June 22, 2020 Patient Education Webinar- The Effect of COVID-19 on Oral Care and Health

Becky: Good afternoon, everyone! We're going to be starting here in just a few minutes. So in just a couple minutes we'll get going. Welcome, everyone, this call is now being recorded. I'd like to thank you for being on the call with us and extend a special thank you to our sponsors, Genentech, Principia Biopharma, argenx, and Cabaletta Bio for making today's call possible. Today's topic is the Effects of COVID-19 on oral care and oral health with Dr. Ricardo Padilla and registered dental hygienist Jennifer Harmon from the University of North Carolina at Chapel Hill. Dr. Ricardo Padilla is originally from Guatemala, where he completed Dental School. After that, he did a three year residency in oral and maxillofacial pathology at the University of Florida. Subsequently, he completed a one-year fellowship in Head and Neck, ENT, and Maxillofacial Pathology at the University of Texas in San Antonio. He started working at the UNC School of Dentistry in 2002 and has continuously seen patients with oral mucosa and jaw diseases as well as been a partner in the oral pathology laboratory and biopsy service. He has been the Director of the Oral and Maxillofacial Residency since 2006, and is currently the Kaneda Family Distinguished Associate Professor of Oral and Maxillofacial Pathology. He is a Fellow of the American Academy of Oral and Maxillofacial Pathology, a Diplomate of the American Board of Oral and Maxillofacial Pathology, and a Fellow of the International College of Dentists. Jennifer Harmon is an Assistant Professor in the Division of Dental Hygiene at the UNC Adams School of Dentistry at the University of North Carolina at Chapel Hill. As a triple Tar Heel, she has received her Bachelor's degree in Exercise and Sport Science, Bachelor of Science in Dental Hygiene, and Master's of Science in Dental Hygiene Education, all from UNC Chapel Hill. In her current role, she teaches both dental hygiene and dental students and serves as the course director for first-year dental hygiene clinic, dental anatomy, and practice of dental medicine. Professor Harmon serves on the advisory board for the National Center for Dental Hygiene Research & Practice and has served as the President of the North Carolina Dental Hygienists' Association. So now it is my pleasure to introduce Dr. Paddila and Jennifer Harmon to answer your questions. So thank you for being on the call.

Professor Harmon: Yes, it's so good to see, Becky were both glad to be here.

Becky: Great. And you have a little friend sleeping in the background too.

Professor Harmon: This is what we get to see, each other's pets when we work from home.

Becky: That's right. So there's a lot of questions that have been submitted, so would you mind if we just jump right into them?

Professor Harmon: Sure, let's go ahead.

Becky: So the first question, in light of COVID-19, when should I see my dentist or my hygienist?

Professor Harmon: One of the first things that I wanted to say was both Dr. Padilla and myself have a lot of the updated resources. So some of those we'll be able to share with you guys if we can't get to all the questions today. Dr. Padilla, you can chime in anytime he feels like it, but personally, I think that you guys need to make an appointment when you feel comfortable and ready to go into a dental practice. As the COVID-19 pandemic is happening and it continues to evolve and it hasn't gone away, we also know that a lot of dental practices are beginning to schedule non emergency dental care. For me, it's going to be based on your comfort level. Some of you may have a dental emergency and we can go over what is constituted as a dental emergency. But please know that a lot of practices are opening for what we call non emergent dental care, which is like what I do. You go see your hygienists and you have your teeth cleaned. What do you think about that, Dr. Padilla? I think a lot of it just has to do with patient preference.

Dr. Padilla: Yes, so I echo the fact that Professor Harmon is giving us all of this information. You are lucky to have her, there's nobody more enthusiastic about health care, about an oral health connection. So, we're glad to have her company and I am very proud to have taught her a little bit when she was a hygienist and a master's and she's now a fellow faculty member. So, super proud of Jennifer. She's also a newlywed, so we're very happy about that. question. Basically, what you need to know is patients who have pemphigus or pemphigoid are in some of the circumstances, considered high risk patient populations because of immunosuppression. We know that if you are taking any immunosuppressant medication you are considered a high risk patient. They only medication that is systemic, to my knowledge that will not be immunosuppressant will be IVIg. And perhaps some people using doxycycline will also be considered a non immunosuppressed patient population. So those who are not immunosuppressed should consider themselves as a regular patient. Also we know that if you're using topical steroids, if you're using the equivalent of less than 10 milligrams per day of topical steroids medication, you should be considered minimal therapy so you should be relatively low risk. But if you're using more than 10 grams per day, then you are a high risk patient for that. So what do we consider a dental emergency at this point? It is important for you to know that if your dental or oral problem is going to progress and eventually send you to the emergency room, you should consider that an emergency. And call your dental provider and

tell them exactly what's going on. We want to keep people with immunosuppression as far away as possible from emergency centers and from hospitals as much as we can. So if you have any condition in your mouth that will progress to get you into an ER, you want to call your dentist and tell them that they need to see you right away. That will constitute a rule of thumb, dental emergency.

Becky: Great, that's really great information, and I'm sure it will come in handy for a lot of our listeners. How common is the transmission of COVID-19 during dental cleanings or procedures, and are there any procedures that are considered safer than others during this time?

Professor Harmon: So I can answer the latter part of that Becky. I don't have any statistics about that first question. Any procedures that produce a lot of aerosol. So a lot of times dentists and dental hygienists both will use instruments that create aerosols which linger in the air and they can stay there for a minute or sometimes hours. It just depends on the amount of bacteria in somebody's mouth, the contamination levels, so to speak of those aerosols. In dentistry, we have hand pieces that we use. We have high speed and low speed handpieces. As a hygienist, almost every day I use what's called an ultrasonic scalar, which is instead of a hygienist using hand instruments manually, it's a power scalar. And that produces a lot of aerosols, as does air polishing or coronal polishing? So, anything that's going to produce aerosols has been kind of categorized as a high risk category just because we know that those aerosols can linger in the operatory. Then that first question you asked Becky, was how common is the transmission of COVID-19 in a dental practice? I don't think we have enough information to actually give you a statistic on that just because dental offices have been closed for quite some time and I don't know if there is research being done on that currently.

Dr. Padilla: I agree, we don't have any statistics that are reliable at this point for transmission. It is relatively rare if that was to be the case to get infected but you do need to realize that there are receptors for SARS-CoV-2 in the oral mucosa and oral pharynx and in the nasal cavity. That is why having, like Jennifer said, having an aerosol that has gone into your mouth and out, or through your mouth and into your nasal passages, potentially could bring the viral particles into your receptors of those tissues tonsils, adenoids, et cetera. So having an aerosolized procedure is going to be a much higher risk than having a procedure that does not require aerosol.

Becky: Great. That's a lot of good information. So thank you. Our next question says, has the CDC or the American Dental Academy offered any special training to dental professionals on best practices and best precautions to keep patients like us safe?

Professor Harmon: Yes, and Becky this is one I wanted to show, I just wanted to present to the audience. If there's a way I could click on a link and share that, that would be great.

Becky: Yes, I'm going to make you the presenter right now.

Professor Harmon: Also, do you see this questionnaire that you had sent us. I have some of these websites that you can share with audience members. I don't know if there's a way where I can type it in the chat box, but I can give that to you, so you can give them these resources.

Becky: Absolutely, if you just want to send it to me afterward, we can send it out after the call.

Professor Harmon: Awesome. So you guys were wondering if people like Dr. Padilla and myself have some specialized training or what resources are we using? Can you see this right now? It says ADHA Task Force Report.

Becky: Yes.

Professor Harmon: So everyone, this is actually from the American Dental Hygienist Association and it's a 15 page report on how not only dental hygienists, but the dental team and patients can successfully open up and go back to practice. I'm going to actually show you multiple things on this while we're on the call today, but this entire interim guidance on returning to work was based on CDC guidelines. It's also based on information from the Occupational Safety and Health Administration. And it's also put together by the ADA and also OSAP, the Organization for Safety, Asepsis and Prevention, which you see right here. So these guidelines actually have been updated multiple times and as new research comes out, as new statistics come out about COVID-19 this report is actually updated almost on a weekly basis.

Becky: Wow.

Professor Harmon: So we have this, which I do not mind showing to you later. And then we also have this document. This is also wonderful, which the director of our dental hygiene program passed along to me and if this is the best practices for infection control in dental clinics

during the COVID-19 pandemic. And as you can see at the top of my screen, at least I hope you can, the date right here is June 17. So this is very, very up-to-date. This is where a lot of us are getting our information about how to prepare the dental clinic, what type of equipment and supplies are suggested, what type of ventilations our suggested, patient protocol, what we wear for our personal protective equipment, just tons and tons of things. So, Becky, I don't mind sending this to you guys

Becky: That would be great!

Professor Harmon: If you Google it, it's available for the public. But, as you can see, there are tons of resources out there and Dr. Padilla and I, since we work in such a very large dental school setting. We also have people who are experts in infection control and we're also getting up to date webinars and faculty Town Halls with new information.

Becky: Great. That's awesome, information. Please send that to us. And we'll probably link it to our COVID-19 site on the IPPF website as well. So thank you.

Dr. Padilla: One other thing. So first of all, exactly what Jennifer is saying, we have been trained to the top level of infection control. Dental offices were already a safe place to begin with, because it is a two-way street. And with COVID, it has been an even more enhanced practice of infection control and sanitation. But remember that statistically speaking, the chances of a patient getting COVID in a dental office are much lower than the chances of a dental person getting COVID from the patient because the aerosol is made in the patient's mouth and it will technically be inhaled by the personnel or the person. The only source for a patient to get infected with COVID will be from the environment of the clinic. If the patient was to open a door and does not sanitize and then sticks their hands, or fingers in their mouth or nose, or scratches their eyes. So the chances of the dental personnel getting infected is higher than the patient themselves and that makes the dental personnel innately invested in observing the utmost infection control. So rest assured that we're all in this together literally, and it is in both parties' interests to have the best control policy.

Becky: Great, thank you. Our next question, and I think you're going to be referring to your documents there a little bit, is, what should I expect after my dental office re-opens? What specific measures would they be taking? Do I wait in my car? Do I wait in the office now? A lot of places, including restaurants, are taking temperatures, is that something that's being recommended as well? And I think the important one for us patients is, what precautions should we actually be seeing taking place in front of us, rather than just in between patients?

Professor Harmon: Wonderful, Becky, as you can see right here on my screen, I have this ADHA version of a patient screening questionnaire. These are some sample questions that you may see when you go to your appointment now. And I just wanted to go through these questions because most screening questionnaires if they're not identical, they're almost the exact same. A lot of times, your dental hygienist or a dental assistant or maybe an office manager may actually call ahead of time. If not, then these questions would be asked as soon as you arrive. Some of the questions are: do you have a fever, or have you felt feverish recently? Do you have a cough? Are you having shortness of breath? Do you have chills or muscle pain? Do you have recent onset of headaches or a sore throat? Flu like symptoms? Any recent loss of taste or smell? Any recent GI upset, or diarrhea? Then also some specific COVID-19 questions. Are you in contact with anyone who has been confirmed with a COVID positive test? Have you traveled in the past 14 days? Have you been tested? What was the result? Then, specifically some questions about history. This is some type of questionnaire that your office should be implementing. I know now Dr. Padilla can probably speak better to what we're doing at the school. I myself have only been to the school one time since all of this. I've been doing most of my work and teaching students from home, but we also have a similar questionnaire and we also take temperature for patients who come into the UNC School of Dentistry. Now, when I've talked to a lot of my friends who are in private practice, they have been actually going out to people's cars. Or in the office space the waiting room has chairs that are six feet apart. This is definitely something that you need to be looking out for is this type of screening questionnaire. Dr. Padilla do you want to talk about the temperatures?

Dr. Padilla: Gladly, so like Jennifer said, you will be screened either 1 or 2 days ahead by phone or upon arrival. Most of the offices in private practice are having the patient wait in their car, and a staff member will go with the questionnaire and take their temperature. What we are looking for when we're doing this is for signs or symptoms of the viral disease. That means fever, malaise, lymphadenopathy(21:26), et cetera. If you have any of these positives, and most of the people on this call have an autoimmune disease, that's why you are on the call, then, you will be moved on to a secondary screening method by which somebody's going to go through your medical history, et cetera. But the majority of people on this call who are patients with autoimmune diseases will be positive in these screening questions and that will trigger their next level. So, what we do here at the School of Dentistry is we screen everybody with questionnaires. We take everybody's temperature and from the patient perspective, always wear a mask. If you don't have one, then the office will provide you with a disposable mask. You will also see some engineering changes, such as this six foot or the social distancing. You will also not find any reading material or there will be a significant decluttering of the waiting room and patient rooms because the less items we have on the surfaces, the less chances for the virus to linger. Plus we have to now decontaminate the entire surface of the patient encounter areas. That involves restrooms, waiting rooms, etcetera. Most dental offices will make you wait in your car if it's feasible and then they will call you when it's time for you to come in and you just have a passage through in a one way hallway to the clinic, and then one way out. From the perspective of the clinic, there have been some additional engineering

measures that we have instituted for most dental providers. There is a double disinfecting of the surfaces, before we would disinfect every surface of the clinic that has been in contact with the patient or patient items. Now we will do the exact same thing, but we will do that twice. We will do that once after the patient has exited the room. We will let 15 minutes go by for all the aerosols that potentially were there to settle and then we will do another disinfection and then wait until the disinfecting chemicals are completely evaporated and that will assure complete removal of the virus in this area. Remember that SARS-CoV-2 is a relatively weak virus. It does not hold on very long and it is easily killed by the standard disinfectants that we use. In addition, most of the dental offices, and we do it here, and the majority of offices will have the patient use a diluted hydrogen peroxide 50/50 with water as a one minute mouthwash before the treatment. Then they will rinse, swish and spit before treatment, decreasing the amount of SARS-CoV-2 in the patient's mouth.

Professor Harmon: Becky, can you see where it says, patient management and patient preparation? So basically a lot of what Dr. Padilla and I just talked about, this is kind of a Reader's Digest version if you will, of what we have been trained on doing for patient preparation. And this kind of goes over, prior to dental treatment, what to do upon arrival. That is where you can see, we were talking about the questionnaire, talking about taking the patient’s temperature. I believe this is probably going to overlap a little bit, but one of the questions that we received ahead of time was, will we have to immediately put on a mask right after we're done with treatment. Most likely that is going to be true. You will have your own mask. Then you take it off for your procedure and then upon exiting out of the dental practice, you will have your face covering back on. So, when you actually leave the treatment area, you'll have to actually put that face mask back on. Again, I don't mind sending this to you guys, but this is kind of a nice little summary about what Dr. Padilla just said. So that might be helpful for later on.

Becky: Perfect, absolutely.

Dr. Padilla: One more thing Becky, I also wanted to say something about the mask and the dental personnel. So that dental personnel should be wearing, as always, they should be wearing a full gown with long sleeves coverage. And they should be wearing a respirator, N95 or a class three if there's going to be no aerosol, plus a face shield. So in the case of patient to provider transmission, this will prevent the majority of them. In the case of provider to patient transmission this will definitely provide everything. Remember that this is an aerosol driven virus, which, if you are wearing your N95 mask, you cannot get it or give it. And that is the same concept of the face mask that the general population will wear. A patient with or a general population person that wears a cloth mask, made a home, or a non N95 respirator will not have a perfect barrier for inhaling it, but it will prevent almost 100% of the exhaling of the virus. If we use it as a herd, that will make the chances of having transmission very low. So,

statistically speaking, the chances of, say hypothetically that I have COVID but Jennifer does not. And we have a physical encounter within six feet of distance. Technically, my aerosol could reach her oral and nasal passages. If I am wearing a mask and she is wearing a mask, even if I am positive and infectious, the chances of Jennifer getting infected will be less than 1%. So us using a mask socially is an absolutely no-brainer. And everybody should be wearing a mask. Unfortunately, there are pressures in society that are encouraging people not to wear a mask. I encourage everybody to wear a mask, even if it is okay by law to not wear a mask, be smart. People on this call are high risk populations. It is an absolute no-brainer, wear a mask and demand that others wear a mask around you. The other thing about wearing a mask is that it is going to prevent your fingers from reaching your mouth, nose, and eyes because that's exactly how you can get yourself COVID. If you are handling a door or doing whatever that somebody had recently touched, then you can pass it on but if you don't touch your nasal passages, your chances of contagion are almost zero.

Becky: Wow, that's a lot of great information, and we covered a lot of questions. So we hope that our community will find this information very helpful. And I can see from this image, it says, one pair of clean, non sterile gloves. And that was one of the questions that had come in, should my dentist be wearing multiple pairs of gloves? But it looks like the recommendations are no.

Dr. Padilla: We only wear one pair of gloves at a time. But we go through multiple sets by doing all the steps we have to do. So when we are doing some activity and we touch a patient, then those gloves either come off and we wash again and use a new pair of gloves. So on average, each dental appointment, a patient may not see it, each dental provider will go through 4 or 5 pairs of gloves per appointment.

Becky: Great. Thank you.

Professor Harmon: Hopefully, this is really helpful for the audience. This is a really nice kind of personal protective diagram, if you will, or what Dr. Padilla and myself will look like as a dentist or dental hygienist providing care. So you heard Dr. Padilla talk about the N95 mask. That is the image that's on the left-hand side. Then as you can see, it says one pair of clean, non sterile gloves. Now, this person over here does not have on an N95 mask but this is also a face mask that is acceptable. Again, you only see one gown. You only see one pair of gloves, you see one mask, and you see one face shield. So this is from the CDC. So I thought this was a really nice image for those of you who may be more nervous about what we would look like.

Becky: Perfect, thank you. Sally says she has periodontal disease for 50 years, long before being diagnosed with MMP. All this time she has had quarterly hygienists appointments but since her hygienists and Periodontist isn't open, she's had to skip pre scheduled appointments. What can she do to keep her gums healthy? Her dermatologists said she can use a dexamethasone rinse when she has a flare, but is it possible or okay to use it as a preventative measure? What should she be doing above her daily self cleaning routine?

Professor Harmon: Well Becky, first and foremost, for sure as far as from a hygienist's point of view, making sure we're still brushing twice daily. Whether it's pemphigoid or pemphigus, making sure you're not using anything except extra soft bristles. Not doing any hard, manual brushing or scrub brushing, very rough. Then obviously whatever toothpaste that you guys have of your choice. Most of the time we recommend without the sodium lauryl sulfate because that can be kind of aggravating to tissues sometimes. As far as a rinse we still recommend nothing with alcohol but I think Dr. Padilla may have a better, more expert level on any other kind of mouth rinses. I know we talked about that a while back when we did home care products. As far as going above and beyond, gentle flossing, gentle brushing. Making sure you're doing that after eating and not snacking on foods right before you go to bed. Kind of those normal home care things we like. But as far as other mouth rinses, I'm honestly not positive so I'll turn that over to Dr. Padilla.

Dr. Padilla: So, me being old-school, I still recommend that people with dry mouth and also with potential immunosuppression of the oral cavity, brush 2 to 3 times per day if possible, if feasible. The other thing, other than the normal regular dental care that people have been using all the time is that I now recommend that people should wash their hands before brushing and flossing. That way in case you are using handheld or finger held flossing, your hands are clean before you put them in your mouth. As of before, me being one, I probably would not have washed my hands before I flossed. I no longer use my fingers to do that, I now use a flosser, which is an instrument that looks like a rake or like a Y. I use it to floss with it and I wash it before I use it and wash it after I use it. That prevents my fingers going in there and I only put the stuff that's clean in my mouth. And also now, I'm washing my toothbrush after I use it and before I use it. Those are the two little tips that could potentially help with an extra layer of comfort about COVID. But remember, COVID doesn't last too long in the normal environment.

Becky: Great, thank you. Our next question says, I missed my three month appointment and it's going to be about six months since my last dental appointment. Should I ask them to schedule me more time since it's been so long since I've been to the office?

Professor Harmon: That's a tricky one. If, perhaps this is suffering from any oral lesions or any concern, I would bring that to your dental hygienist or dentist's attention. I think part of that is if

it's just someone who regularly has great home care and they just still need a regular cleaning, it may not necessarily need more time. Also take into consideration right now with COVID a lot of offices are moving to an hour and 15 minutes or hour and a half time slots, just because of added infection control and waiting procedures. So I would say if there's an absolute concern such as pain or a noticeable legion, then that might need some extra time. But if it was your regular dental care routine, you may not actually need more time at all. But just remember, there may be some different timings right now, for kind of the unforeseeable future as far as actually scheduling goes.

Dr. Padilla: If I could add a little bit of perspective to this. The people on the call need to remember that COVID-19 is going to be over in about a year or two. So the fact that somebody may miss a three month appointment and have to delay for another three, or four, or six months until they get to see a dental professional is not going to be a permanent change. It might just be a temporary thing that they can catch back up to their dental hygiene as needed. So it's possible that somebody, because of their immunosuppression, maybe too high risk for regular dental appointments. Don't worry too much about it as long as you keep like Jennifer is saying, a really good oral hygiene protocol at home, you probably will be able to hold on well enough until this whole mess is under control.

Becky: Great. Our next question says that I'll be traveling by car to see my family, and I'll be home about 10 days before my dental appointment. Will this affect my ability to have a cleaning or a treatment in the office? And does mode of travel determine this, like if somebody were to decide to fly versus drive?

Dr. Padilla: So that's going to be a tricky one, because traveling from one place to another one a bicycle versus a train is a very different experience. The more exposures you have, the more chances you are going to have to contract SARS-CoV-2. There are also areas that are considered hotspots in which it is more prevalent than in others. So that's going to be sensitive to the person and depending on where the person travels, they may be subject to a quarantine upon return. So it's not a one size fits all answer to me. But that will be something that we'll flag in the questionnaire that Jennifer was talking about that will probably trigger additional questions and depending on the geographic location of the person that may trigger or not additional restrictions.

Professor Harmon: Patients can always go to the CDC website. There are links about travel that patients can go to to see recommendations of places to not travel to at all, places in the United States that are becoming what Dr. Padilla said, the hotspots. So if patients are

concerned about traveling they need to do some research prior to going to see if it's safe to travel there.

Becky: Great. Thank you.

Dr. Padilla: That person could potentially reschedule the appointment to before the trip that way, he's done.

Becky: Sure. That's a great tip. If somebody has been diagnosed with COVID-19, when it is safe for them to return to a dental practice for a cleaning or procedure?

Professor Harmon: Dr. Padilla, are we still saying 30 days with no symptoms? Is that correct?

Dr. Padilla: Yes.

Professor Harmon: Yeah, 30 days.

Becky: And then, what if it is their family member in the same household that has been diagnosed? Should they hold off until their loved one is 30 days without symptoms, as well?

Dr. Padilla: So in theory, if somebody in the household is positive for COVID-19, the family members should self-quarantine for 14 days, no matter what. If that person is tested negative and asymptomatic, they can return to society after that. In theory, that is the formal answer. In reality, probably 30 days would be the safest.

Becky: Great, thank you. If my dentist or hygienist test positive for COVID-19, can they still practice, even if they aren't exhibiting symptoms? And if not, how long do they remain out of the office?

Professor Harmon: My roommate, actually, she is working in private practice and they did have a scenario happen like this. This dental hygienist's husband was positive and she actually went on ahead and got testing to see whether or not she was going to be positive. I do not know what the outcome of that is. Let's say, if their spouse becomes positive, they need to get tested as well. Then, if they were to be tested, they would have to do just like Dr. Padilla was

saying they would have to follow doctor's orders about how many days they needed to be stayed at home until they can treat patients.

Dr. Padilla: But in general, any health care provider who is tested positive and there is a documented positive test, leaves the health care force for at least 30 days.

Becky: Great. Is there a recommendation on how often dental professionals should be tested? I know in Michigan, we have a friend who's a dental hygienist and she gets tested weekly.

Professor Harmon: Wow!

Dr. Padilla: There are no guidelines as to how frequently somebody needs to do that. Usually it will be based on the screening questions. Depending on if you're working in a hotspot or if you're working in a place where you see patients who are COVID positive, then that would trigger more frequent testing. If there are any symptoms, anybody who becomes symptomatic will get tested. Health care providers have a much lower threshold of tolerance as a group, so if somebody has even a couple of sneezes they will get tested. But there is no rule or guidance about it.

Becky: Great, you alluded to a hydrogen peroxide swish a little bit earlier in the call Dr. Padilla. We're getting a bunch of questions about that. Is hydrogen peroxide a good swish to use?

Dr. Padilla: Hydrogen peroxide, without delusion, is a terrible thing to use. It will chemically irritate the mouth and especially somebody with MMP or pemphigus or pemphigoid. It would be disastrous. So, we are using it half and half with water for 60 seconds. If it is too harsh for your ulcerated or bullous mouth, then dilute it even more. But it is something that is effective to kill SARS-CoV-2.

Becky: Great, thank you. Marilyn says that she has oral MMP, and she's been using a mouth rinse of Tacrolimus dissolved in water, with a clotrimazole lozenge. Is this treatment common? And, when she is on this, should she avoid dental care? And probably one of the most important questions for her, is she considered immunocompromised?

Dr. Padilla: So the majority of patients that use Tacrolimus in water, or in solution, or a topical medication, such as Desonide or Fluocinonide or Dexamethasone, they will be considered topically immunosuppressed but not systemically immunosuppressed. So as long as it is a

topical application, it should be okay. However, if they use more than, I think it was 20 grams per day on their skin or mucosal surfaces that can induce a mild systemic dosage and that will trigger a high risk status. But in general, for a topical use of steroids, it should be okay. Tacrolimus is not a steroid but it is an immunosuppressant so topically should be okay. Now, topically immune suppressing the mouth carries with it a whole bunch of things like Jennifer talked about in the patient conference. But from the perspective of the SARS-CoV-2 transmission, it should not be considered a high risk procedure.

Becky: Great. We've received this question a few times as well as before the call. The use of the suction wand has been damaging to our mouths of patients. But now in times of COVID-19, is this going to become a standard precaution and something that my dentist or hygienist insists on using?

Professor Harmon: Yes, so, right now, most of the documents that we will read on treating patients, there is a strong recommendation to use high volume evacuation HVE. That is to reduce the amount of aerosols. And then also using things like rubber dams. If you've ever had any restorative work or sealants placed. Anything that can be used to help minimize the production of aerosols right now, you want that. That's what we want. There are a lot of different sectioning devices. I know a lot of people in this population have very tender mucosa and gingival tissue. There is an actual covering that some hygienists can order to put on the very tips of the suction to make it not grab so hard on the inside. So that may be an option for certain dentists and dental hygienists to put on the ends. It has little holes on the end. It still suctions but it almost provides a little barrier right there that way it doesn't suck up the inside of your cheek as rough. But, unfortunately, right now, anything that produces aerosols, we must use the HVE.

Dr. Padilla: Remember, this is a temporary measure. It's going to be in place for a probably 1 or 2 years, and then it would probably be phased out. And I am very aware that using high volume evacuation tools literally creates a Nikolski sign on many patients with pemphigus and pemphigoid but unfortunately, at this point, it is something that is for the greater good. Potentially, what you can ask the provider will be to use it, not in contact with the tissue and try to keep a little bit more distance, even though it is still, like Jennifer is saying, it is something that we are highly recommending for dental providers at this point.

Professor Harmon: Becky, if everyone can see my screen, I have it pulled up right now. Here are special considerations for dental hygiene care, specifically, can you see in bold they have an entire section that's dedicated to aerosol generating procedures and things to do. So right now, they are actually recommending not to use the ultrasonic scalar and to use hand instruments instead. Now, I will say this, ultimately, according to CDC guidelines, is also up to the clinician. But if you end up having to use it, let's say, then you can see right in the center it

says, “If aerosol generating procedures are necessary for dental care, the use of four handed dentistry, meaning myself and like an assistant. High evacuation suction and dental dams need to be used to minimize droplets, splatter and aerosols”. This is coming directly from that Task Force report that I have and I am going to send you guys. It also tells some things that you should do if you can such as dental treatment should be provided in an individual patient room with a closed door. Well, a lot of offices don't have the option for closed door. So, again, not everything is going to be perfect but there's extra precautions outlined.

Becky: Sure. This is great information. Let's see, our next question says, if I have oral lesions for my disease, am I more likely to get COVID-19?

Dr. Padilla: I don't know of any publication that says that in any place. I know that the receptor is usually within the epithelium. So not having intact epithelium might mean that there is less, but I really, truly don't know. So I'm sorry that I have no idea, but I do know that we are generating a study here at UNC that we probably will be able to answer your question in about a month.

Becky: Great, when you're collected the data and you're ready to share, if you wouldn't mind, sharing it with us because I'm sure our community would want to know this as well. \

Dr. Padilla: A sneak preview of the data that we have so far, we think that the majority of receptors for SARS-CoV-2 are in the oropharynx mostly, not necessarily in the anterior throat, similar to HPV receptors.

Becky: Wow, interesting. Beth says, do you have any supporting documentation or can you direct me to documentation, characterizing dental surgery as part of treatment to avert life threatening deterioration for pemphigoid in the mouth?

Professor Harmon: I’m not sure about that. Is that regarding to right now during COVID? I'm sorry.

Becky: It doesn't really necessarily mention COVID in the question so it could be a general question.

Dr. Padilla: Can you read it again? I'm sorry.

Becky: Do you have any supporting documentation or can you direct me to documentation characterizing dental surgery as part of treatment to avert life-threatening deterioration for pemphigoid in the mouth?

Dr. Padialla: So this has a ton of implications so we need to all agree and understand that anything we can do to keep our mouth as healthy as possible, will impact our general health. And having the opposite also really impacts it. So healthy mouths, healthy bodies and vice versa. The problem with that statement is that I am not aware of anything that will tell you that. But also, we have insurance companies fighting that tooth and nail, because if that was to be declared, that will mean that everybody with pemphigus or pemphigoid will get medical insurance to cover their veneers.That's gonna be the tricky part. So, in the majority of the cases, medical insurance will not cover elective dental care and will only cover emergency care. In the question, that person asked if it was a life or death. As you know, it used to be a life or death, recently, with better immunosuppression and immune control it is less so. Controlling the disease in any site that's involved is a matter of general health.

Becky: Great. Thank you. We got a question from Robin and it says, how long after I received my Rituximab treatment do I need to wait to see my hygienist? She's experiencing spongy gums and feels that her condition is getting worse.

Dr. Padilla: So Rituximab is, as you all know, is a B cell suppressor. That will probably mean that that person needs to see a dentist more often. Now is that going to put that person in higher risk for COVID? Probably, yes. The other important thing with Rituximab and a B cell blockage is that it will probably make you less efficient at developing antibodies, should you get immunized against the virus. So having Rituximab on board usually requires a washout period of a good 6 months before you get immunized and be effective. And it usually will require a little bit of after the immunization to hold it. So as usually people with Rituxiamb get their infusions once per year or thereabout, usually the recommendation is not to get any vaccine within 6 months of your last infusion. And to allow, for a little bit of time of about 2 or 3 months, or thereabout, after your infusion to get an immunization. So, the sweet spot probably will be a month 6 and a half, to 7, or 8, and then, wait until your next one.

Becky: Great, thank you. The IPPF has heard from a lot of patients who are undiagnosed, but they're having difficulty getting a biopsy done due to COVID-19. When you have oral lesions and are trying to get that biopsy, I know you went over the information about landing you in the emergency room and what's considered a dental emergency. Is getting this biopsy, also considered a dental emergency?

Dr. Padilla: So about 90% of the offices in the US are now starting to schedule non-emergency patients. When we were in the thick of it and some states are still in the thick of it, such as North Carolina where Professor Harmon and I are, we are still increasing the number of cases. Those situations in which the dental offices are scheduling emergency situations, then that will put up delay on that. But, in general, as offices start to open up there will be available appointments for these procedures and in general, this is something that will not make you at higher risk than a general patient population because if you have not been diagnosed and you are not under immunosuppression, then you are an average risk patient.

Becky: Great, thank you. Our next question says, I was considering getting an implant to replace a missing tooth that had fallen out due to my disease. Should I still postpone this procedure until COVID-19 is no longer a concern?

Professor Harmon: I think Dr. Padilla mentioned this. We're going to be dealing with COVID-19 for another year or two. This isn't something that's just going to go away tomorrow. I would say if the patient is uncomfortable, or having issues talking or eating, then I think scheduling an appointment and a console is definitely okay. But I also think it’s to the patient’s discretion when they want to move forward and are they ready to deal with undergoing an implant? An implant placement is a surgical procedure. So are they ready to have to do that and go through the healing during COVID? Again, Dr. Padilla already mentioned, our offices are clean. We are there to treat patients that have disease. But I think when it comes to that, if there's worry you can continue to hold off. But if you're ready to move forward with it, those are being scheduled.

Dr. Padilla: And a couple of things about that. Number one, about the offices, like Jennifer said, this is not new for dental offices to have to deal with infection control. We have for decades been aware of HIV, and Hep B, and tuberculosis. Both of them are blood borne and or airborne particle disorders. So, we are relatively familiar with that. It is nothing that's catching us with our guard down. Is just enhancing the protection for the provider and also for the patient. But regarding an implant, probably if we step 1 or 2 steps back about the loss of the tooth, it is very important. In your question that you read Becky, you said that they lost the implant because of their disease. To my knowledge, what happens in patients with pemphigus and pemphigoid is that their disease enhances periodontal disease and then that triggers bone loss, etcetera. The ideal time when somebody should get a dental implant, is when their periodontal disease has been controlled. I don't think it's a good idea to have an implant when there is active periodontal disease that triggered the loss of a tooth or teeth in an area. So once that is under control, then I will say the chances of an implant to stick are going to be really good. In general, the success rate of an implant is in the 95% range for the general population.

Perhaps a little bit lower for a pemphigus or pemphigoid patient. But if they have uncontrolled underlying periodontal disease, the chances of success are extremely low.

Becky: Great. Thank you. And I think you've just answered one of the questions that was submitted. She says that I've had PV since the mid eighties. And I've had blisters in my gums for over 10 years, but in the past 10 years she's experienced tooth loss. Is there a connection between blisters and tooth loss? And it seems from what you're saying. The answer is yes.

Dr. Padilla: Correct, in my anecdotal experience of nonpublished patient cohorts, I have found that when somebody has any inflammatory condition or autoimmune disease and they have gingivitis or periodontal disease it will enhance each other. So the cleaner the mouth is, the better the response to the treatment, and the better the status of the disease, and the easier it is to clean. So it is a condition in which it's a mutually permissive or influential condition.

Becky: Really, truly, this has been a very quick hour. Our time for today is up. Are there any last statements that you would like to tell our community of how we can protect ourselves and give ourselves the best oral health and oral care in times of COVID-19?

Professor Harmon: Well, again, Becky, I'm going to send out these. I actually just found some information about the personal protective equipment and the pre procedural mouth rinse. I know somebody asked a question about that a while ago to Dr. Padilla. For me, from a dental hygienist perspective, just continue with good oral hygiene home care. Making sure that you are brushing 2 to 3 times a day with whatever toothpaste is good for you guys. I'm sure you guys each have their own brand that works for you, stick with that. Don't ruin your at home routine just because we're in a pandemic. Make sure that you're using soft bristles, flossing when you can gently, whether that's with string floss or if it's with the little Y flosser like Dr. Padilla was saying. And also just maintain your part in your oral care.

Becky: Great, thank you.

Dr. Padilla: My only parting thought is that I want to remind everybody that COVID-19 has an end. It will end once we have epidemiologic measures to control it. So, what we're doing right now is a temporary thing and things will get better. It may take a little while, probably a couple of years, but it will get much better.

Becky: Great. Thank you both for being here. You both are amazing and provide our community with a lot of great information. I'd like to give a huge thank you for everybody who joined us on the call today. And a big thank you to Genentech, Principia Biopharma, argenx,

and Cabaletta Bio for making today's call possible. Before we go, I do have a few announcements.If you have not registered for the IPPF's natural history study we encourage you to do so. The IPPF Natural History study is a patient registry sponsored by the National Organization for Rare Disorders (NORD) and the US Food and Drug Administration (FDA). You can register today at www.pemphigus.iamrare.org. This online data system collects, stores, and retrieves patient data for analysis in research studies. The more data we can collect, the better the information we can give to researchers, the sooner they can find better treatments, earlier diagnosis, and one day a cure! We want to thank everyone that donated to the IPPF's Hope Fund and to our generous matching partners, Principia Biopharma and argenx for helping us exceed our goal of raising $40,000. With your generous support we are able to keep hope alive and continue supporting you and our community in the way you have come to expect! Also, for those of you that do online shopping through Amazon, you have the opportunity to give back all while shopping. Visit smile.amazon.com and search for the International Pemphigus and Pemphigoid Foundation as your charity. Amazon will donate 0.5% of all purchases made through amazon smile to the IPPF.

Lastly, If you have a question that didn't get answered on the call and I know we had some many questions during today's call, please e-mail me, Becky Strong, at becky@pemphigus.org, or call (916) 922-1298 x:105, and we would be more than happy to help.This call recording will be sent out with the survey following this call. Thank you, everyone. Goodbye.