

Hair Loss – Symptoms, Diagnosis, and Treatment

Despite the popularity of [natural treatments and preventative measures](#), hair loss remains a prevalent concern. As much as [38% of healthy women](#) experience some degree of hair loss. Meanwhile, severe hair loss afflicts [42% of men aged 18–49 years](#). While hair thinning may not directly impact health, it can negatively affect your patients' quality of life. The [emotional and social impact](#) can create significant mental distress.

Hair loss may also indicate an untreated condition. It is [a symptom of several disorders](#), including hormonal imbalances, thyroid disorders, iron deficiencies, and conditions like syphilis. As such, hair loss is clinically significant.

Clinical Presentation and Causes

Typically, female pattern hair loss and male pattern baldness is easily recognizable in a clinical setting. Patients experiencing hair loss may show visible hairlessness, receding hairlines, and bald patches or report a significant increase in daily hair shedding. Combined with physical examinations, simple clinical procedures like pull tests can help you determine the rate of hair fall, identify hair shaft abnormalities, and isolate the type of hair loss. Patients' medical background, including their family histories, may also assist in early identification of the condition. Once hair loss has been identified, diagnosis centers on isolating the cause. Tools like lab tests for hair loss may help illuminate underlying conditions.

Hair loss, like [fatigue](#), is a non-specific symptom that signals everything from stress to chronic illness. For example, one [literature review](#) found that androgenetic alopecia may be associated with cardiovascular disease. Hair loss may even signal a deeper regenerative or immune issue, as [platelets and blood cells](#) are central to the hair cycle.

Simultaneously, some of the [most famous causes](#) of hair loss are simply daily stress and poor hair care practices. Telogen effluvium, excessive hair shedding across the scalp, can often be caused by increased [physiological and emotional stress](#). Many factors can contribute to hair loss, including:

Deficiencies

Certain vitamins and minerals [play a vital role in the normal hair follicle cycle](#). As a result, nutrient deficiencies may be a key facet of the development and treatment of hair loss. [In a study](#) involving 155 patients, nutrient deficiencies accounted for 83.9% of female alopecia cases. Iron deficiency, like that seen in anemia, is a [well-known cause](#) of hair loss, and other essential nutrients are central to the hair follicle cycle. [Vitamin D](#) regulates several signaling pathways for the growth and differentiation of hair follicles. Additionally, it plays an important anti-inflammatory and immunomodulatory role that may further affect the hair cycle. Deficiencies in vitamin D and similar micronutrients may affect hair strength and cause or exacerbate hair loss.

This is particularly striking, as [vitamin D deficiency remains a prevalent issue](#) in the United States.

Autoimmune Disorders

Alongside cicatricial alopecia or [alopecia areata](#), hair loss is a side effect of several autoimmune diseases, [including lupus](#). [Recent research](#) has highlighted the impact of the immune system on hair health. It reveals an important signaling pathway, ADAM10-Notch, that maintains bacterial balance on the skin. When this pathway is disrupted by immune misfiring, hair health is affected and hair follicles may be destroyed. Hair loss, therefore, may be a helpful marker when identifying [undiagnosed autoimmune conditions](#).

Psychological Factors

Mood disorders and daily emotional strain can both impact hair loss. [One study](#) found a significant association between hair loss in women and symptoms of depression. Stress [has been shown](#) to play a role in inhibiting hair growth and contributing to hair damage by promoting inflammation. One [case-controlled study](#) showed that women who experience high stress are 11 times more likely to experience hair loss.

Hair loss itself may exacerbate [social withdrawal, feelings of anxiety, struggles with depression, and other psychological challenges](#). Those with hair loss [are more likely to experience](#) major depression, generalized anxiety disorder, and social phobia. These experiences can then contribute to future hair loss, further worsening your patients' conditions.

Hormonal Imbalances

Several endocrine disorders may be symptomized by hair loss. Androgens, estrogens, growth hormone, and other hormones play [vital roles](#) in proper hair growth. Similarly, thyroid hormones influence hair health. Both hyperthyroidism and hypothyroidism are associated with hair loss. As much as [50% of patients with hyperthyroidism and 33% with hypothyroidism](#) experience hair loss as a symptom.

COVID-19

Since the initial emergence of the SARS-CoV-2 virus, temporary hair loss has been identified as a potential side effect. In [one study](#), 48 of 198 subjects experienced telogen effluvium after being admitted for COVID-19. In November of 2020, alopecia was recognized as a [late-onset symptom](#) of the disease. While the mechanism of hair loss is unclear, COVID-related hair loss may be a product of increased medication and greater physical and [mental stress](#).

Testing and Diagnosis

As hair loss symptomizes various unrelated conditions, comprehensive testing is essential. Blood tests and saliva panels can efficiently detect deficiencies, underlying conditions, and chronic disorders to inform diagnosis and treatment. Highly-relevant data includes a complete blood count, a detailed metabolic panel, readings of essential hormone levels, and an analysis of vital nutrients, including vitamin D.

Comprehensive Lab Tests for Hair Loss

Access Medical Labs offers in-depth lab tests for hair loss. Our [Hair Loss Panel](#) provides insight into vital biomarkers. These biomarkers may help you isolate the potential cause of hair loss. This panel includes:

- CBC with differentiation
- Comprehensive metabolic panel
- Ferritin
- Dihydrotestosterone (DHT)
- Antinuclear antibodies
- Serum copper
- Zinc
- Vitamin D
- B12 and folate
- T3 Free
- T4 Free
- Thyroid-stimulating hormone (TSH)
- TPO thyroid peroxidase
- Thyroglobulin

These test results can provide vital guidance for additional diagnostic tests and treatment.

Treatment

After isolating the causes of hair loss, it's important to develop a treatment plan that meets the needs of your individual patients. While treating the underlying causes of hair loss, we will discuss potential hair care options. For those that have permanent hair loss, like that from scarring alopecia, we may consider treatment options to minimize thinning. If you prefer to avoid hair transplant surgery to replace lost hair, and those with non-permanent hair loss, may be interested in treatments to promote regrowth and hair health, such as:

- Lifestyle changes. We encourage patients to avoid heat styling or chemical treatments and to develop stress management techniques.
- Supplementation. For patients with nutritional deficiencies, consider adding supplements to your regimen. Consider additional supplementations like saw palmetto to boost hair health. As shown in a [recent literature review](#), saw

palmetto supplementation led to a 60% improvement in overall hair quality and increased hair density in 83.3% of the patients.

- Dietary modifications. Diets rich in protein and raw vegetables, or gluten-free diets, [have been shown](#) to positively affect hair growth.
- Avoid smoking. One [population-based survey](#) found that current smokers had an increased risk of developing alopecia areata compared to those who never smoked.
- HydraFacial's Keravive scalp health treatment is a wonderful way to promote scalp health by deep cleaning and nourishing the scalp, promoting an ideal environment for happy healthy hair follicles. For more info about our Keravive treatment, visit their website at <https://hydracial.com/keravive/>. We recommend these treatments monthly.
- PRP/Exosomes injections stimulate dormant hair follicles to beginning hair again. They also promote a healthy scalp environment for the hair follicles to grow in promoting a lengthened maintenance phase of the hair's life span and slow down the shedding phase.

Incorporating consistent testing during treatment allows us to monitor progress and adjust treatment approach to help you achieve and maintain your ideal had of hair. Lab testing, vitamin supplementation, Keravive treatments, and PRP/Exosomes injections are ideal for treatment and long-term management.

Source: Access Med Labs <https://accessmedlab.com/blogs/2024/04/25/hair-loss-symptoms-diagnosis-and-treatment/>