatory disease so the period only involve patient we have to ask ourselves are we assessing them accurately not only from a dental standpoint but medically are we asking the right questions are we putting the pieces together are we then diagnosing them properly and are we treating them appropriately and that speaks to the treatment plan that we're giving our patients and if we utilize this classification system correctly then we will in fact be providing the appropriate treatment and that feels good to have that be more definitive and are we practicing to the evidence. I will say again, it's very easy to tell Mr. Jones that we're using this classification system similar to the medical community of staging and grading and it was derived strictly from the evidence so it's not really your opinion or your docs for that matter it is the opinion of the global workshop with the AAP and the EFP that looked at 20 years of research to come up with this new system again I think that we understand the oral systemic link we hear about it all the time the correlations

with diabetes, with cardiovascular, rheumatic diseases, but do we really understand that piece that has the chronic inflammation. Let's listen to this video for just a sec:

Video "From a disease standpoint when we have different situations in the mouth we respond, our body responds with inflammation and that's where we start the inflammatory cascade that's affecting most these inflammatory diseases. I want you to think about this inflammation and there's a there's a concept called inflammatory burden when you get more inflammation in your system the accumulation of that will have a tipping point where you tend to have inflammatory disease. Inflammatory diseases are heart attacks, strokes, diabetes, rheumatoid arthritis, various cancers, kidney disease, pancreatic cancer, the list goes on and on and on. We're in a state of chronic inflammation and that's the basis for every disease that everyone has it's the basis for cardiovascular disease, it's the basis for cancer. When you're dealing with periodontal disease there's this entire inflammatory cascade going on that people don't understand. When you get a cut for example okay your body is set up to heal that cut and that goes through a process of inflammatory response to solve the problem and resolve. If you always have a chronic inflammatory bacterial condition in your mouth then you never turn off that process of inflammation, in other words it never gets the opportunity to resolve and go away. There's just too much the body can't react to all of them and the body gets sick."

I think that really helps us understand chronic inflammation and why when they come back in six months preferably three months, we're not seeing things resolved because it's chronically causing that inflammatory process, breaking down the tissues breaking down the apparatus and clinical attachment. So we really need to get aggressive with the three-month re-care and I think you'll understand that a little bit more so tonight. So again this was the group that put the classification system together this was the group that attended the workshop in Chicago. And they came up with the multi-dimensional staging and grading framework. And basically the staging was going to be

an indication of the severity of the disease by the clinical attachment level or loss and the complexity of the disease management and that's where we do consider the pocket depths. This is at the time of presentation this is at the time when you're seeing the patient whether it's for the first time or whether they're coming back on a re-care appointment and you're going to start using this situation that initial impression that you get is what you're going to base the classification on. You're going to be looking at the clinical attachment level understanding if there's loss and also looking at the pocket depth because the pocket depths can be very tricky to navigate and that's where we start talking about the complexity and if we have furcation involvement etc. It's more difficult to treat a patient that way. Also think about you know we code everybody we use treatment codes when we do quadrant scalings or quadrant debridement. And you know we're not taking into consideration the different complexities that patients present with and I hope that someday we really move towards diagnostic coding more so across the board versus just the treatment code. So the staging is the clinical attachment level and the complexity of the disease management while the grading considers the supplemental biological characteristics, the risk factors. It's all about estimating the likelihood that your patient's disease is going to continue and at what rate. I can like to consider the grading a crystal ball you're looking to see how they're going to progress in the future, and that's intuitive classification intuitive diagnosing and utilizing a treatment plan according to the patient's prognosis. So that is the difference with the staging and the grading and we know in the medical profession they do this as well, certainly with other criteria.

So the last time the classification system was updated was 1999, this was a long, long time ago. And truth be told not many people were using that AAP classification system here in the States anyway. We got used to using more insurance codes for classifying our patients. But truly there's two major reasons why we needed to move forward and update this system. And again it was to enable not only the proper diagnosis but the appropriate prognosis, for the

communication piece for the education piece so patients would start owning their diseases. They're not, a lot of surveying was done prior to kicking off this workshop and it came about that patients in general were just not understanding most of the time what they were being told as far as their periodontal condition. So it was also created to ensure proper implementation. Frankly we're waiting too long to get in there and treat early perio, and there's a variety of reasons why we do that. But we're really starting to treat a patient when they're already down the pike so we want to think about getting in early looking at a patient's risk factor so we can think of it almost like treating prediabetes or pre-cancer.

I want you to think about that as we go through the program, I like this slide because it speaks to the fact that this classification system, the development of it was also intended to improve the clinicians understanding. Our understanding of the disease progression, and it's not what we thought about in 1999 or years before that. We didn't really think about the risk factors as much and we didn't really understand chronic inflammation the way we do now. So this was this is not only to you know classify the patients in a more global way it's to help us understand those disease factors that perhaps we were not looking at before. So this new classification system clearly distinguishes cases that should respond to standard principles of periodontitis prevention and treatment, and those that do not. There's approximately 20 to 25 percent if not higher that do not respond to standard treatment if all the levying the level playing field was, the same person's experience same instruments same time frames. There is a good subgroup that just doesn't respond. Also it distinguishes cases that should benefit from advanced knowledge skills and experience, which really equates to clinical expertise. In teaching in a dental hygiene school the past couple of years the students have been tested on the national boards on this new AAP classification system. So they come out of school they know it they know the talk they know how to stage and grade. But it is you, the seasoned clinicians the clinicians with expertise that really understand the nuances of risk factors and different periodontal states.

The students don't really understand that yet, so please welcome them be open to utilizing this system because I think it's a win-win for both seasoned clinicians and the newer ones that are coming into your office knowing this. And also cases that should benefit from multi-disciplinary care or interprofessional approach. We've been talking for years about that medical dental connection the oral systemic connection. You know but where are we with integrating with medicine? Where are we with having meaningful communications with internists with endocrinologists? I think this is a pathway to that and I believe the medical community will understand a Stage III perio is not good. They're going to understand the risk factors that are associated with that stage in grade. So if nothing else it's going to get us closer to that oral systemic way of practicing which is I think what we really want to do.

So this was the old 1999 AAP classification system I always think it reminds me of a cheesecake factory menu, there's so many choices and I think that's one of the major reasons that it wasn't utilized chair side. We all we know now that a lot of these entities that came about on this classification update it's just not the case anymore. So as I said the past 20 years of research was examined by this workshop the group. They split up into four or five sections, and one took gingivitis, one took implantitis, one took perio, and they looked at 20 plus years of systematic reviews meta-analysis high-level research. And they decided at the end of the day no it's not that way there really isn't that much of a difference between chronic and aggressive periodontitis the research just doesn't deem that there's a delineated difference. So I think that at the end of the day we were watering down our classification and therefore the diagnosis wasn't being accepted and understood by our patients.

So this is again we move to this newer system. Some of the nuances that came out of the system, again as I said earlier there's no evidence of a specific pathophysiology enabling the differentiation of cases of aggressive versus chronic. So you'll see in a few minutes the periodontitis is one entity with smaller subgroups. There's little consistent evidence

that aggressive and chronic periodontitis are different diseases, so you know a lot of these different small nuances were big as far as what we were classifying our patients and then in turn how we are treating them. Also the classification system of the past was based only on disease severity and that fails to capture the important dimensions of an individual's disease. Complexity which influences how we go about therapy. And risk factors as we said before.

Now bleeding on probing that's always one that is I guess a head scratcher you could say when I say that bleeding on probing is not part of this classification system. We generally assess a patient and if there is bleeding going on we know that they're in a disease state that there's an inflammatory process going on. The bleeding in and of itself is not used to stage and grade the patient. And it again doesn't mean that we're not considering what's going on with the bleeding but it does not change the initial case definition as defined by the CAL. Not the pocket depth not the bleeding but the clinical attachment level or loss. You treat a patient do quadrant scaling etc. and they come back preferably in six weeks, but if they come back at even a three-month mark and they're still bleeding in certain areas this still active disease going on. And that's where that 4910 comes in and we'll talk about that in a few minutes.

So staging is the severity of disease at the time of presentation. Plus the complexity of managing that disease that's where you're going to get your stage okay. And we'll talk about the fluidity of staging and going from a stage two to a stage three things like that. And the grading is information on biological features of the disease the rate of the patient's progression and risk assessment.

I think this is probably the way that we are "classifying" our patients now. This is what is recognized by insurance companies you have a type 0 which is clinically healthy, type 1, type 2, type 3, type 4, etc. So that's what we're using now. And I think it's time to stop that need to be totally insurance driven or directed absolutely have to utilize your patient's insurance, but we want to go to a

more scientific evidence-based approach of classification to help our patients. They don't understand this. If you would show the average person this chart, they're not going to understand it and it's going to be very difficult for you to understand it. As it stands right now, and they should be able to understand their disease.

So this is the new system as many of you have seen. Very clean more streamlined it discusses periodontal health in more depth, talks about gingival diseases in a different way than we've talked about it before. It also talks about health on a reduced periodontium. And that is really a game changer on some level. That's where we can almost start bringing in that 4910 beside a 1110, and I am NOT a coding expert but at the end towards the end of the program I'll show you some information on being able to really maximize someone's insurance and get them in every three months accordingly. Periodontitis as you can see is broken up into necrotizing and we now know there's a lot more cases of that than we thought, straight periodontitis, periodontitis as a manifestation of systemic diseases, and periodontal abscesses and endo-perio lesions. So those are our 4 categories of periodontitis. We also have a subdivision or a separate classification of periodontal manifestations of systemic diseases and develop developmental and acquired conditions, so we'll talk about some of those entities as a category as well. And then finally we have the inaugural rollout of a classification system for our implants and very very important. People are spending four, five, six thousand dollars on an implant and we are the gatekeepers dental hygienists and the doctors. And we are the ones that should really be assessing the health of those implants very individually each time they come in. And I will show you how we classify the implants, and it's a little bit different than how we classify the natural dentition.

So some of the key differences, okay again the older classifications were based almost entirely on severity of past destruction and current demonstration of inflammation, bleeding. We also used to think that most patients responded to bacterial overload the

same way and should respond equally with well standard treatment. And we know that's not the case. Today's system looks at severity of past destruction but also takes into account missing teeth. So if the patient has four five missing teeth due to perio then you know we know that the biggest indicator of future periodontal development is past periodontal history similar to caries. We're also looking more at the complexity of managing these different patients with their systemic entities, with their unique furcation anatomical involvements. And for the first time we're estimating future risk, and that's almost the biggest bow on this package. That we're now talking about prognosis, we're able to say "Mr. Jones you are a Stage III Grade C perio, if we can get you to stop smoking your prognosis is going to be much better. Let's do something to move you to that stage B or me excuse me grade B or even an A". The hyperlinks that are in the handout that you might have downloaded really speaks to the specificities of this classification. So you have to look at things like the clinical attachment level cannot be from reasons such as traumatic occlusion, such as bruxism, things like that. We're only considering clinical attachment loss due to periodontitis, okay. Really want to make that very very clear. Also the interdental clinical attachment level has to be detectable at greater than or equal to two non-adjacent teeth. So it can't just be one tooth involved it's a certain parameters is what I'm trying to say and again you definitely need to read into this a little bit deeper but the high notes are coming to you tonight that we're judging and we're staging and we're grading these patients according to the clinical attachment loss.

Okay, so let's get going and start understanding the classification of periodontal health, gingival diseases and conditions. Basically three levels of periodontal health. We have pristine periodontal health, and there's not many people watching this that have pristine periodontal health, myself included. We have well-maintained clinical periodontal health and again those are 1110 prophylaxis patients. They are structurally and clinically sound. And then we have that third area I spoke about where you have periodontal disease stability on a reduced periodontium. So why

is that periodontium reduced, because of past destruction. Maybe they had surgery, maybe they had non-surgical periodontal treatment and so the tissues have decreased the tissues have subsided we don't have that in for inflammation going on so the patient is stable. The patient is in remission. And if you leave with only if you were tonight make sure you start using remission, because that is the goal that is the goal of cancer with staging you want to get your patient into remission, and that's where those three month recare are critical.

So periodontal health, you can see everything looks very very nice, there's no bleeding on probing, there's no attachment loss no recession etc. So those cases are you know kind of few and far between, as far as strict periodontal health. And then we see this patient who the gum tissues beautiful the gingiva was stippled, nice firm healthy tissue but you can see areas of abfraction on the right side, you can see the recession, so there is some attachment loss but this patient is still in a periodontal healthy state. Okay and let me just go to one more before we talk about gingivitis. And this would be an example of your patient that has health on a reduced periodontium. And again that's where you bring that prophylaxis, the tissues are healthy they're not bleeding they don't need that periodontal maintenance therapy, so something to think about. I know within for years and years and years we talk about once a perio patient always a perio patient kind of opened up my eyes. Some things I've been reading this past year on that entity.

So gingivitis, let's talk about gingivitis. Again I really really think that it's the "itis" we need to focus more on. So the workshop addressed unresolved issues about classifying gingivitis. The fact of the matter is we are very very often telling our patients "Okay Mr. Jones the good news is you have gingivitis, and this is reversible", fact of the matter is this really not a lot of good news there because most times gingivitis will slide into an early periodontitis. And if we give our patients the sense that this is great this is good news, it's reversible, and if we don't either get a very aggressive maintenance schedule and home care regimen it is going

to slide to a to a periodontal Stage I. So I think we should start taking away that verbatim of the good news is and simply start using this classification system which offers the value of stating, "Mr. Jones you have a case of gingivitis", similar to you have a case of the flu. And then we break it down even further than that.

Think about digital bleeding as we talked about earlier we are not staging or grading gingivitis, okay. So we are looking at factors that bring us to the diagnosis of gingivitis and we'll talk about that 4346 code and how we treat gingivitis and home care regimens. But we also need to understand that gingival bleeding precedes other clinical manifestations. So if the bleeding is going on the next step in the processes is tissue and clinical attachment breakdown. It's the most accurate clinical sign of gingival inflammation it produces a bacteremia which we know gets into the system which is never a good thing. I don't think we're really considering that as much as we should. And the American Academy of periodontology recommends sites with bleeding be measured at every regularly scheduled appointment to evaluate the status of health.

So the dental the diagnosis of dental biofilm induced gingivitis is graded in the sense that we want to understand why this patient is having the gingivitis. What is this patient's prognosis if they start using a power brush, if they start using stannous fluoride type toothpaste. What is their prognosis. So we do want to grade what's going on but we're not staging these patients because there's not clinical attachment loss at this point as far as the bone structure. The new system has introduced the term in incipient gingivitis, and I know you are familiar with the term incipient from caries. So incipient gingivitis would be less than 10% of the mouth is affected. So very very early mild case of gingivitis but certainly something that you want to start turning around very specifically with your patients. It then goes into a mild gingivitis, moderate gingivitis, and then severe. And I cannot stress this enough if you're not giving your patients a percentage of their bleeding points in a numeric value. They're not going to understand this bleeding here this bleeding here there's a little bleeding here that they won't

digest that. So whatever way you find your bleeding percentage through your software programs, you want to be able to say you have a you know you've a bleeding on probing score or a bleeding score of 50%, 60%. And you want to get them to get it down to 10% or less. People work beautifully with numbers, people want to know their cholesterol they want to know their blood pressure because they work, it makes sense to them. If that gets better at the next appointment, so we need to be more black and white and give our patients numbers.

We can also look at it the gingivitis can happen certainly on an intact periodontium which is most of our cases of gingivitis. And again we have localized and generalized. Reduced periodontium with no history of periodontitis. So these are patients that might have had gingival recession, crown lengthening, they may have a reduced periodontium from bruxism things like that. So they will also be classified with a case of gingivitis according to the severity. And then finally we have those reduced periodontium patients, patients that have had periodontal surgery, periodontitis treatment and they have been stabilized as far as the CAL but they're showing inflammation of the tissues. So that's still a gingivitis case because it's not further clinical attachment loss. And that's where you know that's one of the points I think it's a little bit hard to get our heads wrapped around.

We also have a subcategory that's certainly much smaller than biofilm induced gingivitis, and that's our non-biofilm induced. And this speaks to different viral, or fungal, or bacterial origins, reactive processes, gingival pigmentation, things like that. That we are really seeing the effects in gingivitis. So this is not going to necessarily improve with home care we have to get to the bottom of why these patients are exhibiting this gingivitis. We did take out puberty associated and menstrual cycle associated in this new classification system there was not enough evidence to substantiate that entity. It was found that most of the patients had plaque biofilm initiating the gingivitis in the studies, but very interesting to find out why your patient is having the gingivitis if it's not a home care situation. And that's why

you know probiotics are coming onto the scene. Prebiotics, probiotics to treat people that have microflora disturbances. So we have to look at that whole microbiome to truly treat and diagnose the gingivitis accurately.

These are some more non biofilm induced gingival diseases and they're hard to distinguish certainly with the with the more advanced cases there's always you know perio combination periodontitis. But sometimes we just have reactive processes that's causing the inflammation and we want to understand if it's medication, medication induced certainly or hereditary etc. We need to understand it's not going to be treated with just upping the home care regimen that being said it certainly helps with the whole healing process.

We certainly have some endocrine nutritional metabolic, and these are all within your handout as well. Mainly our focus tonight or during this presentation focuses on the biofilm induced and in order to figure out why they have this type of gingivitis it generally has to do with local predisposing factors. There are systemic reasons, so the local predisposing would be ortho, you know you know open contacts of posterior composites, for example, ill-fitting restorations, crowding, things like that. But we also have systemic modifying factors such as smoking, metabolic, and as we talked about the other entities. But local predisposing is probably one of the major ones that causes this gingivitis biofilm retention.

Implants, critical to have a very specific precise home care regimen for your implant patients. We're finding that if we don't get mucositis under control with our implants that it will quickly lead to an implantitis, which we know eventually can lead to implant failure. So what it's paying most close attention to those implants and teaching them how to be biofilm free.

So this is an interesting slide and it kind of goes a little bit deeper than my program I used to have on here before and all I want you to look at here is the line that's highlighted in red talking about bone loss or bone level from the CEJ. So if you see in health and in gingivitis the



height of the bone is approximately 1.5 to 2 millimeters below the CEJ. Okay, once you get into the Stage I periodontitis the height is more like 3 millimeters, and that's important to keep in mind because people are very frequently getting the pocket depth confused with the clinical attachment level. Okay and this is going to come into play when we start looking at our radiographs our vertical bitewings. We need to take into consideration that there's about 2 millimeters below the CEJ that's not considered bone loss it's still considered healthy.

As I said gingivitis is not staged but we should grade it to find out what's going on what's causing the gingivitis. This is just to kind of show you before we talked about anything up to close to three millimeters you're still in somewhat of a safe zone. We'll see some more pictures of the different types of AI that's out there that's going to really help us with our clinical attachment loss, but keep in mind very important gingivitis is not showing clinical attachment loss. And here's another software. Again we'll talk about this in a little while we get into periodontal disease.

Critical with gingivitis critical with periodontitis certainly as well critical with our patients that are healthy that we want them to maintain their health that we have very clear and concise oral hygiene instruction in my opinion at the very beginning of the appointment. It's I think a good idea if you can to have them brush their teeth before they even sit down. You can see how they're brushing, you can see their aggressiveness, you can see on some level the speed in which they feel that they're you know complete. It starts the discussion of home care at the beginning versus the end. Studies show that if you wait till the end patients are kind of tuned out. So we want to talk about treating gingivitis, showing them different techniques, talking about power brushes and the benefits of those. And again they're much more open to hearing about something like that at the beginning of the appointment versus the end. And we'll talk about power brushes and different types of toothpaste in a few minutes.

So gingival diseases. You know we always kind of thought in terms of these three things and

reversible is probably the one that many of you are kind of - that's your go to statement with your patients. But I think we want to think more about the lines of preventing gingivitis to begin with. So think about gingivitis as your pre-cancer as your pre-diabetes and we want to give our patients solutions home care regimens treatment plans. If we need to do a gingivitis type appointment type scaling appointment, then that's not a healthy prophylaxis 1110. We want to prevent gingivitis but certainly we're trying to prevent periodontal disease. And our patients will fight us on that when we say we need to do more than a prophylaxis. They don't understand why they need to come back for a second visit. You know I like to say if it took you five years to get everything into your garage, to clean your garage out it's not going to get cleaned in one afternoon. And we need to find analogies that help the patients understand where they are with their mouths and what is needed to get them into remission and get them into a healthy state. They want their teeth cleaned that day and I think I'm singing to the choir, I think all of you know that. I think sometimes we're too sensitive of the patient's wallet, and we need to be certainly. But I don't know about you, going to the medical doctor, I don't want to be soft-pedaled, I don't want to hear a kind of version of my medical health. So this gives us a very definitive stage and grade and or gingivitis level that's more accurate and we're going to give our patients ways to treat it.

So let's talk about that gingivitis code for a few minutes that 4346. Which some of you use some of you is quite successfully, I think some are still having trouble with it so I have a few slides on best practices utilizing it. I think some of the big type things is that there cannot be clinical attachment loss okay. Also 4346 is not aged based so you can use it for children. You can also use it in a pretty close time frame to a 1110 so you can follow up with a 1110 within really a few weeks you want to wait to see if the gingivitis therapeutic appointment worked. You need at least 30% of the mouth to be exhibiting gingivitis, okay moderate or severe. So this certainly wouldn't be used on an incipient case and intraoral photographs are extremely helpful. According to the ADA it's "scaling in the presence of generalized

moderate or severe gingival inflammation” and it’s “after an oral evaluation”. It’s “the removal of the plaque, and calculus” and this is about the gross debridement code this is your gingivitis code which is really underutilized right now. “It is indicated for patients who have swollen, inflamed gingiva, supra bony pockets in moderate to severe bleeding on probing”. Pseudo pockets. It should not be reported in conjunction with prophylaxis on the same day scaling and root planing or debridement procedures. You want to tell your patients that this is the therapeutic service based on the diagnosis of gingivitis. Based on that classification. Again there’s no waiting period between 4346 and the 1110, but you want to give enough time for healing. It is a full mouth procedure and it needs to be completed in one day. The perio charting needs to go in with the insurance to show that there are no areas of clinical attachment loss, that this is in fact pseudo pocketing.

So after spending some time talking about the gingivitis code the 4346 ,I think it’s a great time to step back and ask ourselves you know what is our role as healthcare providers. And beyond the treatment of gingivitis we really have to go back to that key important step of helping our patients take care of their oral health at home. So I wanted to just throw a study and I thought was very interesting that was done by the International Federation of Dental Hygienists, and this was done between the April and May period of 2021. And I put this in here because it has some very interesting findings as far as what we believe globally as dental hygienists to be important. What we would emphasize on and I think it’s a good way to kind of speak about this home care piece.

So this was to understand global dental hygienists’ knowledge and practices regarding the relationship between oral health and overall systemic health. So I think that you’ll find the interesting findings. So that we basically had hygienists that were in the field for more than 25 years that was 40% of the participants. We had about 22% in the 16 to 25 years of practicing, as you can see. 24% in the 5 to 15 years, and less than 5%, excuse me, less than 5 years of practicing 14% in this study. So this

was kind of what the study group looked like and again it was international it was from all over the world. So we looked at in this study where were the work settings community health, hospital, educational, corporate, private practice etc. Because I think there is a little bit of a difference, I think it was a good route to go because there’s a little bit of a difference in all those settings, I think you would agree. Also looked at the educational backgrounds of dental hygienists all the way up to the doctoral degree. And as you can see most had a diploma or a certificate and all the way up to bachelor’s degrees. And again you know that’s a question the more education we have is it necessarily in that oral systemic piece, is it necessarily in looking at the oral microbiome, may play a role. And then this this basically slide says we asked the participants “are you aware of a link between oral health and the conditions below”. And I don’t necessarily have to read these to you but as you can see people are very dental hygienists are very aware of that cardiovascular piece, diabetes, and as we go down a little bit pregnancy, or cancer. And I think we all know that the several outcomes now and the information tends to be a little bit less in those areas because it’s really non-refutable that cardiovascular disease and diabetes are linked to oral health care. So that slide is not really that unusual. And this is how often do you perform the following activities and again we’re talking about oral hygiene teaching our patients how to do better at home. And this is some interesting findings as far as what a hygienist doing globally. So I’ll give you a minute to look at that. I think it’s interesting the 87% percent counseling about diabetes and health care, that’s promising that’s excellent. I step back and say what do the patients then do with that information. And then, what did these practitioners believe regarding the relationship between dental plaque biofilm bacteria and gingival inflammation. Did they talk to their patients about what would improve their patients and is there a need for more medical dental interprofessionalism. So again here are the findings to those questions. I’ve been a part of the International Federation for several years I would highly recommend looking into it they produce some great studies like this. But as you can see all on the higher end of believing this,

believing that they want to improve plaque control. I guess my question would be from the belief stage to the action stage how much of that is really happening. And then as you can see these are pretty interesting questions about where they believe their patients understand. And I guess that's where we need to step back and turn that mirror around and ask ourselves are we educated on the latest up to up to date chemotherapeutics, tooth brushing adjuncts. Really just bacteria biofilm the micro flora things like that are we up to date. So I think these are interesting as far as whether the participants agreed or disagreed. And as you can see most definitely thought that the patients understood plaque control is important. But again what was the action step. And then this just talks a little bit about do they have all the information they need and that's a question I will say again we need to ask ourselves. Maybe part of that is why you're on this CE recording to get more information about this staging and grading and how the grading piece, the risk factors, understanding you know the microbiome and the tissue response to plaque and bacteria. I think it's very very important very important question to ask ourselves. And then these questions, I think you can read them to yourself basically, but they were asked how important are each of the following oral health practices. And as you can see obviously reducing bleeding, regular dental prophylaxis, managing perio, they think it's very very important. So you know the importance is out there. And as you can see when we get down to controlling plaque regrowth with antimicrobial mouth rinses interesting. So this, this is a very interesting site that you can certainly access it tells a lot about what our profession thinks about what is best versus what they are actually delivering to their patients. So interesting slide and study to kind of go into you know, what are we recommending why are we recommending these things.

And I think it's important to begin by looking at some outdated misconceptions. And some of those misconceptions are that the mechanical action of the brush is all that a patient needs for good oral health. How many times in your practice did you hear either in your own head

or your dentist saying "yeah if they do a good job with the manual toothbrush they don't really need those mechanical brushes". I think you know back in the day that was relatively common thought. I think now dental hygiene students in particular are very educated on why they should be using a power brush, certain chemotherapeutics, certain toothpaste more so now than maybe back then. There was also a belief that all toothpaste are the same, and we know that that is not the case and that we use certain toothpaste for certain conditions, individual risk factors. So I think a lot has changed in that and we'll spend a little time talking about the differences and why we should lean more towards a stannous choice. A sodium fluoride toothpaste is all my patient needs, I think that again you'll see the difference with that as we talk about stannous. It's funny colleagues that are my age, seasoned not old, we tend to really still think about stannous in the world staining and you know a perio only treatment. So I think it's always important to you know revisit what you're thinking about and test it and see what's out there see what the newer studies. And that specialty toothpaste are only for patients with problems. And that's really not the case as well, so let's look at some of those thoughts. Here are some products that I guess you could consider them specialty products they are there for sensitivity, they are there for bacterial reduction, they're there for xerostomia and dry mouth. So that there are different medicaments out there to treat different things but it sure would be nice if we looked more at something that controlled many of these factors, and certainly prevented them.

So how does stannous fluoride work let's talk a little bit about stannous fluoride. Stannous fluoride and the oral microbiome. And I think that's where we really need to look at what does stannous do to the bacteria. So let's think about soft tissue benefits. We know stannous fluoride inhibits plaque growth, and it does this because it has antimicrobial properties that drive bacterial changes to reduce toxicity. It targets the pathogenic red complex bacteria, so it's not only decreasing the gingivitis associated with bacteria but contributes to an increase in health. And that's very important it has a

stabilizing effect. So think about that, you want your patients to be stabilized and stannous really does that as far as affecting the bacteria and the harmfulness of the bacteria. We can look at stannous fluoride is an important part of a hygiene program for peri-implant disease prevention and as we go a little further in the program I'm going to speak about implants as far as how we now do the classification of implants. Finally we have a way to look at those implants and classify them separately than the whole dentition. And that's important these are 5-6-thousand-dollar restorations, and it's very important that we look at those individually and take care of those. We are the gatekeepers to the health of implants when we start seeing this peri mucositis, it's similar to a gingivitis. So we want to be using something again that can inhibit plaque growth, that can reduce the metabolic production of the bacteria, and also suppresses the pathogen virulence. So very very important for implants and we also know that the stannous can create more of a neutral environment and that's critical as we're learning with implants as far as keeping the pH at a good level.

And let's look at the comparison or the magnitude of the benefit is it clinically relevant? And again we always want to look at clinically relevant versus statistically relevant, very important to understand the two. So using evidence-based decision making we can confirm its clinical relevance. Look at this example it's a meta-analysis of Crest stannous paste shows a 51% reduction in bleeding sites in 3 months when compared to negative or the sodium fluoride control. And again we tend to go to sodium versus the stannous. And then to compare flossing at two weeks showed a 40% decrease, and the prophy at one week was between 40 and 66 %. So unrealistic to believe that there will be a prophy on a one-week basis. And I think that that's very very important to get a 51% reduction in bleeding sites in 3 months is huge. And I have said earlier in the presentation, and we'll say it again towards the end, it's very important to give our patients numbers. If we can give them a percentage to work with so they can understand just like the cholesterol just like their blood pressure if we can understand

what the numbers are and share that with our patient. If they have a 90% bleeding percentage, we want to get them down. So to see a 51% reduction in 3 months using a stannous fluoride that, that's amazing. And we need to explain that to our patients because it's not just putting the brush in the mouth as we spoke of it has to do with the chemotherapeutics in what we are using. So this was a really a very important study I think we should note and talk to our patients about.

So what about stannous and sensitivity beyond that bacterial piece. What does stannous do for sensitivity? We know that sensitivity has a lot to do with fluids in the dentinal tubules and stannous fluoride is responsible for occluding those tubules. And that's very important as far as stopping that hypersensitivity. There are other type of medicaments or toothpaste that work more on depolarizing the nerve. So the stannous fluoride again blocks tubules, and that helps with the hypersensitivity. Think about post quadrant scaling and patients will report they have some hypersensitivity, if we can start them on something that's going to do tubular occlusion that's a huge, huge benefit. We also know that when the stannous fluoride is deposited it creates a situation where it's more resistant to acid and that's very important.

So just to kind of recap a little bit, stannous fluoride is something that I really encourage you to look at with more depth. Look at the studies, look at the reduction in bleeding look at the reduction in gingivitis. And again, going back to the statement that that might be the "it is" that we need to be looking at versus periodontitis. Let's treat gingivitis as a pre-cancer, pre-diabetes, and treat it with the right armamentarium. Let our patients know that they can use this, and you know the stannous fluoride has been changed or is different from 2006 time period when we think of the staining effects. We now know that the stannous fluoride contains ingredients that decrease the effects of staining, and that's a very good thing also increases the taste a little bit better. So stannous fluorides have changed and changed for the better containing ingredients that won't set people up for that

staining problem, and I think that's what we go back to, I think that's our fear a lot of us that we shouldn't use it for those reasons. Think about the plaque reduction, the sensitivity, caries. We didn't even get into enamel erosion, all of these things. It's the best thing to fight for your patients. So start looking into stannous and start recommending it as you're looking at gingivitis certainly and perio as well. So what about electric toothbrushes. Shouldn't we all use an electric toothbrush? I think we can ask ourselves that question. Again in the dental hygiene schools, the one I'm affiliated with anyway, we bring in the reps, we bring in Procter & Gamble, we bring in Sonicare we bring in Phillips. I should have said in P&G. We bring in people that are experts in this field to lecture to our students about the statistics, versus faculty standing up there and giving lectures on this. We certainly support it but we bring the experts in, and so the students leave the program with a power brush, with some really good information so that they can then share that with their patients. You know I think we go back to those misconceptions, are you one of the hygienists that really isn't sure whether there's a difference and that's an important question. I think if you reach out to some reps in your area and have them come by and give you some of the newer information that could really be such a good thing for you because I think the most authentic recommendation is one that comes from your own personal beliefs. And what you use personally, people want to know that. "What does my hygienist use", "I'm using something my hygienist uses at home".

These are some of the barriers to accepting electric toothbrushes along the way. Again skepticism, perceived lack of need those patients that have pristine clinical oral health may not think that they need them. But again let's start talking about prevention, let's start talking about people that are in a healthy situation, people that are just starting to show some incipient gingivitis the early stages. That's, that's not a lack of need. That's a lack of showing the importance of our patients getting on one of these power brushes. And that they know the statistics that they know the research on it. Some people also think that

the power toothbrushes are more harsh than a regular brush, and we know that and we need to certainly not just recommend one of these brushes. I feel that we need to provide them through the office. And I'm not one for doing a lot of sales out of the dental office as far as product, but I will tell you this. When I go to the physical therapist for my rotator cuff issue I am taught all kinds of exercises to do at home, and it's made crystal clear that I'm not going to get better until I start doing these at home. I think it's the same exact thing with dental hygiene. And also, my physical therapist showed me these great bands to use at home and I said "oh do you sell these here" and she said "yes" and she said "yes we do". And I don't think I would have gone to the store or gone on amazon and looked for those things. I think it's critical to arm them with something they can walk out the door with and that's you know a practice philosophy, which product you want to go with. But that being said, take it out of the box show them how to use it show them the benefits of it and how it gets to those hard-to-reach areas. I think that's a big piece. A big part of that. So what about the efficacy and the safety of electric toothbrushes. There's a lot of studies going back several years talking about the safety and the efficacy. These Cochrane systematic review, "power toothbrushes provide a statistically significant benefit compared with manual brushes". And that was a study that was done quite some time ago. This was a study done in the journal of Clinical Periodontology 2019 by Pitchika, and it showed that power brushes had a 22% lower progression of probing depths, 21% lower clinical attachment, and 20% less tooth loss or tooth structure loss. So that's important, and these are very strong studies, when you see the word systematic review and Cochrane study you know that's a very important study. This particular study talked about the safety of oscillating rotating brushes which go in that circular formation or movement. In "a large body of published research two decades consistently showing oscillating rotating toothbrushes to be safe compared to a manual toothbrushes". Again, this was compared to a manual. So the evidence is irrefutably there the evidence is there and i think it's important we talk to our patients in terms of "the evidence

states”, even going back to our staging and grading. What we’re talking about tonight, it’s important to say “this is based in the evidence” not just your opinion or your practice’s opinion it’s based in the evidence.

Some summary findings on the oscillating or rotating toothbrush. Plaque reduction superiority versus a manual. There was 2X times greater reduction in plaque biofilm, interproximally 3X greater, and at the gingival margin 6X greater reduction. So this is an eight-week period, this was published in the International Journal of Dentistry, and those are some very big numbers compared to a manual toothbrush. So we want this, we want this for our patients, we want their brushing to increase but we want them to do it the right way and have meaningful outcomes such as these that I’m showing you right now.

And again, I think it’s important to note the bleeding sites we just talked about gingivitis, we just talked about the gingivitis code and how do we utilize that in practice. But the big step is to send them home with something that’s really going to make a difference: stannous fluoride and a good power brush explained how to use. And they are going to be happy to start seeing results that’s going to get their inflammation into remission. And remember we talked about that at the beginning, these patients if they hear those words, they’re going to be more cooperative as far as what they’re going to do as far as your recommendation, and your individual instruction.

And this is another study showing a side-to-side technology versus a manual toothbrush. And as you can see the dark blue color is just very very high compared to the manual toothbrush. So any studies that you look like, that you look at, excuse me. Whether it is an oscillating type of a toothbrush, a side-to-side toothbrush in general far superior than the manual toothbrush. And I think that’s what we have to look at let’s move our patients off a manual brush and get them into something that’s really going to be a whole lot better. If you look at the number of sites with gingival bleeding, however, as you can see the manual

came up a little bit higher in this particular study. So interesting. This again was a very new study, a 2023 meta-analysis in the International Journal of Dentistry, and it compared electric and manual toothbrushes on gingival health and plaque removal. So to end this portion of the discussion on home care, this is an excellent example of looking at all the different types. Manual down at the bottom, side-to-side brush type power brush, an oscillating brush, and then the newest technology of an oscillating brush which is considered an iO in that oscillating family. As you can see, just the bleeding site reduction was so much higher as we go from the manual brush to the newest technology. So definitely clinically relevant and statistically relevant to get our patients on these brushes. I will say again to not continually speak to the difference of the manual and power. I truly think you as a clinician need to make a decision understand what you feel is superior and simply state that. Share that, and it will come across authentically. So as you can see the highest reduction was in the newer technology.

Okay, let’s move into periodontitis and again that’s broken down into four categories we’re going to focus mainly on the second one, periodontitis individually. And the next one down of manifestation of systemic diseases. So we have periodontitis as a whole, which used to be sub categorized into aggressive and chronic, and we’re not doing that anymore. We have necrotizing periodontitis which is demonstrative of somebody with a host immune response issue. And then periodontitis as a manifestation of systemic conditions. So that’s what we’ll really speak more to during this presentation.

So if there is clinical attachment loss that was deemed by the assessment of the probings and also of the radiographs. You are going to then stage and grade your patients. Okay so, a differential diagnosis of the category of periodontitis is based on the history and the specific presentation of either a necrotizing situation or the presence or absence of an uncommon systemic disease that’s altering their immune response something is keeping them in that chronic state of inflammation.

So that's what we're going to be looking at as far as delineating the patients. When we talk about periodontitis as a manifestation of systemic diseases, think about it considers the multi-factorial factorial, excuse me, etiology of the disease and the level of complexity. So does a certain manifestation of a systemic condition affect the difficulty of getting that patient into remission and getting that patient really just good appropriate treatment. Can you manage the disease without bringing in that medical piece. I was very surprised to see that this category accounts for more than 1/3 of the classified cases of periodontitis. These systemic diseases have a major impact on the loss of periodontal tissue through its influence on periodontal inflammation. So this category talks about the systemic disease has an influence on the periodontal inflammation.

To continue a variety of systemic diseases and conditions can affect the course of periodontitis or have a negative impact on the periodontal attachment apparatus. These are some of the systemic disorders that have a major impact on the loss of periodontal tissues. Okay this is not the diabetes cases that we're we tend to go to that as far as a systemic condition. These are diseases that influence the pathogenicity of the periodontal disease, of the bacterial inflammatory process. So genetic disorders, immunocompromised, diseases affecting the oral mucosa, connective tissue disorders, metabolic and endocrine disorders, AIDS, inflammatory diseases, a lot coming out on inflammatory bowel disease. And then the separation of those two entities, we need to talk about systemic disorders that influence that pathogenesis of the periodontal diseases those are your diabetes mellitus, your obesity cases, your osteoporosis. So there's a difference about there's a difference between systemic disorders that influence the pathogenesis versus the breakdown of the tissues.

So here are some other conditions as we spoke about before. Systemic diseases or conditions, we just talked about that in the past slides. We also need to look at periodontal abscesses, endo-perio lesions, mucogingival deformities, traumatic occlusive forces. Okay there's all

reasons why we can have clinical attachment loss. But remember from this classification standpoint you are only staging patients that have periodontal disease from a bacterial inflammation.

The distinction was made to emphasize the need for a more comprehensive maintenance and surveillance schedule for the successfully treated patient with periodontitis. The three-month recare is critical. It's absolutely critical. We know in the science that after 120 days the bacteria becomes more potent, more virulent, and we start getting breakdown at that 120 day mark. I think if we just switch to the phraseology of "Mr. Jones, we want to get you in a state of remission", I mean I think that that's powerful and I, and I believe that's going to really help us getting our patients back in three months. Because once we go beyond that that cycle of continual chronic inflammation will just continue to happen.

So before we go on I just want to clarify that if we look above the peri-implant diseases, periodontal manifestation of systemic diseases in development. Truly there's a difference between systematic diseases and conditions affecting the periodontal tissue, versus those that are altering the host, altering the clinical attachment ability to stay healthy. So I think that's probably the most difficult delineation. That being said, 25% of your patients are not healing because of something going on systemically. So rather getting too bogged down and confused whether periodontal disease affects the course, excuse me, the systemic disease affects the course of the periodontal disease treatment or if it just makes it more virulent and the breakdown happens more aggressively with these immune conditions. It's more important to just recognize that systemic conditions play a large role and must be classified accordingly.

Let's move to implants, peri-implant diseases and conditions. So that is broken down into four categories as well. We have periodontal health, which is what we want our implants to look like. We want to look at an implant as it is a crown and really that's what our implants should look like. If we didn't have a, or the

patient didn't tell us that it was an implant, or it's not in the medical chart, they're a new patient. But an implant that's healthy should look like a porcelain crown.

The next stage is peri-implant mucositis. And that is sometimes relatable or understandable in relationship to gingivitis, where we haven't lost attachment but there is inflammation and redness around the implant. And then we have peri-implantitis which is attachment apparatus has been lost. And then we also have peri-implant soft and hard tissue deficiencies. Which we won't get into with this presentation. Something like that would have to be really evaluated by the periodontist or the oral surgeon that placed the implant.

So to probe or not probe. That's always kind of the question of the hour, and I think that that shifts and changes over time. Should we use plastic, should we use metal? I think at the end of the day we're finding perhaps less probing might be better because we don't want to damage that very delicate sulcular epithelium. That being said whether you probe or not and at what intervals is a very practice philosophy. Whether it's guided by your periodontist, or your oral surgery practice that seats these implants. Or if you're doing most your implants in house, there has to be a philosophy around implant care and assessment in regard to probing, when to take the radiographs etc. But bleeding certainly is an indication that we have a little bit of inflammation going on and maybe a mucositis. So this is what your healthy implant looks like on #9, okay. Mucositis again has the bleeding upon probing but no attachment loss. By looking at the radiographs, by looking at the probings if you can, certainly no mobility. Mobility is kind of the kiss of death if you will with implants. I love this picture because it really speaks to the attachment apparatus of a natural tooth which is the picture on the left, versus the implant. And you can see just by this picture that the attachment apparatus around the implant is so much less than a healthy tooth. And that's why that sulcular epithelium is easy to permeate if you will. And once you start getting you know bacteria into the into the system into the local tissues, bacterial breakdown. Tissue

breakdown can happen that much quicker with an implant than a tooth. So although we like to say gingivitis will lead to periodontitis, please know that mucositis leads to implantitis much faster because of the attachment apparatus difference. And then peri-implantitis is basically a progressive bone loss in relationship to radiographic bone levels and how often you assess that whether it's a , or if you feel like you need it more frequently than that. That's again a practice philosophy, but we're getting tissue breakdown clinical attachment loss and perhaps mobility and bleeding etc. Those are the cases that really should go back to the doctor that that seated the implant. but it needs to be treated obviously much sooner than later.

And this is a five-step example of what your assessment process could look like in the office. This is by Susan Wingrove, who does a lot of work with implants, implant maintenance etc. You want to visually look at that tissue, palpate it maybe to see if there's any signs of infections or exudates, any bleeding. Assess for residue, we know that retained cement from crown placement has been a real big reason for implant failure and that's not sloppy dentistry, per se. Sometimes we don't see that the cement was retained, and the cement might be not radiopaque, so we're not going to see it on the x-ray but critical to feel with either floss or an 11-12 explorer. To see if there's any residue or calculus left behind. What you choose to remove the calculus etc. Again, practice philosophy, who does it dentist, hygienist. That depends on your practice. And you want to assess for mobility, pain, occlusion, and bone level. So that implant needs very special care in all eyes on board. That's kind of a very good excessive picture of that retained cement, but even if that cement is removed mechanically, the tissue cytosis goes on after the fact once the tissues have been affected by retained cement.

All different types of probes out there. I think some of these plastic probes are fabulous. Just know that over time with a lot of autoclaving they can get bent and then they can be more susceptible to permeating that sulcular epithelium. So be careful with what you



choose.

All right so we're getting there. I hope everybody's not getting too confused with all this or two weighed down. You have the beauty of this being a recording and you can turn me off for a while and go stretch. What I want to say about the implants though is, we are not staging the implants okay. We are not staging the implants. So if your patient has three implants tooth number 3, number 14, number 19, each one of those implants will be individually classified as: peri-implant health, peri-implant mucositis, or peri-implantitis. So if your patient happened to be a Stage III perio patient, you're still going to say implant number 19, peri-implant health. So very important to distinguish that piece.

So we can't classify our patients until we fully assess them, and we are going to go through all these things that I know you're already doing, most of you anyway. Keep in mind that smoking piece. This is a very nice way to help our patients. Unfortunately we are seeing that smoking cessation is really not happening. And we also know it's one of the major reasons of periodontal breakdown unsuccessful periodontal surgery. So we need to stop talking about some of these risk factors and I think this gives us a nice vehicle to do that. So these staging and grading sheets you can get them from the handout I gave you. You can download them. I can send you the link for them. But I would highly recommend you have these laminated and in your office because this is how you're going to talk to your patients. And this will become you know second hand over time, you won't have to look at them all the time but it's a nice visual to show your patients.

So let's start with the Staging okay. We already decided how that you were classifying your levels of perio etc. Let's talk about the staging piece. So what I'd like to tell people to do when they're first starting this or taking a look at this, is to draw a red line in between Stage II and Stage III. And why is that, well it's easier to read this way. And I think you can see with the Stage I and Stage II, you're having very early clinical attachment loss. As you can see if

you go down to the third level under severity, there's no tooth loss as of yet. The complexity is probing depth around the 4 or 5 millimeter, the CAL is at the 1 to 2. Once you tip over into Stage III and Stage IV, these cases are not as successfully treated with non-surgical periodontal therapy. So again, I also like to split that to have an understanding that you know Stage I and II are your earlier slightly moderate situations, that have excellent outcomes from non-surgical periodontal therapy. So "Mr. Jones, your prognosis at this stage and your grade of B, you have your pretty good home care etc., your prognosis should be very good". Once you get into the three and four that's again when you start talking about, do we refer or not. What is the practice's philosophy on debridement, scaling procedures on a Stage III patient. I think we do it, I don't think the outcomes are as good as Stage I and Stage II at Stage IV. Please think about the fact that Stage IV patients will very likely end up being edentulous. So like, it's like a Stage IV cancer. You want to think of it that way, and staging is not fluid. Once you're Stage II you will never be a Stage I. You'll be a Stage II in remission. So very important to think about that, that way as well. As I said, severity is what we're looking at. We're looking at the interdental, interproximal clinical attachment levels or loss. So the Stage I patient has about 1-2 millimeters of clinical attachment loss. So remember I said a few minutes ago that up to two millimeters is normal when you're looking on the radiograph. It's that next 1-2 millimeters that puts them into that Stage I, and you'll see radiographs in a few minutes on that.

Radiographic bone loss, very important to be able to look at that. Important to have good peri-apicals that are not elongated or foreshortened. But for your interdental CAL you're going to Stage it at the site of the greatest loss. So if you have you know clinical attachment loss of between 1-2 millimeters on the upper right, that patient's going to be Stage I. It doesn't matter that everything else is totally healthy. They're still in that Stage I just from one area. That'll make a little more sense in a few minutes. So if we look at radiographic bone loss here, we know that that yellow line, you're still at the health mark because

you have about 1-2 millimeters of playroom before you start getting into looking at actually what that clinical attachment loss is. And percentages of bone loss is important. So in Stage I, you only have about 15% bone loss. Stage II, 15 to 33%. So we know this patient here is about at a Stage III because they've got 45% radiographic bone loss. No tooth loss we said was a good situation. Once you have tooth loss from perio, we know the likelihood of future recurring disease increases with that risk factor. Complexity again is your probing depths. You can see in a Stage I, < 4 millimeters. Stage II, becomes up to 5 millimeters. Notice once you get into Stage III and IV they don't get that definitive on the probing depths. And if you even go all the way up to interdental CAL, greater than 5 millimeters is the same for both categories. What is the differentiators, a little bit more tooth loss from perio. And if you look in the Stage IV, you're going to see flaring ridge defects, bite collapse. So it's certainly more involved from a periodontal standpoint. And then we're also going to use extent and distribution. It's important to know whether the disease is localized or generalized. This is another chart that I think is very good. I think people learn through visuals. This is a nice way to show your patient what it starts looking like to be a Stage I perio patient, to be a Stage II, to be a Stage III or IV. Whatever works for you, download it, laminate it, and make it your own. Be comfortable speaking about it.

So this is something that I think helps you understand how we were telling our patients about their disease then versus now. So we would think a patient has periodontitis "Mr. Jones you have periodontal disease, and you have some areas of clinical attachment loss, you've got some pocket depths, you've got mild areas, you've got some moderate areas, and then you have an area of local destruction with your pocket depths being 5-6", you know their eyes are kind of rolling at you. They're not really understanding their classification or the disease state as a whole. Where now, we would speak to it as, "Mr. Jones, you have generalized periodontitis, you have a Stage III or possibly Stage IV". If the patient has more than 5 teeth. Clean and simple, Stage III generalized periodontitis. And again that's

something that they can understand a little bit better than what we were trying to describe to them before.

All right let's look at the grading now. Okay, very important that you look at every patient that sits in your chair as a Grade B, and then you can fluctuate to "C" or an "A". And your "C" patients will have certain things in your "A" patients and more your meticulous very very healthy patients. We're going to look at either primary criteria, okay and you look at grade modifiers. So this is all about progression, it's all about how your patient's disease is going to progress. That's why you're giving them a grade, and again similar to how we're talking about cancers. So direct evidence of progression is basically if Mr. Jones has been coming to you for 15 years, you have 15 sets of bite wings, and you can pull them up and see that rate of progression, that's direct evidence. We don't always have that luxury. We have new patients, so we can't always have direct evidence so then we go to indirect evidence. Which is utilizing that percentage of bone loss. And in a nutshell, think of it this way, a 50 year old person should not have 50% bone loss. Something is wrong if that's the case.

So here's a patient okay, and you know why you start looking at your radiographs and your pa's this way, with the with the lines demarking different levels of the bone. So the first red line would be at ground zero, if you will the CEJ, and then third and a third of the way up. Whatever way your office is going to understand radiographic bone loss, again is a discussion to be had. We're trying to standardize things. This is probably something I should have said earlier. This really standardizes the way that we're classifying, diagnosing, and treating periodontal disease throughout the office, throughout the city, throughout the state, throughout the country, throughout the globe. So patient has 50% radiographic bone loss, 50 years old. You divide that 50 by 50 and you come out with a 1. And as you can see greater than 1 is "C". You can still be a 1 and stay in the "B" category. But if they're smoking and they have other factors then they would definitely go into a "C" category. So this patient has about 50% bone loss, and some of these AI

software that I showed you a glimpse at while we're talking about gingivitis. They can tell you what your clinical attachment level is, and your percentage of bone loss. And I think we're just getting more and more in that direction as time goes on. First red line is at the CEJ, second is 35% bone loss, third is 70. So this person has about 35% bone loss. They're still we're still talking about a 50-year-old person, different patient however, so you divide the 35 by 50 (% bone loss divide by age) and you come out to 0.7. And 0.7 keeps you in that "B" that Grade B. So think about this you are you don't have access to direct evidence of the progression of the disease, so you have to use indirect evidence. And that's taking the patient's age and where they are at from a bone loss percentage standpoint. But you've got to think about your x-rays. And you know think about how is your shot, what do your radiographs look like. Am I elongating, am I getting a good vertical bite wing. Because radiographic bone loss is something that it takes a very trained eye to start looking at. The nuances of crestal lost bone. You also need to remember that bone loss can only be identified radiologically when about 25% has started to demineralize. So the Stage I perio was defined as radiologic bone loss of less than 15%. So if you're not seeing it until about 25% of it from a 3D standpoint is demineralized. It is hard to tell, and I'll tell you the Stage I patients are the hardest ones to get. Is it a gingivitis or is there early crestal bone loss. You know if you look at the lower molars in this picture you know that that height of the bone is probably 1-2 millimeters below the CEJ, that's health. May have a little bit of vertical bone loss on the top there in between the premolar and the molar. But I challenge you to start looking at your radiographs a little bit differently. Start looking at that crestal bone. Start looking at your 2D images with a different set of eyes. If you have 3D images great, but you want to make sure that you're not over diagnosing certainly. And in fact truly we've been under diagnosing as far as perio goes. So again this is one of those programs that will tell you exactly what that percentage of bone loss is. So this one comes out to be about 33% bone loss. And here's another depiction. And some of your softwares already do that. Some of your Dentrix programs have ways that you can draw

a measured line in there to understand the clinical attachment level and the bone loss.

So how are we assessing what have we been doing traditionally as far as the clinical parameters. The foundation is going to remain the same except we're adding that clinical attachment level piece, okay CAL. So we're still going to be probing, we're still measuring the bleeding on probing, we're still charting it, but we're now getting a clinical attachment level. We also should start truly noting the degree of furcation involvement. And remember I'll show you a couple pictures in a minute, but you know remember the recession or the entrance to a furcation starts kind of dipping in only at about 3 millimeters down, 4 millimeters on you know 19, 30 buccal, you're already slipping into early furcation. So again we're diagnosing things too late. I think we're doing a good job with gingival recession. Are we recording tooth mobility, are we doing a plaque score? That's critical, that's critical. We'll talk about that before we end tonight. Quality radiographs, again it's my understanding that some insurance companies will only, will start turning back payment for radiographs if that practice continues to send in radiographs that are undiagnostic. And I think you might say, oh well that's you know insurance companies. But a clinician should be able to diagnose off of the x-ray that they took, the radiation that was given to the patient, minimal absolutely minimal, but you know let's not take sloppy undiagnostic radiographs.

So the concept of clinical attachment level. Okay, all of these three teeth have 6 millimeters of CAL. And I want you to you know pause it here and take a look at this picture. The picture on the left there is a 4-millimeter pocket but there's 2 millimeters of recession so the clinical attachment level is 6 millimeters. Okay, if the patient comes back in three months or six months and now the pocket depth is 5 millimeters then now we're starting to talk about clinical attachment loss, okay loss of supporting structure versus the very first time you classify this patient. The middle picture has a 6-millimeter pocket but the gingival margin is right at the CEJ which is usually where it's at or maybe a millimeter

above the CEJ. The patient on the right has a pocket depth of 9, and that gingival margin, however, is 3 millimeters above the CEJ. So what we're not doing out in practice frankly, is we're not measuring that negative gingival margin, is how the software is calling it. But we're not noting when a patient has a lot of gingival inflammation or you know the 2-3 millimeters above the CEJ, that tissue puffiness. We're not recording that. We're recording the patients on the left, the recession, which is good. But we're not going to get an accurate CAL if the tissues are super inflamed and over the gingival margin. And I'm not telling you that you have to start doing it. I mean think about it very timely very time consuming to get a three-point understanding of where the gingival margin is in relationship to the CEJ. But it has to be thought about up here where you're starting to look at pocket depth. We'll go back to that in just a minute.

The case phenotype what does that mean, okay. That basically means the destruction of the tissues is commensurate with the amount of plaque biofilm, calculus that's in the patient's mouth. So you know somebody that is heavy plaque, heavy calculus, but doesn't have any breakdown or destruction. They would be an "A", that would be a slow rate, okay in response. You have your "B" patients, where they have a lot of buildup, they have a lot of calculus and they have breakdown. And then a "C" patient would mean that they don't have personally any calculus, any biofilm, any you know factors like that from a microbiome standpoint. However, the destruction is happening in ongoing so that means that patient would be a "C" patient. Which means that of a rapid rate for progression. This is going to keep rapidly progressing unless we can figure out why the attachment loss is happening. And then your grade modifiers down below. Let me just go back to this, your grade factors, modifiers on this chart. It talks about smoking and diabetes because go back to the fact that this was done in 2017. And it was done by looking at 20 years of evidence, systematic reviews, etc. It was pretty irrefutable and concrete in the science back in 2017 that smoking and diabetes had a direct relationship with periodontal health. We now know there

are so many other entities that we'd have to start using our clinical expertise to kind of fill those boxes in with things that we're starting to learn, osteoporosis, things like that. Smoking depends on how many you're smoking will put you into an "A", "B", or "C". If you are a former smoker it has to be a year or over because this so it's such a high chance of relapse. Your diabetic patients, I hope you're taking HBA1c or asking a patient. I should say what their HBA1c percentage is, and it should be no more than 7. So anything over that, they're not a controlled diabetic and they would go into a Grade "C" for a rapid rate of destruction. It's not enough to know just their glycemic index you want to actually know when was your last HBA1c and what was what was the percentage. So when I speak about other factors okay, think about the patient's overall health, what's their lifestyle. Like are they on the road all the time, you know do they have are they obese, do they have osteoporosis, do they have rheumatoid arthritis, inflammatory conditions? Are you doing any salivary diagnostics? Great if you are, because that really kind of gets you to the puzzle a lot quicker. It just hasn't become mainstream yet, and I really would like to see that change. But there's you know entities that would put your patient into a Grade "A", "B", "C". But put everyone in a "B" when they get in your chair and then figure out if they're an "A" or "C" and truly again don't over complicate this you should know what the grade is after reading the medical history. You know you're going to be able to grade them pretty quickly, so don't over complicate this. There is going to be some people that are going to say a "B", or "C". It's okay, you know just try to start speaking the language that your patients are really going to understand.

I love this slide just because it speaks to the value of salivary biomarkers and salivary diagnostics. And you know this is what we're doing in medicine. You know doctor has you for the physical, they have you do a blood panel work up, and they look at the blood and they say "okay, you have some increased markers, your numbers are a little bit out of range. You're considered a, you know, pre-diabetic". Or you know your cholesterol is just starting to get into the point of concern. You

know by the time we tell somebody they have periodontal disease you're doing that with a probe and you're already down the pike.

So this was 2012, Giannobile did this study, and it was in JADA in 2012. And what he liked to phrase it as, "let's start detecting periodontal disease in the subclinical phase". And the only way to do this is with you know three entities you see on the left. Just something to think about.

And this is just another visual to think about what makes a patient an "A" versus a "B" versus a "C". And I think please feel free to take a picture of this, I think it helps you to understand it in a different way, per se.

Okay, so let's move into a case study. I'm going to look at Alex. Alex is a 50-year-old construction worker, has bad breath and his wife wanted him to come in to get a cleaning. He's receiving some medical treatment for high blood pressure, depression, acid reflux, and smoking cessation, which is a good thing. Prescribed medications: Prevacid, hydrochlorothiazide and Wellbutrin. Reports smoking a pack of cigarettes a day for 35 years. So even though he's being treated for smoking cessation probably with the Wellbutrin, he's known a non-smoker at this point. Also vapes and drinks 3-5 alcoholic beverages a day. So he's busy. Dental history, last dental visit was over 10 years ago. Only goes to the dentist when he's in pain or needs a tooth extracted, and no history of tooth loss. Alex states he brushes one time a day flosses when necessary, uses essential mouthwash. So he's probably gets xerostomia from that. He has generalized moderate to heavy calculus you'll see in the intraoral pictures in a minute. On the mandibular anterior, his plaque biofilm is light but if you look down at the bottom there you see plaque free score of 50. Meaning he has an 85% plaque score so there is a lot of plaque, there is a lot of bleeding going on. And here are his intraoral pictures. As I said before, do not over complicate things if you can look at the bone or the clinical attachment loss around tooth 9 and 10, you already know that you're dealing in the Stage III/ Stage IV area. So start looking at your patients that way. Start looking

at the recession, start thinking about what that clinical attachment level is or what the loss is versus just thinking about pocket depths and bleeding. Here's the radiographs, and I know these old films but sometimes that's what we end up with sent to our office etc., I want your eyes to look at the worst area from a clinical attachment loss standpoint. Again, you can pause this, I think your eyes would go straight to number 27. And you can see that's one of those situations where you would hold the tooth in place and scale the teeth and just pray not on your watch that tooth comes out. So a lot of mobility there, so you're already thinking for sure Stage III if not a IV. These are some perio chartings on Alex, and the clinical attachment level you can see is up in the 5,6,7-millimeter marking. And I'll actually blow this up a little so you can see it a little bit closer. So you can see that, for example, tooth number 26, it's got a 4-millimeter pocket depth but 2 millimeters recession. Gives a 6-millimeter clinical attachment loss. And you can see in your programs will do this as well, but you obviously have to put the recession in. So start looking at your clinical attachment levels versus your pocket depths. Okay so he definitely has greater than 5 millimeters of interdental clinical attachment loss that we saw on the probings. He has bone loss extending beyond the middle 1/3 of the root. And you can see it's both the same on both areas. He has greater than 5 teeth lost from periodontal disease. And then you know one could argue that he had the complexity of a Stage III, but in Stage III complexity he's got some, flaring, things like that. So in addition to his status, start thinking about does he have those entities that are more of a Stage III or Stage IV. And then extent and distribution. I think we can all agree that Alex is generalized, and so now we think about the grading on Alex. And here we're going to use indirect evidence of progression, because we didn't have 15 sets of bitewings. So we did the math problem, and Alex is 50 years old and has well over 50% radiographic bone loss. So he's in the "C" category. I believe his destruction is pretty commensurate with his plaque and calculus deposits. He is still considered a smoker and by all means we could probably assume he might have diabetes. But we wouldn't circle any of

those there. So looking at all of that, oh that's loud, looking at all of that, some fun jeopardy music. What do you think Alex is? So if you guessed IV, "C" you were correct.

Keep in mind that post treatment even at the level of Alex. The clinical attachment level and the radiographic bone loss are your primary stage determinants. Okay, also even if you were to treat Alex and he was to come back, that he would not go from a Stage IV to a Stage III. Okay, you lose the portability of the diagnosis. Again think about a cancer patient if they're Stage IV they're not going to be a Stage III, even if they have treatment. They're going to be Stage IV in remission. Think a lot about how you're doing your probing, you know really go back and understand this clinical attachment loss. You had it in school, if you work for a perio practice you talk in terms of clinical attachment loss not probing depths. But understand it, start looking at how inflamed the tissue is above CEJ because that's going to give you a more accurate clinical attachment level. Okay so you can pause any of these and kind of look at the different ways to get comfortable with the CAL.

And dust off that furcation probe. Bring out that Nabors probe and start assessing early furcations, versus moderate, versus all the way through. And it gives you a much better diagnosis, and really more of a likelihood of getting the insurance acceptance if you're sending in furcation involvements as well. Keep in mind to review, and I'm going to give you an app that you can download for free. To go over the anatomy of the teeth. And I don't spend much time on this but remember if it's a mesial furcation, okay, you cannot access the mesial furcation on 14 or 3, for example, from the buccal. You have to go from the lingual in those early to moderate furcation involvement cases. And you'll remember why in just a minute. Buccal furcation, just think about the two buccal roots. You're going to measure in between the distal furcation on an upper molar. You can get that from the buccal or from the lingual. And the reason why is, if you look at that picture on the upper right, the mesial buccal root is much wider. So you hit a block trying to you know assess that mesial

buccal furcation. But if you commit from the lingual, you're able to assess it much much more clearly. Distal buckle root, you can go from the buccal or from the lingual. And think about this, people are spending thousands of dollars on quadrant scalings. And I think it's imperative to know where you're going, take a walk down memory lane and look at those nuances of trifurcated teeth. Look at that palatal root there on number 14. Remember about that concavity that's right in the middle of middle of that palatal root. You know you're only as good as being able to navigate your anatomy effectively. And remember that this is how we're treating you know our patients we're down under the tissues, we're feeling around, we're doing the best we can. But we've got to go back and remember the anatomy. And again this is in your handout, the ability to download this app. This is just showing your Class I, Class II, Class III, Class IV furcations. And you can certainly pause this and look at those more closely.

Understand the feeling of that prominent CEJ versus the calculus, and understand the bone level in accordance to that. And this is your free app, and it is free and available on iphone. Unfortunately, they do not have it on android anymore. You can get it on an ipad. We have our students utilize this all the time and it's really that 3rd set of assessments where you have the radiographs, the probings, but you've got to have that mental image of your anatomy. So this is a very nice app to kind of show you how to assess that anatomy. And this is kind of just a picture of the video. So you want to look at number 14, you're doing a deeper quadrant scale on 14, and you can turn it around you can see the mesial entrance, the buccal entrance, there's the distal entrance, and remember okay I need this visual image before I do that quadrant. It's the right thing to do. I think it's important.

Okay, so let's classify a couple of patients and bring this around home plate. We're going to start with Sally. Sally is a 29-year-old female. She reports she's never had her teeth cleaned. Her gums bleed when she brushes, she has sensitivity to hot and cold most of the time, she does not like to smile and her mouth

always feels dry. She's not currently under the care of a physician. She takes vitamins and antihistamines. So you know your mind starts to think about her grade here, is she an "A", "B" or "C". Her last dental visit was over three years ago when she had her wisdom teeth taken out, and she never had a carious lesion. This is her dental health: brushes once a day with a hard brush, never flosses, uses warm water, pain in all her lower molars, she drinks energy drinks, and she recently started smoking a pack of cigarettes daily. She got in there and just does a pack a day now. So deposit level moderate, moderate plaque biofilm, and her bleeding index was 50% and her plaque free school was 30% so she's 70% plaque score. These are some of her intraoral photos, and you can certainly see the edge-to-edge bite, the flaring of the anteriors. You can see the calculus. The dry mouth you can pick up on, the cheeks and the high palatal vault and certainly on the lower left. So she's got some challenges from a periodontal standpoint. These are Sally's radiographs, and again you can always pause and take a good look at these. You can see a lot of heavy calculus. Here's her periodontal chart and you can see the pocket depths and the CAL and again I've blown it up a little bit to help you see it better. Okay, upper right quadrant, so you can see she's got some areas of 7 CAL. Okay, so the pocket depth is the same as the CAL if you haven't put in areas of recession or pseudo pocketing or inflamed tissue. Okay that's the upper left and lower left. So the lower left has inflamed tissues so that the margin is above CEJ. As you can see in the picture on the upper left so the CAL is not really 7. Okay and the lower right quadrant. So you already know that she's got some 7-millimeter clinical attachment loss. You know she's smoking a pack a day so pretty quickly you're going to realize that she is a III, "C". She's not at the IV level, but she's got you know the risk factors that keep her in the "C".

Let's talk about Michael. Michael is a 32-year-old police officer. He lifts weights he enjoys traveling., regular jaw pain and headaches, bothered by his bleeding gums, self-conscious about his breath, reports he lost a piece of a tooth. Probably why he came in. He is a Type I diabetic, takes medication - insulin daily. He

recently quit smoking, so you can almost tell at this point where he would be at as far as the Grade. Okay, believes he's grinding his teeth from his wife. We always have patients that won't admit to it but the spouse hears them. Heavy calculus, heavy biofilm, 60% plaque index and then 80% plaque score. Because this plaque free 20%. Here's the intraoral photos, and you just want to rev up that ultrasonic on a patient like this. But you can see there's a lot of disease activity going on. Here's the radiographs. So you want to pause and really take good look at that bone level. And here is his probings on the upper right and the CAL upper left. So again unless there is recession charted or a positive gingival margin the clinical attachment level will be the same. So for example, tooth number 24 there, he had a pocket depth of 2,1,2, but he had recession of 1,2,1, so that gave him the CAL that was a little bit higher. And the same thing over here. Okay so Michael is a III "C". So sometimes easier the more difficult patients, but it's important that you kind of back up and look at those gingivitis, those Stage I patients, Stage II patients, and look at a couple of these cases with you know patients within your office. Looking to your software and kind of talk about it amongst your office so you get a good understanding of how you would Stage a patient versus your colleague.

Just some frequently asked questions as we close up. "How does this new disease can construct impact when I submit for insurance? Well you know it's always comes down to questions like this I believe the CDT coding is getting more in line with the AAP classification updates. I believe the fact that we're looking at complexity is going to change or add additional CDT codes. For more difficult challenging patients that need perhaps more time. AAP is working with the ICD-10 coordination and maintenance committee to start adjusting more diagnosis codes using more diagnosis codes not just treatment codes, which are the CDT codes. Once we start bringing in that diagnosis a little bit more so we'll have more latitude is the point with the CDT codes.

Okay, and this is where I've kind of changed this program a little bit in the end. So what is

meant by the consensus, “a perio patient is a periodontitis patient for life”? Always in my 30 plus years of working you know you do not rotate the 1110 with the 4910. They’re either you know, they’ve had perio surgery, they’ve had perio scaling and root planings. They are then considered a 4910 and should be coming in every three months and two of those visits they probably have to pick up on their own, and that’s what we have become comfortable with. But now we’re leaning towards a little bit more of a recognition of health on that reduced periodontium. So this is an interesting article, and you can just you know freeze it and look up this full article. But really what it speaks to is why can’t we look at our periodontal patients and certainly do that 4910 if there’s some you know a little bit of inflammation going on, and we’re doing that, we’re doing the perio maintenance. We don’t need to go back in in quad scale but it’s not you know, a 1110. I but if it is health on a reduced periodontium, can we use the 1110 scaling in the presence of health. I have the exact definition escapes me right now, but we’re starting to move towards a philosophy of, it’s up to the dentist discretion, the practice discretion, as far as what they’re going to code for the treatment. And I’m going to leave it there because it’s something that’s just starting to bubble up and I and I recommend that you look into it and you kind of vet it out. Because that’s really maximizing your patient’s insurance, if you’re able to get them covered every three months. Kind of rotating these codes, in alignment with they’re doing great things with their home care, and they’re showing evidence of health on a reduced periodontium. I think they should be rewarded on some level. So it kind of all goes together. So do not come looking for me with the CDT police, the Delta police. But I do recommend that you look into this and try to get your own answer.

We already answered this earlier, “can you use a stage for each quadrant”? Nope, there are Stage III, and think about it from the cancer format. You have a large tumor. That’s what you Stage that patient at. It’s not that you don’t care about the smaller tumors, but they’re going to be the Stage of what the largest entity is. And we’ll do exactly that with our

periodontal diagnosis and classification.

This is something that I worked together with a group practice on. And it is verbatims that align with each Stage and Grade. So I am happy to share these with you. You can put your office name in there, you can put in there the home care recommendations you feel are correct. But this gives you statements to get comfortable with how do you explain this to your patient. You always want to tell people, you know, what is the clinical significance of your condition, what is your prognosis. Okay, so this will give you a different type of, you know, a template really, some talking points around a Grade “A”, a Grade “B”, a Grade “C”. Prognosis, home care recommendations, and again you can very much individualize this. It’s in a word document. I’m happy to send it to you, and again I’ll put my email up at the end. I think we kind of need, a guide, until we can really get used to using this.

So this is just another chart kind of showing different visuals. Again, you’re happy to more than welcome to take a picture of it this. It was done by consulting a dental hygiene consulting company.

So how do you get it going into your office. Well you need to remember most importantly that you’re doing this to help your patients understand in a familiar language what their disease is all about. It’s to be able to communicate with your medical providers a little bit easier, and for you to understand the outcomes of somebody that’s a Stage I, versus a Stage II. And for you to understand a poor prognosis is going to be the case if they have a lot of risk factors. This is not to scare patients but perhaps to get a little more urgency around preventing the periodontal disease from getting worse.

So digest this material, talk about it with your office. I will tell you I think the hygienist needs to be the spearhead in this. I believe they have to be the one that gets the AAP classification system going in the practice. It’s not that the dentist, certainly cannot do it. But I believe it’s going to really impact the way you’re treating your patients, the comfortableness of



recommending what is appropriate for them. You will see your production go up just as an outcome of using it. But it's not as much why you want to do that, certainly. I think we're looking for a way to get out of those gray zones. For a way to be able to tell our patient they have a disease and they need treatment. This gives us that leg of evidence-based dentistry that we've really been looking for. In nomenclature, in verbatims, that your patients will understand. So hygienist needs to own it. Develop a team philosophy on treating perio to coincide with this updated classification system. Breathe deep and reach out to us, meaning I guess myself and my faculty team here at the college would be happy to help you get this going.

I believe with all my heart that this is the right thing to do. I'm passionate about this subject because it just makes sense, it just works and I think that we've been overwhelmed by it for a few years, and we've been slow to embrace it. But I think it puts us on a level right up there. It helps encourage the relationship with medicine that we're really all looking for. So that being said this is my email. You can reach me at [cerenewed@mariannedryer.com](mailto:cerenewed@mariannedryer.com). I'd love any emails, questions, comments. You want any of the resources, I'm happy to do so. Thank you for spending some time with me, and I hope you bring this classification system to your office very soon. Thank you.