Switching Biologicals: Switching TNF α Antagonists in Psoriasis Treatment

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Biologicals have enriched our therapeutic options for the treatment of psoriasis. In Europe they are used for high-need patients where at least 2 other systemic therapies were unsuitable because of lack of efficacy, intolerance or contraindication. Two different groups are available, T cell blockers and TNF α antagonists.

The 3 TNF α antagonists – infliximab, etanercept and adalimumab – have yet to be compared using head-to-head trials. Nevertheless, these TNF α antagonists appear to provide comparable positive clinical results. However, in a proportion of our psoriasis patients, TNF α antagonists are discontinued either due to lack of efficacy or side effects. Does it make sense to prescribe another TNF α antagonist in this situation? We might want to use conventional therapies or T cell blockers because we instinctively categorize our patients into TNF α antagonist responders and nonresponders. Likewise, if one TNF α antagonist was discontinued due to the development of an adverse event, we might fear similar events would occur with another one as well. So the central question is this: does the failure of one TNF α antagonist predict the failure of another?

Apparently the answer is: let's switch! Switching among the 3 inhibitors rather than dismissing all the inhibitors when 1 fails is a common and successful practice in rheumatology. This strategy encourages rheumatolo-

gists to switch to another TNF α antagonist if the primary one was ineffective or not tolerated. Both clinical trials (references in Hyrich et al. [1]) and national registries [1, 2] have proven the value of this strategy. Today we do not really know in which way this behavior is connected to the differences between the 3 TNF α antagonists, differences which include chemical structure, epitopes, half-life, dosing, mode of action, administration, immunogenicity and age on the market; both infliximab and adalimumab are TNF α monoclonal antibodies; infliximab is chimeric (mouse/human), and adalimumab is fully humanized. Etanercept, on the other hand, is a fusion protein of recombinant human TNF receptors and the Fc portion of human IgG.

In this issue of *Dermatology*, a retrospective study suggests that the strategy of switching also makes sense for psoriasis. Pitarch et al. [3] found a positive outcome in 8 psoriasis patients previously unsuccessfully treated with infliximab after switching to etanercept. The strategy of switching TNF α antagonists in psoriasis gains further support from a recent open-label study, where Papoutsaki et al. [4] describe a good clinical response to adalimumab in 30 psoriasis patients unresponsive to other biologics.

As more drugs become available for psoriasis, the challenge to choose the best one for an individual patient

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1018–8665/08/2164–0281\$24.50/0

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becomes more and more difficult. As our patients in real life differ in several aspects (such as phenotype, sex, age and comorbidities), we need to analyze the response to different therapies in different patient groups. When TNF α antagonists appear to be the best choice for a patient, we do not only need to know which one to start with but maybe also which one to switch to in the case of a

treatment failure. In order to address all these questions, we have to follow a large number of patients over time. Studies of this scale can be done effectively through national treatment registries [5]. As Dorothy reminds us, we are not in Kansas anymore; we need to follow a new path home.

References

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