LETTER TO EDITOR
Year: 2020 • Volume: 3 • Issue: 2 • Page: 42

USE OF LACTOBACILLUS RHAMNOSUS GG IN CHRONIC URTICARIA

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Sir,

Treatment with Oral Antihistamine alone may not yield satisfactory control in many patients in terms of longer remission in chronic urticaria (CU). This is due to inability of Antihistamine to control the underlying pathomechanism - often observed in CU patients with atopic background [(1)]. Such patients are not uncommon in clinical practice and are often associated with elevated level of serum IgE and personal or family history of atopy [(2)]. CU returns immediately in those patients as soon as the antihistamine is stopped and this is a major cause of distress among the patients. Thus, in clinical practice, a continuing need exists for effective and safe treatments for CU, enabling longer remission. Atopic allergies are associated with a shift in T helper (Th1/Th2) cytokine balance toward a Th2 response. Probiotic like Lactobacillus Rhamnosus GG can inhibit the Th2 response, while stimulating the production of Th1 cytokines [(3,4).] Vitamin D has significant effects on both adaptive and innate immunity through Vitamin D receptors. It can affect T-cell activation and antigen-presenting cells function and can down-regulate IgE-dependent mast cell activation[(5)]. The present study notes the benefits of oral supplementation with Vitamin D and Probiotic, Lactobacillus rhamnosus GG, in patients with Chronic Urticaria with atopic background in practice.

Fifteen patients (Age: 18-29 years) with CU, having high total Serum IgE level associated with personal/family history of atopy were included in the study. Patients with high Vitamin D level, immunodeficiency, G.I.T. and Heart diseases and patients with known allergy to probiotics were not included in the study. All patients had persistent but Antihistamine-responsive urticaria; urticaria returned immediately as soon as the antihistamine was stopped. Patients were treated with Oral Vitamin D3 (600 IU/day) and Lactobacillus Rhamnosus GG strain, 6 Billion CFU daily, orally, for a period of 6 weeks, along with Oral Antihistamine on SOS basis. All patients were followed up for additional 4 weeks after completion of oral treatment. Urticaria was assessed with urticaria activity score (UAS).

Patients were evaluated at weekly intervals for a period of 10 weeks. Out of 15 patients, five patients were free from urticaria by the end of 3 weeks; another three patients were free from urticaria by the end of 5 weeks; and finally, two more patients were free from urticaria by the end of 6 weeks. All these 10 patients were able to stop Antihistamine completely. Remaining 5 patients were required to continue with oral antihistamine, but the severity of urticaria were less as reflected in the UAS; they no longer required to take oral antihistamine on daily basis.

During the 4 weeks treatment free follow up period, 9 out of ten patients (who were completely free from urticaria during trial period), remained Urticaria free. One had milder relapse, as reflected in the UAS.On the other hand, all the 5 patients who had partial relief from urticaria during trial period, had moderate relapse.

Chronic urticaria is a common condition where the goal of the treatment is to reduce symptoms until spontaneous resolution occurs.But the response to treatment is often disappointing. Therefore, CU management is a challenging task for clinician in practice. This small study showed that supplementation with Vitamin D and Probiotic in Patients with Chronic Urticaria with atopic background can cause significant clinical improvement in terms of longer remission and reduction in severity of urticaria. However, larger trials are required before more definite recommendation can be made.

References

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