Alopecia Areata in Skin of Color Patients: New Considerations Sparked by the Approval of Baricitinib

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With the introduction of the first US Food and Drug Administration (FDA)–approved medication for alopecia areata (AA)—the Janus kinase (JAK) inhibitor, baricitinib—there is an important focus on this disease in the literature and for practicing dermatologists. Known by all as an autoimmune genetic disease that causes relapsing and remitting nonscarring hair loss, AA is a condition where the psychological burden has been less widely recognized. Patients with AA have reported lower health-related quality of life scores compared to patients with other skin conditions, including psoriasis or atopic dermatitis. In addition, a lesser amount of scalp coverage is negatively correlated to health-related quality of life scores.[1] Patients with AA also have a 39% lifetime prevalence of major depressive disorder and generalized anxiety disorder.[2] The treatment of AA has been a hodgepodge of topical, intralesional, and systemic agents, all with indirect immunosuppressive or anagen prolongation effects. Now that there is an approved therapy for AA with more treatments likely to be approved in the near future, there must be a focus on real-world outcomes. With the dawn of a new era in the treatment of AA as well as new information showcasing an altered prevalence of AA in skin of color, highlighting disparities among this population may help ease challenges dermatologic providers will face.

Efficacy of Baricitinib in Different Races and Ethnicities

How will patients of different races and ethnicities respond to this new treatment, and how will their emotional health be affected? The 2 phase 3 pivotal trials showing efficacy of baricitinib in AA included Black and Latino patients but not in a way that is representative of the US population.[3] Until recently, the most commonly used prevalence of AA in the United States was from the NHANES I study completed between 1971 and 1974, which was between 0.1% and 0.2%[4] with minimal focus on race and ethnicity. Recent studies suggest that there may be increased prevalence of this condition in Black patients in the United States. These new findings raise concern around access to care and treatment and the need to tailor psychosocial interventions for populations that may not currently have these supports.

A large cross-sectional study published in 2020 demonstrated that these data remained similar, with a lifetime prevalence of 0.21%.[5] Of the 45,016 participants—representative of the US population based on the 2015 US Census—the average age of AA patients was 41.2 years, with 61.3% being White and not of Hispanic origin.[5] In recent years, other studies have challenged the narrative that AA predominantly affects White patients.[6-8] A different cross-sectional study utilizing National Alopecia

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Areata Registry data from 2002 to 2016 suggested that Black patients have greater odds of developing AA.[6] In this study of 2645 cases of AA, the odds ratios of developing the condition were 1.36 for Blacks, 0.53 for Asians, and 0.83 for Hispanics compared with the referent White population. These results were consistent through the varying subtypes of AA.[6] In a reply to these findings, Gonzalez and Fleischer[7] analyzed data from the 2007 to 2016 National Ambulatory Medical Care Survey database with a focus on racial and ethnic prevalence of AA. This study concluded that Latino and non-White individuals had an increased likelihood of clinician visits for AA compared with White individuals.[7]

More evidence of the Black predominance of AA was demonstrated in a study published in 2018. In this large-scale study, 63,960 women from the Nurses' Health Study (NHS) and 88,368 women from the Nurses' Health Study II (NHSII) were included to examine prevalence of disease among these US women.[8] Analysis showed increased odds of AA based on self-reported race in Black and Hispanic women. Lifetime incidence of AA was greater in Black women, with 2.63 and 5.23 in NHS and NHSII, respectively. It was hypothesized that hairstyling practices in Black and Hispanic women may cause AA to be more noticeable,[8] which may drive patients to seek medical evaluation.

Feaster and McMichael[9] published information on the epidemiology of AA in a busy hair loss clinic. This retrospective single-institution study of 265 pediatric and adult Black patients with AA seen over a 5-year period showed that patients aged 18 to 34 years were most likely to present for care, which accounted for 35.8% of the study population, followed by patients aged 10 to 17 years, which accounted for 15.1%. This study also found that females were the larger segment of AA patients, with an increased distribution of disease in young patients. Most of these patients (68.2%) had patchy hair loss, and the ophiasis pattern was seen in 15.1%.[9] Although the pathogenesis of AA is linked to autoimmunity,[10] the leading cause for these epidemiologic findings of increased prevalence in Black patients is still uncertain.

Baricitinib for AA

In June 2022, the FDA announced the first biologic drug approved for the treatment of AA—baricitinib. Baricitinib is an oral, selective, reversible inhibitor of JAK1 and JAK2.[3] The phase 3 trials for baricitinib—BRAVE-AA1 (N=654) and BRAVE-AA2 (N=546)—were conducted between March 2019 and May 2020. In these double-blind, parallel-group, randomized, placebo-controlled trials, 33% of the patient population receiving baricitinib accomplished 80% or more scalp coverage at 36 weeks. The Severity of Alopecia Tool (SALT) score also decreased to 20 or less in 36 weeks. The BRAVE-AA1 and BRAVE-AA2 trials consisted of a total of 1200 patients, with only 98 identifying as Black. Of these 98 patients, 33 were randomly selected to receive placebo.[3] With studies now suggesting that Black individuals have greater odds of AA compared with White individuals[6] and Black patients being more likely to seek medical care for AA,[7] the BRAVE-AA1 and BRAVE-AA2 study population did not allow for significant comparative data for Black patients. These studies did not document Latino patient involvement.[3] Future studies in AA must recruit a diversified group of study participants to better reflect the patients with an increased likelihood of presenting with AA.

Other Treatments on the Horizon

Baricitinib likely will remain alone in its class for only a short time. Phase 3 trials have been completed for ritlecitinib, brepocitinib, and deuruxolitinib for AA. Ritlecitinib, an irreversible inhibitor of JAK3 and tyrosine kinase 2 (TYK2) inhibitor expressed in the hepatocellular carcinoma kinase family, has met all end points in a phase 2b/3 study.[11] Brepocitinib is an oral TYK2/JAK1 inhibitor,[12] and deuruxolitinib is an investigational JAK1/2 inhibitor for AA.[13]

Insurance Coverage Considerations and Health Care Disparities

Prior authorizations have been the initial step for many drugs in varying fields of medical practice. A study completed in 2016 suggested that insurance coverage for biologics used in the treatment of psoriasis was becoming increasingly difficult.[14] Prior authorization requirement rates increased from 16% of patients in 2009 to 75% in 2014. The decision time also increased from 3.7 days in 2009 to 6.7 days in 2014. The most common reason for delay in decisions and denials was due to step therapy.[14] Insurance companies wanted many patients to try less expensive treatment options prior to "stepping up" to more expensive treatments. Although this may be the case in the treatment of psoriasis, the role of step therapy is unclear for patients with AA because there is only 1 FDA-approved medication. This sets out an ambiguous future for our patients with AA and approval for baricitinib.

The time required for the correspondence between insurance companies, clinic staff, and patients for drug approval may delay treatments, and not all providers have enough staff to coordinate and perform this work. For Black patients, who may present more frequently and with more severe disease,[7] this could lead to a health care disparity due to the likelihood of the increased need for biologic treatment. Because Black patients have an increased likelihood of being uninsured or underinsured,[15] this further decreases the chances of the most severe AA patients receiving the most helpful medication for their condition.

Many pharmaceutical companies have drug cost assistance programs that aim to provide support covering expensive medications for patients unable to afford them. Although this is a good first step, treatment with any JAK

inhibitor potentially can be lifelong. Regarding the social determinants of health, it is known that access to medications does not solely depend on cost. Transportation and access to qualified health professionals are among the issues that create barriers to health care. Instilling long-term practices to ensure equal access to JAK inhibitors and treatment of AA may be the cornerstone to treating AA with equity. Whether we require pharmaceutical companies to make sure all patients have equal access to medications or provide community resources to hairstylists and federally qualified health centers, raising awareness and advocating for and creating attainable access to treatment modalities is imperative to providing well-rounded care to a diverse population.

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