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ORAL TOFACITINIB (JAK1/3 INHIBITOR) IN THE TREATMENT OF ALOPECIA AREATA

Dermatology

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ABSTRACT

Alopecia areata (AA) is a chronic autoimmune disorder. Tofacitinib, JAK3 inhibitor, is emerging as a promising drug for the management of severe and resistant cases of AA/totalis/universalis. Our study aims to evaluate the response of oral tofacitinib for Alopecia areata, Alopecia totalis and Alopecia barbae. Significant hair regrowth was seen with SALT score 100% in Alopecia totalis patients by the end of 16 weeks Patients were followed up every 4 weeks, and results were assessed. .More studies and Follow up is required to assess relapse and efficacy and tofacitinib.

KEYWORDS

Alopecia areata, Alopecia Totalis,Alopecia Barbae,Tofacitinib

INTRODUCTION

Alopecia areata (AA) is a chronic autoimmune disorder characterized by patchy loss of hair from scalp, beard, eyebrows, or rarely even body hair. The disease can be widespread and severe leading to loss of entire scalp and body hair. Treatment of AA is challenging as there is no FDA approved therapy. Topical, intralesional steroids and immunosuppressants have varying rates of success. AT/AU are often resistant to such therapies and relapse are frequent.

Tofacitinib, JAK3 inhibitor, is emerging as a promising drug for the management of severe and resistant cases of AA/totalis/universalis. Tofacitinib blocks the common singling pathways, downstream of cytokine receptors,

Figure 1: Alopecia Totalis SALT Score 100%

Figure 2: Alopecia Totalis with SALT Score 100% improvement

Figure 3 : Alopecia areata SALT score 10

Figure 4: Alopecia areata SALT Score 40% improvement

AIM & OBJECTIVE

Our study aims to evaluate the response of oral tofacitinib in the treatment of Alopecia areata, Alopecia totalis and Alopecia barbae.

MATERIALS AND METHODS

10 patients diagnosed with AT/AA/AB with were selected. Prerequisites for tofacitinib were done.

Severity of alopecia assessed using SALT score Alopecia areata patients showed response with 5 mg bd dosage after 6 weeks.Alopecia barbae patients responded after 8 weeks.Alopecia totalis patients showed no response after 6 weeks and dosage was increased to 10 mg bd.Patients will be followed up for 6 months after stopping treatment for assessing disease relapse.

RESULTS

Patients were followed up every 4 weeks, and results were assessed. Significant hair regrowth was seen with SALT score 100% in Alopecia

totalis patients by the end of 16 weeks.Lond standing disease improved by SALT 80%.Vellous and terminal hair growth response in alopecia aerata is seen after 6 weeks and SALT 100 improvement is seen after 12 weeks.In 2 patients with alopecia barbae hair growth seen after 8 weeks and patients are still under follow up to assess response.

CONCLUSIONS

This study treated 3 patients of Alopecia totalis who were above 30 year old and 1 patient of 20 yr old, Alopecia Areata -2 patients below 15 and 2 patients above 20 yr. No adverse effects with tofacitinib observed. Alopecia totalis with disease duration greater than 3 yrs needed 10 mg bd dosage. Alopecia Areata and Barbae patients responded well for 5 mg bd dosage. More studies and Follow up is required to assess relapse and efficacy and tofacitinib

REFERENCES:

1. Shivanna CB, Shenoy C, Priya R A. Tofacitinib (Selective Janus Kinase Inhibitor 1 and 3): A promising therapy for the treatment of alopecia areata: A case report of six patients. Int J Trichol 2018;10:103-7
2. Jabbari A, Dai Z, Xing L, Cerise JE, Ramot Y, Berkun Y, et al. Reversal of alopecia areata following treatment with the JAK1/2 inhibitor baricitinib. EBioMedicine 2015;2:351-5.
3. Mackay-Wiggan J, Jabbari A, Nguyen N, Cerise JE, Clark C, Ulerio G, et al. Oral ruxolitinib induces hair regrowth in patients with moderate-to-severe alopecia areata. JCI Insight 2016;1:e89790.
4. Craiglow BG, Tavares D, King BA. Topical ruxolitinib for the treatment of alopecia universalis. JAMA Dermatol 2016;152:490-1.
5. Gupta AK, Carviel JL, Abramovits W. Efficacy of tofacitinib in treatment of alopecia universalis in two patients. J Eur Acad Dermatol Venereol 2016;30:1373-