Revitalize Skin & Hair With GHK-Cu Peptides Transcript

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Introduction to GHK-Cu

Hi, it's Dr. Jen. I wanted to give you guys a mini talk on the science behind GHK-Cu (Copper Peptide) specifically for the skin and hair follicles. So this is a great peptide.

GHK-Cu is glycyl-l-histidyl-l-lysine. It's a naturally occurring peptide. And it's found in the human serum levels averaging about 200 nanograms per milliliter.

But unfortunately at age 20 that's how robust they are. But then they started to decline to 80 nanograms per milliliter by age 60. So, this is why I think this is a great product for the skin, because as you age, collagen and elastin declines in the skin.

How GHK-Cu Works in the Body

And this is one of the ways you can help battle that part of aging. So GHK has a high affinity for copper in that form. Securely. GHK-Cu. And this is when you hear about this the most.

the big three things it does is it helps repair, remodel and rejuvenate. And it's sometimes called liquid Botox. GHK-Cu improves wound healing and tissue regeneration.

So this is true for the skin the hair follicles, the stomach, intestinal linings, bone tissue and many other things. And increases collagen and glucosamine glycans.

Stimulates synthesis and decoherence. Increases angiogenesis and nerve growth. It possesses antioxidant and anti-inflammatory effects, which is really cool for a peptide and awesome for the skin.

As we've learned about peptides. They help turn on and off certain gene expressions in the body and GHK-Cu, it affects gene expression because it can help reset the DNA repair genes.

It helps stimulate them. And in studies it's showed that GHK increase or decrease gene expression up or down more than 50% in 32.1% of human gene. So it's really going in there and in turning on and off gene expression, which is really cool.

It also helps suppress interleukin six secretion in skin fibroblasts and interleukin six gene expression in cross sites. So what are the benefits for the skin.

Helps tighten the skin and reverses the thinning aged skin, which we all have seen.

Skin Benefits and Anti-Aging Effects

I know working in the emergency room, we've seen elderly come in with those skin tears. So if you have a nice copper peptide cream, you can help repair that like and tighten that loose skin.

So you're not having those skin cares. It also repairs protective skin barrier proteins, which is really important because what happens with the skin is if we have aging skin or even skin exposed to certain elements, we lose that protective layer and that protective layer.

Not only does it protect our skin and make it look good, it helps protect against the loss of moisture. So we are skin looks like less thirsty and dry.

It helps reduce fine lines, depth of wrinkles and improve structure of aging skin smooths that rough skin that you

can get and helps reduce photo damage, which means sun damage, mottled hyperpigmentation, skin spots, and skin lesions.

It also protects the skin from UV radiation. Simulates wound healing. I've really seen this in a lot of certain patients and increases hair growth and thickness and helps enlarge hair follicles so GHK-Cu can actually penetrate the stretching corneum and the use of liposomes to increase that penetration.

This is used a lot in scalp for for my patients. They really like this. And there are studies in the Annals of Dermatology. In 2016 they showed the efficacy of a complex five amino acid and GHK peptide on hair growth.

And they showed the study showed that the complex of the five Ala and the GHK peptide can be considered as one complimentary agent for the treatment of male pattern baldness loss, and they were shown to have an increased hair count, which was significantly significant.

This is very important with people that are concerned about losing hair now, specifically in the scalp. It increases the hair growth and thickness, enlarges the hair follicle and improves hair transplant success.

So those are really awesome. The research in the skin. There's been a few really important studies. One of them that was called cosmeceuticals in active cosmetics drugs versus cosmetics.

Markel Tucker, New York, New York. This is a 12 week facial study of 67 women. They were between the ages of 50 and 59, with mild to advanced photo damage.

They applied a GHK-Cu cream twice daily for 12 weeks. They showed improved skin laxity, clarity, firmness and appearance, reduced fine lines, coarse wrinkles and model pigmentation, and increased skin density and thickness.

Overall, just the it seemed rejuvenated the skin, which I think is so important.

Hair Growth and Scalp Applications

In At the American Academy of Dermatology 60th Annual meeting, February 2002, they had a facial cream containing GHK-Cu peptides applied for 12 weeks to the facial skin of 71 women with mild to advanced science of photo aging, and the study showed it increased skin density and thickness, reduced laxity, improved clarity, reduce fine lines and wrinkles.

Once again, just amazing benefits and I like it for the skin because it's it's found in the body and it's been it's affecting that gene expression and working from the inside out on those.

What about wound healing. So I think that this will be up and coming. I'm hoping, based on the research, that more hospitals and wound care centers look at GHK-Cu and other things such as hyperbaric and red light therapy.

So a study showed that GHK-Cu, you know, it's been proven in the literature. It helps accelerate wound healing. It increases angiogenesis or increased blood vessel formation.

So then, more oxygen to the wound site to help with healing, stimulates collagen synthesis in the fiberglass, which is an increased expression of integrins.

And P 64 in Basil Kara site. So that's increasing collagen synthesis, which we know GHK-Cu does. So it does it for wounds to. And excessive inflammation can lead to delayed healing and scarring.

We see this a lot, especially in people that get chronic wounds such as diabetics, people with chronic illnesses.

Clinical Studies on Skin Rejuvenation

So this working as an anti-inflammatory can really help this peptide GHK-Cu reduces TNF alpha and interleukin six synthesis secretion and stimulates synthesis of decoration, which is an extracellular matrix protein.

As we discuss anti-inflammatory and antioxidant properties and repairs that protective skin barrier. So then you can really get the healing. This one study on the effect of GHK-Cu on interleukin six secretion in normal human dermal fiberglass.

So because of the anti-inflammatory properties of copper peptide can be used on the skin surface instead of corticosteroids or NZ drugs which have more side effects.

And GGH, GHK and their copper complexes decreased tumor necrosis factor alpha dependent interleukin six secretion in fibroblast and interleukin six is crucial for normal wound healing, skin inflammation, and UVB induced erythema.

I love this study because it it says that it could be an alternative to NSAIDs and steroids which have side effects. Right. We're not seeing side effects in these peptides as we've discussed during this Summit.

another research on the effective topical tri peptide copper complex on healing of a skin open wound. So ischemia meaning lack of blood flow, lack of oxygen, open wounds. Right.

These are totally open. And this was to evaluate the the topical peptide. And it showed it was an affected stimulant of healing ischemic open wounds in rats and may have an application for treatment of chronic wounds and other species.

Clinical evaluation is warranted. So this was a study in animals. And hopefully we do more wound studies on on people. And you know, just pretty amazing.

Wound Healing and Anti-Inflammatory Effects

I had a patient it's a quick case study. 38 year old male. He went to urgent care for poison IV two weeks prior to contacting me and was given steroid and antibiotics.

And then he went to the urgent care for a rash and was diagnosed with cellulitis. He was given more oral antibiotics and Neosporin topically. And the initial picture said to me, it was just it was just candid.

It was yeast. It was teeniest krewes or jock. It. It was right in the inner thigh. It was pretty obvious. But because they were putting this exclusive dressing on the Neosporin, so it was just feeding the yeast, feeding that rash and giving antibiotics and disrupting the gut flora even more.

It looked a mess. It was about this big. So I got him off the steroids, off the antibiotics, started him on Candida supplements and even one dose. And I flew can't because it was so bad I had to put nystatin powder topically on it.

Also just to dry it out a little bit. And it did improve. And he he sent me another picture three days later and I was like, you know, are you ready for some big guns?

Right. And we put topical GHK-Cu on the wound and it was two milligrams per milliliters cream twice a day and three days later it looked so much better.

He was so happy. He, you know, wasn't going to have a big scar or anything like that. So definitely really great as just another tool in your toolbox.

And I still did use some conventional medication, but I use the peptides also, especially in wound healing. It's quite beautiful. So real quick, some topical formulations of GHK-Cu.

if you're going to be ordering from a compounding pharmacy, you can get some of these amazing products too.

such as Vitality Skin Care. You can get GHK-Cu, you know, over the counter.

if you are calling these into a compounding pharmacy, some here are some of the formulations GHK-Cu and arginine and liquid phage that is that can be either gel cream and that arginine gives a little bit more of like a tightening to the skin.

Case Study and Topical Formulations

You could compound and that would be like 0.2 percent GHK-Cu, 10% the arginine in 5% leukocyte. And then GHK-Cu hydrochloric acid, usually two per ten milligrams.

And that's usually a cream. The hydroponic acid just gives a little bit more plumping effect. but that's more temporary, right? That if that goes away where the GHK-Cu is more going up because it's affecting that gene expression, it's going to, stay longer, if that makes sense.

GHK-Cu five milligrams for ML dropper or foam? My female patients tend to like the dropper better, and that's great for hair, restoration and have them at least try it for two months.

Don't have them. Just try it for four weeks and then stop. Have them at least try it for two months and most of my patients keep using it. And then for wounds GHK-Cu, Hydrochloric acid.

Sometimes this is paired with BPC 157 also. So you can get cream. usually it's like a two milligram per ML of the GHK-Cu for wounds. So if you're listening like how can topical GHK-Cu be used.

So you can use it on the face or the scalp. You can use it topically on the body. You know, when in the stomach you have their skin from childbirth. I had a 10 pound, ten ounce baby. So.

So I do use some GHK-Cu body cream on on my, belly skin. You could use it on wounds and rashes and also like post procedure. So laser microneedling, chemical peels, surgery.

So, it's always just so many great uses for this peptide. So I hope that you have really enjoyed this mini talk on GHK-Cu peptides. Please stay tuned to the rest of the Summit.

I hope you're enjoying it. This is such a big passion of mine. Thank you.