



## Eczema-Skin Inflammation

*Muthuyavaraj<sup>1</sup>, Kannan Yamuna Yazhini<sup>1</sup>, Kumar Prakash<sup>1</sup>, Muthukumar Jaya Hari Prabha<sup>1</sup>, Kamchybek Kyzy Aselya<sup>2</sup>*

<sup>1</sup>UG Student, <sup>2</sup>Guide

Department of Clinical Discipline- 2, Osh State University, Kyrgyzstan.

---

### ABSTRACT:

In the US, 31.6 million people, or about 10% of the population, suffer from eczema. Atopic dermatitis (AD), often known as eczema, is an inflammatory skin disorder that can result in rough, itchy spots on the skin.

Childhood is when AD is most prevalent. By the time they are five years old, symptoms of AD start to show up in about one out of every four kids.

About 60% of AD sufferers will no longer exhibit symptoms by adolescence. Nevertheless, 2–3% of adults suffer from AD.

**KEY WORDS:** Eczema, causes, effects in Pregnancy, triggers, symptoms, Treatment.

---

### IN PREGNANCY:

People with a history of eczema, which is the most prevalent skin disorder that pregnant women may encounter. Three quarters of patients with eczema experience symptoms during the first two trimesters, and 20 to 40 percent of pregnant women who get eczema have a history of the condition.

Pregnant women may also develop dry or oily skin, acne, rashes, sensitive skin, or changes in skin pigmentation. Pregnancy-related eczema goes under several names, such as: Pregnancy-related atopic eruption (AEP) Pregnancy Prurigo Pregnancy-related pruritic folliculitis pregnancy-related papular dermatitis.

---

### MANAGEMENT IN PREGNANCY:

Emollients for the Management of Eczema During Pregnancy Topical steroids that are mild, moderate, or strong UVB light (phototherapy). Very strong topical steroids in small dosages Third-trimester oral steroids.

Topical calcineurin inhibitors at low dosages Pregnancy-related treatments to avoid include: Some suppressors of the immune system include Psoralen with ultraviolet A (PUVA). Approximately 50% of nursing mothers will have atopic eczema, and 2% will develop nipple or areola eczema. Eczema in this area can be treated with emollients and low- to moderate-potency steroids, but only after feeding and after being well cleaned off before feeding again.

---

### CAUSES:

Things that either cause eczema to appear on the skin or exacerbate pre-existing eczema can be considered eczema triggers. Triggers for eczema might differ from person to person and can also evolve over time for an individual.

Skin that is dry Given that one of the most prevalent symptoms of eczema is dry skin, anything that causes the skin to become dry may act as a trigger.

Extremely hot or cold conditions with little humidity or repeated use of harsh soaps without moisturizer are two examples. Anxiety Significant eczema triggers include emotional stressors like worry, grief, embarrassment, wrath, and other intense emotions.

Additionally, research has demonstrated a strong correlation between eczema flare-ups and depression.

---

**SYMPTOMS:**

Symptoms Each person experiences AD symptoms differently, and they can be influenced by a number of variables, including age, skin tone, and the severity of the illness.

Young children Youngsters under two years old may encounter: skin rashes on the face and scalp rashes that form bubbles and then spill liquid rashes that are really itchy and can keep you from sleeping Youngsterhood.

Between the ages of two and puberty, children may develop rashes that look like this: behind the knee or elbow folds on the neck, wrists, and ankles in the space between the legs and buttocks.

Additionally, they might encounter: lichenification, or thickening of the skin, caused by bumpy rashes that can turn lighter or darker and eventually turn into a persistent itching

---

**IN ADULTS:**

Teenagers Adults may develop eczema rashes that are more scaly than those that affect youngsters. show up as persistent itching in the folds of the knees, elbows, or nape of the neck, covering a large portion of the body.

Over-18-year-olds may potentially get skin infections or extremely dry skin in the afflicted area. Adults who no longer suffer from AD but who had it as children may still have: Hands that are dry or easily inflamed Eczema on the edges of the eyes

The following principles are essential for controlling eczema and associated symptoms in the majority of cases: Be aware of your triggers. Establish a consistent regimen for bathing and moisturizing; Consistently take prescription and/or over-the-counter (OTC) drugs as directed; Indicators of a skin infection include pus-filled pimples.

---

**TREATMENT:**

Drugs for Atopic Dermatitis Treatment While there isn't a cure for atopic dermatitis, drugs that reduce inflammation and immune system function can help manage symptoms that are difficult to manage using the aforementioned non-pharmacological ways.

The first line of treatment for mild to severe atopic dermatitis is topical anti-inflammatory ointments and creams, such as topical corticosteroids, which come in a variety of potencies.

Topical phosphodiesterase 4 inhibitors (crisaborole ointment for patients aged  $\geq 3$  months), calcineurin inhibitors (tacrolimus and pimecrolimus for patients aged  $\geq 2$  years), and topical Janus kinase inhibitors (ruxolitinib cream for patients aged  $\geq 12$  years) are additional topical drugs.

Biologic therapies: Biological checkpoint inhibitors, or "biologics," are a class of antibody therapeutics that include some of the most successful recent treatments. Often known as monoclonal antibodies (MABs), these work on the skin's interleukins to target inflammation.

The NHS has approved the use of dupilumab, tralokinumab, and lebrikizumab, three notable therapies from this group; nemolizumab is presently undergoing evaluation. Phase 2 clinical trials for the OX40 antagonist monoclonal antibody therapy telazorlimab are already complete. These medications have shown a lot of promise in treating different facets of atopic eczema. Usually, they are given via injection at different times.

JAK inhibitors: The Janus Kinase Inhibitors (JAK Inhibitors), which are identified by the letter "nib" in their names, are another potent class of medications that target the inflammatory pathway.

Both tablets and creams are available for these therapies. Compared to monoclonal antibodies, JAK inhibitors affect the immune system more broadly, which could result in greater adverse consequences.

The NHS is now authorized to utilize second-generation inhibitors such as upadacitinib and abrocitinib. It is anticipated that other JAK inhibitor therapies will be introduced shortly.

Certain medications, such as ruxolitinib, are already marketed as creams to treat mild to moderate eczema. As a dual inhibitor, cedulatinib targets the spleen tyrosine kinase (Syk) and JAK pathways.

---

**REFERENCE:**

1. <https://www.medicalnewstoday.com/articles/14417>
2. <https://nationaleczema.org/eczema/>
3. <https://jamanetwork.com/journals/jama/fullarticle/2800427>
4. <https://www.news-medical.net/health/Eczema-Triggers.aspx>
5. <https://nationaleczema.org/research/eczema-treatment-research/>

6. <https://www.news-medical.net/condition/Eczema>