More Than Hair Loss: Current and Emerging Therapies for Alopecia Areata

CMEO Journal Club Transcript

Dmitri Wall:

Hello and welcome to the final installment of the three-part Journal Club series titled “More Than Hair Loss: Understanding the Role the Immune System Plays in Developing Alopecia Areata and Its Treatment and Implications.” Today, we'll be discussing the Alopecia Areata Consensus of Experts, or ACE study, part I: Results of an International Expert Opinion on Treatments for Alopecia Areata. My name is Dmitri Wall. I'm a consultant dermatologist who specializes in hair disorders. I work in Dublin, Ireland. I have an affiliation with University College Dublin, and I also have another interest in development and maintenance of patient registries. I suppose I'd be called a health care informatician.

Nekma Meah:

Thank you. And my name is Dr. Nekma Meah. I'm also a consultant dermatologist in the UK. I have a specialist interest in alopecia and scalp disorders. I'm also the Secretary of the British Hair and Nail Society. And it's a delight to be here joining you all today.

Dmitri Wall:

Yes, it's lovely to be asked to do this, particularly after all the work that we've put into that project. It took up an awful lot of our time, but we did enjoy it. And we've gone through the background behind ACE and Journal Club, too, but it's worth revisiting this if it's been missed. The ACE, or Alopecia Consensus of Experts, was conducted through a three-step e-Delphi process involving 50 esteemed dermatologists from five continents with recognized expertise in alopecia areata management and research. The first two rounds were online, where participants answered survey questions. And then we conducted a face-to-face meeting to consider unresolved questions at the World Congress of Hair Research.

Nekma Meah:

ACE 1 had 423 questions. That's a huge number of questions there. It focused on treatment, prognosis, and registry development in alopecia areata. In this paper particularly, consensus was achieved in about a third of the questions, so 134. We felt it was an incredible achievement back in 2019, as we were informed that this was one of the largest e-Delphi studies at the time. So it's probably worth going through the treatment highlights and where consensus was achieved for everyone.

Dmitri Wall:

I think we might begin with topical therapy. There are different topical therapies available, including topical corticosteroids. There are also calcineurin inhibitors, prostaglandin analogs, topical minoxidil, anthralin, and contact immunotherapy. In relation to these, the experts group agreed that topical corticosteroids can be prescribed first line, particularly in children under the age of 12, irrespective of disease activity. They can be prescribed as first line, alone, or in combination, to treat scalp, eyebrow, or beard alopecia areata, and the potency will be different, as you might expect, for the different sites.

So, one consensus point that makes inherent sense is that potent topical steroids should not be applied to the eyelashes. On the scalp, for example, potent steroids should be applied daily for at least 6-12 weeks, and at most 6 months. Ultra potent or class IV steroids are more likely than potent to induce regrowth.

Nekma Meah:

We often get asked this question about how long we should use the topical steroid for: 6 weeks, 4 weeks. There was this agreement that it should be used for at least 6-12 weeks, so it's, I think, useful knowing that.

Dmitri Wall:

It was important to look at in terms of when to stop steroid application. So, times you would do this are complete regrowth, and that's as opposed to just the first signs of regrowth, or if there's 50% of greater regrowth.

Nekma Meah:

What would be the first signs of regrowth?

Dmitri Wall:

Fine, downy hair is really reassuring to see, but terminal hair regrowth is what we're really looking for before considering that they have full regrowth in the area. But that doesn't necessarily mean that the area will look normal at that time. You may be looking at a head of de-pigmented hair, which is quite common at that stage of regrowth of alopecia areata.

Nekma Meah:

We can now go onto the agreement for intralesional therapy and you can see what the group agreed on for intralesional Triamcinolone or intralesional kenalog (ILK). And what they agreed on is that it's important to dilute the ILK. So, a solitary patch of alopecia areata shown in the image can be treated with low-dose therapy, that's 2.5-5 milligrams of Triamcinolone. It's reassuring to see that the experts are in agreement that's it's more effective than potent or other topical steroids such as Elocon or Dermovate. Of course not everyone is happy to have injections into the scalp, so it's best suited for adults or adolescents. And leading on from this, the area of involvement is also important. For someone who's got SALT 100, it wouldn't be suitable. So, the group agreed that it's best to look at 50% or less involvement when you're thinking about injecting the scalp, rather than more than 50% hair loss.

Dmitri Wall:

And most people would get concerned about the quantities of steroids that you'd need to use anyway. But, again, it's nice to have assurance that's what others are doing.

Nekma Meah:

Absolutely. And appropriate sites to inject would be where there's clinical activity, and we've gone through this in Journal Club, too. For example, you're looking at injecting where you've got exclamation mark hairs, where you've got black dots, or where you've got de-pigmented vellus hairs. There, that should be injected is the entire patch and also, as you can see the image, into the hair-bearing site. So, just beyond that patch, because if you use a dermatoscope, you'll see an exclamation mark as a periphery of that particular patch, and it's worthwhile using an insulin syringe because you are only administering very small amounts. So, we'll put 1 milligram of IRK 1 centimeter part into the dermis and/or into the subcutaneous tissue. It goes back to what you said. This starts to make sense. This starts to give the 50% limit of scalp involvement, which makes more sense as it gives a sense of how many injections you'll need to cover a particular site.

Most people can tolerate up to 20 milligrams per session. Don't forget to warn your patients of the complications, and the expert group all agreed on that there are complications, subdermal and dermal atrophy, and that can take 8-16 weeks to result. It takes a while. And patients really should be informed about that before they have it done. One of the motivations for injecting at a lower concentration, the lower dose, is that atrophy is more likely to occur with more high concentrations, 20 milligrams or even 10 milligrams.

Nekma Meah:

We can now move on to the JAK inhibitors.

Dmitri Wall:

I think most people want to know that.

Nekma Meah:

JAK inhibitors are medications that many would be familiar with in the context of atopic dermatitis, baricitinib, or even from its use in alopecia areata. And then caused quite a fundamental change, in terms of treatment of alopecia areata, with the potential for it to be more effective than standard systemic therapies that have been utilized to date. They were discovered by chance in alopecia areata and we know that from Angela Christiano's lab. They identified the link between the clinical observation and how that might then translate into therapeutic benefit. I think subsequent work by Brett King et al demonstrated potential,] in a larger series of patients. JAK inhibitors such as cyclosporine were believed to be effective as a single agent, so as monotherapy, or combined with systemic corticosteroids in adults and adolescents. Monitoring on contraindications associated with JAK inhibition is very much a topic of conversation. But one point that was really agreed on is that, where there's no history of chicken pox, and you can't get varicella-zoster virus virology confirmation, then it's important to vaccinate these patients before you commence a JAK inhibitor.

Dmitri Wall:

And a big talking point with relation to JAK inhibitors was an eye-opening consensus agreement that, if all treatments were equally reimbursed, JAK inhibitors would be the ideal choice of systemic therapy in adults. And this is the point that keeps on getting said back to us time and time again when we talk about ACE, that this is the one statement that really stood out to people. It's worth noting, however, that there's currently no licensed systemic medication for alopecia areata. I think of all the things that ACE demonstrated was the potential of better effectiveness compared to current therapies and that there appears to be hope of a potential capacity to alter the natural history of alopecia areata, with only corticosteroids potentially representing a similar capacity and influence on disease course, as felt by the expert group. The ACE paper was written in 2020 and much has progressed since then. While there are still significant concerns about safety profile, much of the currently available data come from older non–alopecia areata cohorts with a very different disease profile. What is worth stating is that rather than pinning hopes to one medication, what we're seeing is an explosion of research and innovation across a family of agents. It's likely that this will promote better access to therapy and investment in better understanding of disease theology and further improved therapies.

Nekma Meah:

Yes, I completely agree. And I think for me what this highlights is the obvious need for more robust data. Then in this regard, there was an overwhelming support for the development of a connected network of alopecia areata registries globally. Indeed, as you know Dr. Wall, the further your e-Delphi size investigated this further, and this led to the development of GRASS, a network that we hope you hear more about in the media.

Dmitri Wall:

So, GRASS actually means the Global Registry of Alopecia Areata Disease Severity and Treatment Safety. Bit of a mouthful. You can understand why we call it GRASS all the time now. But it builds on the back of ACE to deliver a dataset that's going to enable harmonized data collection across the globe. It'll ensure that real-world evidence gets collected on safety and effectiveness of current and emerging therapies, which is just not captured in clinical trials. It's not designed to do that. And the hope is that it'll be the unprecedented part to detect those safety signals. But, also, the secondary benefit from this is that it's really facilitating a collaborative approach to help our community move coherently together, at a time where a lot of patients are seeing hope.

Dmitri Wall:

Again, thank you so much for asking us to talk, and thank you for listening. It's been a pleasure talking to you. I hope that was helpful. And as always, lovely to present with Dr. Meah.

Nekma Meah:

Thank you so much. It's been a delight to present again. Thank you to CME Outfitters for the invitation. It has been wonderful. Thank you.

