

## TOPICAL CETIRIZINE FOR ANDROGENETIC ALOPECIA

- Topical cetirizine has emerged as an effective therapeutic option for Androgenetic Alopecia.
- Topical cetirizine is particularly considered in patients who show intolerant response to topical minoxidil.
- Inhibits prostaglandin D2 (PGD2), which suppresses hair growth and Increases prostaglandin E2 (PGE2), supporting the anagen phase of hair follicles.

### Indications:

- Female pattern alopecia
- Male pattern alopecia
- Chemotherapy induced Hairloss
- Congenital hypotrichosis

### Efficacy based on studies:

#### Male pattern Hairloss:

- *A study conducted in India by Rachita Dhurat et al. demonstrated trichoscopic improvements in all participants following 16 weeks of treatment with 1% topical cetirizine.*
- *In a pilot study of 85 patients, Rossi et al. demonstrated that a 1% topical cetirizine solution significantly enhances hair density and diameter in individuals with androgenetic alopecia*
- *A comparative study by Mostafa et al. demonstrated increased hair density in both the Cetirizine and Minoxidil cohorts, though the Minoxidil group showed more significant improvement.*

- *Microneedling with topical cetirizine is effective in promoting hair growth in male androgenetic alopecia , as shown by increased vellus hair and enhanced hair density in a single-blind, parallel placebo-controlled study of 80 patients done by Gohary et al.*

### **Female pattern Hairloss:**

- *Topical cetirizine with minoxidil significantly improves hair density and thickness in female pattern alopecia, with a good safety profile , as shown in a double-blind, randomized, controlled study with 66 participants by eglal et al*
- *In a comparative study done by alavi et al in 60 participants, Topical cetirizine provides favorable therapeutic effects for female pattern hair loss, although inferior to 2% minoxidil*

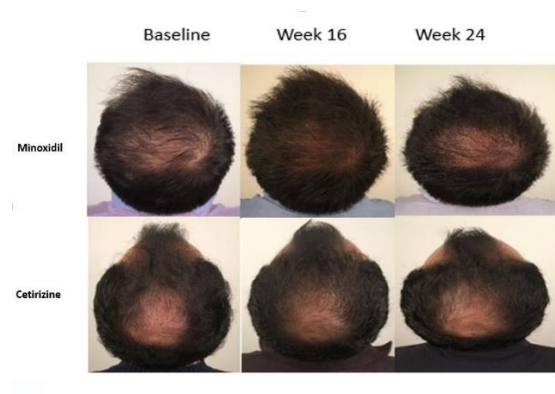
### **Studies for Other Alopecia:**

- *Rossi et al. identified the combination of topical cetirizine and oral vitamin D as a viable therapeutic strategy for managing congenital hypotrichosis associated with ectodermal dysplasia*
- *Gemma Caro et al. observed clinical improvements in chemotherapy-induced hair loss with 1% Cetirizine topical application*

### **Dosage and vehicle:**

- Topical cetirizine in the form of 1% lotion is applied to the affected scalp area once a day for 3-6 months
- It can be combined with micro needling to enhance scalp penetration.
- Vehicles used are Propylene glycol 30%, Butylene glycol 30% and 96% Ethanol.

## Results:



**SIDE EFFECTS:** Clinical trial reports minimal to no significant adverse reactions.