## Hair Loss In Women

Although it's commonly accepted for men to lose hair as they age, many women will also experience some degree of hair loss during their lifetime as well.

Hair loss (formally known as 'alopecia') generally falls into two categories - *scarring* and *non-scarring* alopecia. Scarring alopecia is given its name because it's created when inflammation within and around the hair causes the follicle to 'scar over'. A few examples of this type of alopecia would include that seen in *discoid lupus* as well as a condition called *lichen planus*. The bad news with scarring alopecia is that the scarring can permanently destroy the follicle and prevent regrowth of the affected hair. Fortunately, scarring alopecias are less common. When they do occur, further scarring (and additional hair loss) can often be limited if properly diagnosed and treated early into its course.

There are a number of non-scarring alopecias. As the name implies, they are not associated with scarring and therefore *do not* permanently destroy the hair follicle. In other words, the hair is physically capable of regrowing. The two most common examples of non-scarring alopecia are *androgenetic alopecia* and *telogen effluvium*.

Androgenetic alopecia results when an individual's hormones (androgens) cause genetically sensitive follicles to shrink and eventually shed their hair. This is essentially the equivalent of the hair loss that men often experience. Although such hair loss is usually less pronounced in women, it tends to be more diffuse. It usually presents as mild to moderate thinning throughout the entire top of the scalp. In contrast to that which occurs in men, it rarely causes the frontal hairline to recede in women.

*Telogen effluvium* is another common cause of hair loss in women and its underlying cause is very different. In *telogen effluvium*, hair growth is suspended when our body senses that we are experiencing significant stress. This can take the form of significant *psychological* stress (such as a new job or death in the family) or even *physiological* stress (such as pregnancy or major surgery). Remember that our body senses stress as a threat to our survival. In *telogen effluvium*, hair production is halted because the body feels that the resources normally devoted to hair growth are better utilized elsewhere. Usually only 10-15% of hairs are in the dormant 'telogen' phase of the growth cycle, but when significant stress occurs, as many as 70% of hairs can go dormant. The affected hairs will then gradually shed over the following months. When dermatologists evaluate hair loss in a female, the first priority is to rule out the scarring type of alopecia. This can often be done on visual examination alone, though sometimes a biopsy is necessary. Once it's clear that a patient is suffering from the non-scarring variety, the next challenge is to determine which additional diagnostic or treatment steps are necessary. The answer depends on the suspected diagnosis.

For some patients with general, nonspecific hair loss, it's as simple as correcting underlying anemia or even thyroid dysfunction. Blood tests may be ordered which can show these deficiencies and, once corrected, the hair loss should stop.

For suspected *androgenetic alopecia*, the primary question is whether the loss is due to excessive hormone production or whether it's simply due to genetic predisposition. Signs that a woman might be experiencing excessive hormone production would include irregular menstrual cycles or excessive hair growth on the face, chest, or arms.

On the other hand, if a patient tells us that other women in the family have experienced similar hair loss, then genetics alone are likely to blame. It's important to keep in mind that such predispositions can seemingly 'skip' generations. So even if no other related females are known to have hair loss, it still may very well be a genetic problem.

The treatment of *androgenetic alopecia* in females is difficult. Sometimes hormone-blocking pills can be used, but their effectiveness isn't as consistent as that seen in men. Minoxidil (name brand *Rogaine<sup>a</sup>*) is a liquid medication that can be applied daily to the scalp. It's fairly effective if used consistently, though users should expect to wait at least 4-6 months before results can be seen.

Diagnosis of *telogen effluvium* if more likely in those that have a history of significant recent or ongoing stress. The nice thing about *telogen effluvium* is that **it nearly always completely resolves on its own once the stressful event has passed**. In fact, for many patients with *telogen effluvium*, a sudden increase in hair loss is actually caused by new hair growth 'pushing out' the older dormant hairs.

Rarely, some patients will have a chronic form of *telogen effluvium* - especially if stress or other health issues are ongoing. For these patients, hormone-blocking medications won't help since hormones aren't the underlying cause of the problem. Those affected by chronic *telogen effluvium* should talk to their dermatologist about available treatment options.