

New hope for chronic hand eczema patients: Tofacitinib clinical trial shows 90% improvement

The drug was used after studying the signalling pathway in the skin of patients. The condition commonly affects individuals with frequent exposure to detergents and solvents, including those working in vegetable processing, resulting in skin degradation of hands.



New Delhi: In a significant breakthrough for those suffering from chronic hand eczema, a widespread skin condition resistant to existing treatments, a clinical study by RML Hospital has shown a

remarkable 90 per cent improvement in symptoms in 12 of 15 patients within just four weeks of using Tofacitinib. The treatment regimen lasted about six months.

According to researchers, the drug was used after studying the signalling pathway in the skin of patients. The condition commonly affects individuals with frequent exposure to detergents and solvents, including those working in vegetable processing, resulting in skin degradation of hands.

The research, conducted by medical professionals at RML, in collaboration with the Council of Scientific and Industrial Research - Institute of Genomics and Integrative Biology (IGIB), Delhi, was published in a recent PubMed publication (Archives of Dermatological Research).

Chronic hand eczema is the most common occupation-related skin disorder, with as many as 40% of workers in high-risk occupations developing this ailment. Dr Kabir Sardana, principal investigator from RML Hospital's dermatology department, noted that the condition significantly affects workers with frequent water exposure, including healthcare professionals, food service staff and hairdressers.

"The condition carries substantial financial implications, encompassing healthcare expenses, disability-related costs, compensation claims, rehabilitation programmes, workplace absenteeism and potential unemployment. Additionally, individuals suffering from acute hand eczema often experience considerable disruption in their social interactions and overall quality of life," said Dr Sardana.

The study assessed the expression of cytokines from Th1 and Th2 cell lineages in tissue samples of chronic hand eczema patients and evaluated the efficacy of oral Tofacitinib. The research focused on patients who did not respond to conventional treatments. The treatment protocol specified Tofacitinib administration at 5mg twice per day, with regular assessments conducted at four-week intervals and follow-up monitoring for any post-treatment recurrence.

Prior therapeutic interventions included topical corticosteroids usage across all participants. While methotrexate proved unsuccessful in 19 per cent of the cases, acitretin showed no benefit in 9.5 per cent of patients.

The study stated that of the 21 participants, 15 received Tofacitinib 5mg twice daily. Within an average period of four weeks, 12 patients achieved a 90 per cent improvement in their hand eczema. Four of these 12 patients experienced adverse effects while three noticed disease reappearance about seven months after discontinuing Tofacitinib.

The findings indicated that Tofacitinib, functioning as a pan-JAK inhibitor, showed significant effectiveness in treating resistant chronic hand eczema cases, where elevated tissue Th1/Th2 cell-related cytokine levels were present.

Research published in Journal of Dermatology indicates that hand eczema affects 10-15 per cent of India's population. A separate study at an Indian tertiary care facility found that hand eczema represented about 20-30 per cent of dermatology outpatient visits.

People affected by the condition primarily experience dryness and itchiness of the skin, accompanied by redness or darkened patches. The affected skin may become painful, develop cracks and occasionally bleed. Some patients might develop fluid-filled blisters. During active flare-ups, the skin typically becomes thick with a scaly texture, while the fingers may exhibit noticeable swelling.

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