Hairstyling and Alopecia—What Dermatologists Need to Know (Sponsored by Eli Lilly and Company) Crystal Aguh, MD, FAAD, interviewed by Seemal Desai, MD, FAAD

SEEMAL DESAI, MD, FAAD: Hello and welcome to this episode of *Dialogues in Dermatology*. I am Dr. Seemal R. Desai. I'm a board certified dermatologist in private and academic practice, the incoming President-Elect of the American Academy of Dermatology, and a member of the *Dialogues in Dermatology* editorial advisory board. It's my pleasure today to be here to have a dynamic conversation with my friend and colleague, Dr. Crystal Aguh. Dr. Aguh is Associate Professor of Dermatology in the Department of Dermatology at Johns Hopkins School of Medicine in Baltimore, and also Director of the Ethnic Skin Program. Crystal, welcome.

CRYSTAL AGUH, MD, FAAD: Thank you so much for having me. I'm so excited to speak with you today.

SEEMAL DESAI, MD, FAAD: Let's dive right in, because I think the topic of alopecia and hair care and hairstyling, I want to soak up all your knowledge, because this is something that I think can benefit so many of us. One of the things that I want to really talk about is practical approaches to counseling patients. So broadly, people come in, "I've got hair thinning," "I've got hair shedding," "I feel like I'm losing my hair, it's falling out." Give us a couple of your introductory questions and/or clinical exam things you do in that first few minutes to really sort of try to hone in your differential diagnosis.

CRYSTAL AGUH, MD, FAAD: Absolutely. So that's a great question, because patients are going to come in and some are going to say, "My hair is really thin." Some are going to say, "My hair is breaking a lot." Others are going to say, "My hair is not growing." And those are all different diagnoses. So if someone is coming in and they're saying, "My hair is not growing, it's constantly breaking, or it's breaking off in the back," can we do a scalp biopsy? One of the first

thing I talk to dermatologists about is that we are trained on a scalp biopsy but that is going to tell us very little about the hair itself or the hair quality.—

--If I have someone with curly hair who is coming in and they're complaining about hair breakage, or their hair is not growing, or it's really short and they haven't cut it in years and why aren't they getting length, I'm really focusing on treating acquired trichorrhexis nodosa, which is basically just hair breakage from poor styling and care habits. And so for that patient, I'm really going to focus a lot on hydrating the hair. Curly hair is inherently fragile and dry, sebum doesn't coat it quite as easily.—

--And so I want these patients to focus on washing every week, deep conditioning with every wash, using a leave-in conditioner several times a week. This is very different than the patient who comes in and says, "My hair is really fine. I'm getting older and it's just thinner. And I want to show you this picture of me from when I was 17 years old, when I couldn't get a ponytail holder around it and now I can wrap my ponytail holder around it three times." Well, some of this is just physiologic aging. As we get older, the hairs that we have cover less scalp.—

--And I kind of divide androgenetic alopecia into like physiologic androgenetic alopecia and then pathologic androgenetic alopecia, where we're thinking about someone with a Sinclair 3, 4, or 5 and they're only 45 years old or they have elevated testosterone levels. For that first patient, I'm going to talk to them about protein conditioners, shampoos that can increase the appearance of fuller hair. And so these are things that contain ingredients like hydrolyzed proteins, just to help the hair appear more fine.—

--When it comes to fine hair, even if we overload it with oral minoxidil, that's not going to change things because it's not necessarily a pathologic issue, it's really just that the hair is becoming finer over time. Then finally, hair shedding, I think of this as telogen effluvium. And I think I'm doing what many of us are doing, which is counseling patients on the etiology of telogen

effluvium and the fact that it is going to spontaneously resolve. So all very different scenarios that I approach differently when it comes to counseling.

SEEMAL DESAI, MD, FAAD: Got it, great. Now, speaking of diagnostic counseling, and one thing you mentioned made me think about this, Crystal, do you still do hair pull tests? And if you do hair pull tests, what is your way to tell our audience to do it better? Because I always hear people do hair pulls, but aren't really doing them the right way.

CRYSTAL AGUH, MD, FAAD: You're going to get so many answers from so many different dermatologists, even those who are focusing on alopecia. So I am not yanking. I am casually running my fingers through the hair because that's what patients are doing, as well. So if they're coming in and they're saying, "I'm getting a fistful of hair," I want to know how aggressive are they being with their hair to get that. Because you will see differences. And so I'm looking for either a telogen effluvium or anagen effluvium.—

--So when I'm thinking about anagen effluvium, I'm thinking about my alopecia areata patients who are rapidly progressing. And I want to know if that hair pull test is positive because I might put them on oral steroids. I may try to break that aggressive shedding. For my telogen effluvium patients, I want to see if there's a positive hair pull test. But I am not aggressively pulling because telogen hairs, even when you look at them under the microscope, they are just ready to come right out.—

--They shouldn't require a lot of effort, like an anagen hair would require to come out, if it's properly anchored. And so my force is in between a very light to a medium force of a pull.

SEEMAL DESAI, MD, FAAD: And I love that because I agree with you, some of us were taught you've got to get a minimum of 100 hairs and you've got to yank those hairs. And maybe that's not true, so thanks for that. Now, I'm glad you mentioned hair care styling practices, let's get into

that in just a minute. Before we do that, I do want to also get your opinion, doing ethnic skin and hair, obviously hair loss can be very, very challenging, both psychologically and clinically for many of our patients, certainly our underrepresented populations. Do you want to comment on what you see in your patients from different ethnic backgrounds before we dive into a little bit more about styling?

CRYSTAL AGUH, MD, FAAD: Absolutely. From a big picture standpoint, I think one of the things that's very sad for me that I've realized very early on in my career is that progression into a wig is a lot more accepted and considered an eventuality among black women than it is in women of other races. So for women of other races, losing hair and requiring a wig is truly, truly devastating and unexpected.—

--I think for some black women, some dangerous hairstyling practices have been so pervasive that for several of them they say, "Hey, you know what? My grandmother is in a wig, my mom is in a wig." And I really have to talk to them about the fact that that does not have to be the case. So we're not talking about CCCA, which is something that's very difficult to prevent, we're talking about traction alopecia, acquired trichorrhexis nodosa that's leading women into wigs. And those are things that, especially with early intervention, we really can stop and really change the mindset of healthy hair for a lot of black women.

SEEMAL DESAI, MD, FAAD: When we talk about healthy hair for black women, or for patients of different ethnic backgrounds, or even men, the frequency of shampooing is so critical. And you kind of alluded to that. So in a sound bite, how many times a week would you tell someone who is from an African-American background that they need to shampoo, if they've got let's say CCCA and concomitant seborrheic dermatitis? Or if they've got alopecia areata and seb derm? Or just if they have thick, thick seb derm that could be affecting their hair? Are you saying three times a week, twice a week, once a week? Do you have just a general gestalt given?

CRYSTAL AGUH, MD, FAAD: I do. For women with curly hair, I really tell everyone they should be aiming for once a week. I don't go up from that unless their hair is less curly and more wavy, which you can still see in African-American women, but I like a once a week frequency. And then I just feel for seborrheic dermatitis, you have to do an adjunct treatment. Shampoo alone is not enough for black women. You can do a shampoo but because it's only a once a week frequency, you have to add a leave-on agent.—

--As opposed to my patients with straight hair, because I know they're going to wash their hair at least three times a week, three times a week is okay as far as frequency is concerned for any topical medication. Think about eczema. You can have the best eczema cream and if someone's only going to get it on once a week, it's not enough. And so shampoo is not the cornerstone of treatment for seborrheic dermatitis for black women, so we just have to keep that in mind.

SEEMAL DESAI, MD, FAAD: Just to recap, maybe do a ketoconazole or a tar-based shampoo or a sal acid-based shampoo once a week. But also use maybe a topical steroid oil or a liquid or something maybe thrice a week is what I understand.

CRYSTAL AGUH, MD, FAAD: Exactly.

SEEMAL DESAI, MD, FAAD: And I really like that. Now, let's take that a step further. I get a lot of questions about, okay, you're telling me that I've got to use this prescription shampoo. That's going to dry out my already dry hair. That's going to split my split ends even more. So then I say to the patient, well, this is what I do. I tell them, "Fine, use a conditioner that you want, in addition to my prescription shampoo. But what do you tell them?—

--Do you maybe say do the prescription shampoo once a week and then get a more siliconebased or dimethicone-based or an oil-based shampoo for another day a week? Or do you just combine the prescription with an OTC conditioner?

CRYSTAL AGUH, MD, FAAD: Right. And you really headed straight into my next point, because anyone who's heard my talks is going to be like, "Wait, I thought you don't give out ketoconazole shampoo?" and I don't. So I don't do ketoconazole shampoo for curly hair because it's so dry. So if I give prescription, it's ciclopirox, because ketoconazole has sodium laurel sulfate. That's super-drying, it's going to break the hair. Ciclopirox has sodium laureth. And so I will either, if it's really bad seb derm, you're going to get ciclopirox shampoo from me.—

--If it's moderate seb derm, I'm going to point you to a zinc pyrithione-based over-the-counter shampoo preparation because those are more conditioning. And exactly like you mentioned, I'm literally going to be looking for conditioning shampoos because it's hard to alternate if you're only washing once a week. Because sometimes I do recommend alternating a prescription with a normal shampoo. For once a week, it's hard to alternate. You really probably should be getting that on every week. So that's why I say zinc pyrithione-based for moderate shampoo, plus a scalp oil, exactly right, that's exactly what I do. And then for more severe, ciclopirox plus a scalp oil.—

--Now, if you have severe, we're talking sebopsoriasis, and I can't use an oil and I need to use something of higher potency, then I go into a scalp solution. If patients don't mind their hair getting wet and curly, which many don't, sometimes I do a foam or an ointment. But that, I will really let the patient guide me as far as what steroid base they would prefer.

SEEMAL DESAI, MD, FAAD: Love that. And I kind of purposely teed you up for that ketoconazole, because I know your ketoconazole thought, and I think that's valuable. And I think

it's important to have these conversations. That's why we're doing this in *Dialogues*. Now, overthe-counter shampoo. Patient comes in, "I feel thinner. I want fuller hair. I need a little volume. I want less shedding." Ingredients OTC, you don't even have to give me brands if you don't want. But tell me what to look for and which shampoo to tell them to buy on Amazon, online, or in the store.

CRYSTAL AGUH, MD, FAAD: You know what's great for everyone? Almost everyone are these protein conditioners. So Olaplex No. 3 is really popular. It's considered like a pre-shampoo product. But that is going to help minimize breakage. And that's very important to increasing overall fullness for your hair. So I really like it for women with fine hair, of all hair types. There's also a product called ApHogee Two Minute Reconstructor.—

--That's also really good for all hair types. So anyone who is dealing with fine hair, like colored hair, so if your hair is dyed and because of that it's becoming finer or it's breaking, I recommend that across the board. Because it's going to be a washout preparation. I don't recommend necessarily sulfate-free shampoos anymore. Just from a chemical perspective, if we all recall negatives attract positives, true sulfate-free preparations tend to have either a neutral charge.—

--And so if you stack a neutral charge and try to attract a conditioner, you don't really get as much of a conditioning punch. So I like what I call mild sulfates. My favorite ingredient is sodium C14 16 olefin sulfonate. You can find that in a lot of different shampoos. Some of these shampoos will say sulfate-free but it's actually a sulfate, it's just a very gentle sulfate, so you're still going to get some of the negative charge but not so much that you're going to strip your hair. Sodium C14 16 olefin sulfonate, so that's my favorite shampooing ingredient.

SEEMAL DESAI, MD, FAAD: Good to know. That's a mouthful but I'm glad you repeated it. And that's something that we can make sure. And you can write that down for your patients, too. You can tell them, "Look for this ingredient."

CRYSTAL AGUH, MD, FAAD: I have a whole very detailed patient handout for Epic, my electronic medical record, yes.

SEEMAL DESAI, MD, FAAD: Perfect, templated up, I love that. So let's kind of bring this full circle. Now, I'm going to make this a little personal about me, because I want your advice, my hair loss expert friend. A male comes in, male pattern thinning, just like I have. We're on audio here but I've got thinning hair. I've tried topical minoxidil, topical finasteride, off-label oral minoxidil, oral finasteride. There's the hair hats, the laser hats, there's PRP, there is lots of other stuff.—

--Starting with men with androgenetic alopecia, is there a favorite OTC shampoo that you like for these male patients?

CRYSTAL AGUH, MD, FAAD: That's a great question. OTC, not necessarily. Most of my male patients are going to get ketoconazole shampoo from me. Because I feel like it definitely won't hurt and it possibly will help.

SEEMAL DESAI, MD, FAAD: And how, tell our listeners how.

CRYSTAL AGUH, MD, FAAD: There have been some studies about it increasing the percentage of hairs in anagen phase. So as you know with androgenetic alopecia, you get a slight telogen shift, and that's one of the reasons you get thinning. And so shifting some of these hairs into anagen can be helpful. And also some limited data about possibly increasingly the width of hairs affected by androgenetic alopecia, so reversing that miniaturization. So that's if you're curly, straight, because most men are going to keep their hair cropped short.—

--I don't really have to focus on a great hair product. So most of my patients are going to get that shampoo. I do want to speak on my favorite medication for androgenetic alopecia in this moment, if that's okay? It is off-label use of oral minoxidil. And I have been really reaching for that more for men of all ages, young men and older men, just because it's a non-hormonal treatment for androgenetic alopecia. I don't have to worry about hypertrichosis, which is the most common side effect that we'll see when we use low dose oral minoxidil off-label. And so my patients have been tolerating it well, so I have been using that more often in clinic.

SEEMAL DESAI, MD, FAAD: And how do you dose or prescribe that? How do you actually send that in?

CRYSTAL AGUH, MD, FAAD: That's a great question. So for women, and I use oral minoxidil a lot for women, I will start off at 1.25 mg for four weeks. And then after four weeks, I go to 2.5. For men, I'll do one of two things. If they're younger, I'll start off at 1.25 mg for four weeks, go up to 2.5. If they're older, I'll actually start off at 2.5 mg and go up to 5 mg after four weeks. And the way I think about it and I'm guessing there are not a lot of cardiologists listening to this, and maybe my thinking is wrong, if your spouse is a cardiologist I apologize.—

--But, as we know, oral minoxidil is FDA approved to treat high blood pressure. If your vessels are just nice and flimsy like they are when you're young and you have no cholesterol buildup, then I just think the side effects such as lightheadedness, dizziness are just going to be more common, so I like to start on the lower side as far as dosing. Understanding that most patients who are getting it for the FDA approved indication are older. Most patients who are starting off at 20 mg a day are in their 60s, so I don't feel concerned about starting an older gentleman on 2.5 and then going up to 5 a day.

SEEMAL DESAI, MD, FAAD: Let's bring this full circle back to hairstyling. Because one of the things that I get a lot of questions about is, "I want to get a hair prosthetic. I want to use a wig." Give me advice on where to find a wig. Is there a type of wig you should look for? Is there a resource? Is there a risk of contact dermatitis from the adhesive on the wig? Or should we ask patients to do more permanent things, like sew-in hair? Just give me the last couple of minutes

as we kind of land the plane what you think about that. Because we could talk for hours but I want to make sure we get to this topic.

CRYSTAL AGUH, MD, FAAD: That's a great question. There are so many nuances when it comes to camouflaging techniques. So we're thinking about somebody who maybe has lost a lot of hair, whether that's from alopecia areata or scarring hair loss. If there is chance of hair restoration, I do want to be cognizant about the type of camouflaging technique that's being used. I like to avoid adhesives, because not only can they cause a contact dermatitis but you can get traction alopecia, especially for my patients with curly hair. Getting into endstage traction alopecia kind of negates the purpose, because now you need a hair transplant, even if we grew in your alopecia areata.—

--So I don't want patients to glue down their wigs or tape down their wigs. So you want something that's removable, that you can remove every night. If you are prone to traction alopecia, having a Velcro band or a silk or satin wig cap underneath to minimize any dryness and breakage. I have a lot of patients, especially patients with straight hair, who when they're suffering from let's say severe androgenetic alopecia or alopecia areata will use kind of metal extensions.—

--These are very, very small, almost like clip-in type extensions that are meant to stay in place for several weeks at a time. And that can lead to severe breakage, as well. It's quite expensive. The stylists who do them obviously will reassure patients that these extensions are not going to lead to hair loss but they do. And so you really want to focus on things that are not going to make hair loss worse. And so I do like wigs, as long as they're being done safely. Again, avoiding adhesives. And I prefer wigs to weaves, braids, or other forms of extensions.

SEEMAL DESAI, MD, FAAD: I think this has been fantastic. I want to keep bugging you with more stuff, so we're going to have to have you on another episode, because this is always fun

to get your pearls. Crystal, in the last minute, tell me from more of an aspirational perspective, as someone who's done a lot of hair loss research, you're an author, you've written this amazing book, you're spreading the word on social media, what would be some of your kind of hopes for the next generation of hair research and hair development to really help our patients who are suffering?

CRYSTAL AGUH, MD, FAAD: It's a great time to be an alopecia specialist. For those of you who are thinking of dipping your toe into this subspecialty, we have so many great treatments. I'm super excited about JAK inhibitors for alopecia areata. But I would love to see greater treatments for hair restoration for scarring alopecias. And I think several of us who see these patients and treat these patients, we know that follicular rescue is possible for several patients. And so I would love to see us identify those treatments.—

--And then from a more personal perspective, especially treating so many women of color with traction alopecia and endstage disease, and seeing people come into my clinic in their 40s and 50s and just wishing they could turn back the hands of time, I really do want to see us do a better job about educating patients. I think as dermatologists, we've done a phenomenal job educating patients about dry skin care, tanning booths, tanning beds. We are all about prevention and I would love to see us focus on prevention of hair loss and getting that message out there to young people, so that we can make that impact from an early age.

SEEMAL DESAI, MD, FAAD: Crystal, this has been phenomenal. I want to thank you so much for joining me and really taking a different spin on hair loss. We didn't dive so much into prescriptions but we dove into so many of the other soft components. And sometimes, I would call these soft components even more valuable sometimes than the medical therapy, because it's part of such a large package. Thank you again for being interviewed today. And to all of you listening in, thank you for being a part of *Dialogues in Dermatology* and the American Academy

of Dermatology. I'm Dr. Seemal R. Desai, with Dr. Crystal Aguh. We were talking about alopecia hairstyling, what's new and hot and what's to come. It's been my pleasure to be your host and we look forward to seeing you on the next episode of *Dialogues*. Until then, stay healthy and stay well.