

## Discussion about alopecia areata emergence as a classdependent effect of anti-TNFlpha $^{*}$

Discussão sobre indução de alopecia areata como efeito classe dependente de anti-TNFα

Gleison Vieira Duarte 1

The article "Moderate to severe psoriasis treated with infliximab in 53 patients: patient profile, efficacy and adverse effects", published in the Anais Brasileiros de Dermatologia (Brazilian Annals of Dermatology) in March/April 2011, is very enlightening. The authors refer to the emergence of alopecia areata (AA) in a single patient, classifying it as a random adverse effect and stating that this event has not yet been described in the literature. However, similar reactions have been previously reported in the literature and seem to be class-dependent rather than a specific effect of infliximab. These reactions have been associated with immune dysfunction due to the inhibitory effect of the following anti-TNFα agents:

infliximab, adalimumab and etanercept. <sup>2-8</sup> The association between anti-TNF $\alpha$  and induction or exacerbation of autoimmune diseases like lupus erythematosus and lupus-like syndrome is well-known. <sup>2</sup> By inhibiting regulatory T cells with suppressor functions, such drugs could interfere with mechanisms of immune tolerance. <sup>9</sup> An *In vitro* study demonstrated that TNF $\alpha$  exerts inhibitory action on hair follicle growth. <sup>10</sup> Nevertheless, the use of anti-TNF $\alpha$  drugs has not shown efficacy in the treatment of AA. <sup>11</sup> Finally, most authors assign a paradoxical and immune effect to this class of drugs in the emergence of AA. This should be considered cause-consequence and not a random adverse effect.  $\Box$ 

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MAILING ADDRESS: Gleison Vieira Duarte Rua Augusto Viana s/n, 3º andar - Canela, 40110170, Salvador, Babia, Brazil.

<sup>&</sup>lt;sup>1</sup> Dermatologist. M.Sc. in Health Sciences, Federal University of Bahia – Salvador (BA), Brazil.