Update on Pediatric Psoriasis

New guidelines and new treatments seek to dramatically improve lives of children with psoriasis.

BY JENNIFER SOUNG, MD

>> One-third of psoriasis cases begin during the pediatric years, and onset is most common during adolescence. Psoriasis is particularly challenging for children and adolescents because of the unique aspects of their mental and emotional development. Growing up with itchy and painful plaques as well as with a visible difference can have a profound impact during a crucial developmental period in young lives.[1] While psoriasis is a well-known and well-studied chronic inflammatory skin disease in adults, there is much to be learned about psoriasis in children. Management options for pediatric psoriasis are typically limited to off-label treatments and previously approved systemic biologics, including etanercept in ages four years and older and ustekinumab in ages 12 years and older.

The FDA recently expanded the approval of two biologics, ixekizumab and ustekinumab, for children as young as six years old with moderate-to-severe plaque psoriasis who are eligible for phototherapy and systemic therapy.

The efficacy, tolerability and safety of ixekizumab were demonstrated in a Phase 3, 12-week, double-blind, randomized, placebo-controlled clinical study of 171 pediatric patients with moderate-to-severe plaque psoriasis.[2] At 12 weeks, 89 percent of pediatric patients who received ixekizumab (weight-based dosing) achieved a 75 percent improvement on Psoriasis Area and Severity Index score (PASI), compared with 25 percent of those on placebo; 81 percent on ixekizumab achieved a static Physician's Global Assessment of clear or almost clear, compared with 11 percent on placebo. After only 12 weeks of treatment, half of patients treated with ixekizumab achieved completely clear skin.

The safety profile seen with ixekizumab among pediatric psoriasis patients was consistent with what has been previously observed among adult patients, except for slightly higher frequencies of conjunctivitis, influenza, and urticaria. While higher incidences of Crohn's disease were seen in the ixekizumab group (0.9 percent) compared to the placebo group (0 percent), the incidence of all comorbidities including inflammatory bowel disease is higher in pediatric patients with psoriasis.

The CADMUS Junior study was an open-label, single-arm, multicenter Phase 3 clinical trial that examined the use of ustekinumab in children ages six to 11 years old.[3] The study included 44 subjects who had moderate-to-severe plaque psoriasis who received weight-based dosing. Fully 77 percent of study participants had clear or almost clear skin at week 12, after receiving two doses. The study showed that 84 percent of subjects achieved a PASI 75 response.

Overall, the safety of ustekinumab in the pediatric population was similar to the safety results seen in the adult population. Common adverse events included nasal congestion, sore throat, itching, tiredness, and headache. One potentially mitigating factor in the study was that the participants were aware that they were receiving ustekinumab.

Recognizing that psoriasis may take a heavier toll on pediatric patients, the American Academy of Dermatology and the National Psoriasis Foundation released the first ever guidelines of care for pediatric psoriasis treatment in November 2019.[4] The new guidelines address the importance of managing comorbidities and emotional stress, screening tools to measure disease severity, and the safety and effectiveness of topical, systemic, and phototherapy treatments. The latest approvals of ixekizumab and ustekinumab in pediatric psoriasis give this young population a chance for completely clear skin and fill research gaps. ■

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