

Medical Treatment of Cicatricial Alopecia

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There are many alopecic disorders that are classified as scarring alopecia that differ in both their clinical appearance as well as their histological changes. Common to all, however, is the destruction of the hair follicle and oil gland and its follicular growth center, the primary bulge area. The exact trigger for the inflammation is poorly understood but is hypothesized to be initiated by infectious agents, hair follicle proteins, or products of the hair follicle metabolism.

The current therapies for all the scarring alopecias are aimed at reducing or altering the inflammation and in turn saving the hair follicle and oil gland from destruction. Basically, the targets for therapy are to: 1) reduce inflammation; 2) reduce follicular infectious agents and control the host's response. The clinical targets of therapy are to: 1) reduce scalp discomfort such as itching, pain and burning; 2) improve scalp health; 3) stop hair loss; 4) improve hair growth.

Basic therapy includes scalp care and cleansing, medical evaluation for concomitant disorders such as thyroid, diabetes, autoimmune diseases and nutritional deficiencies, especially low iron, calcium and vitamin D.

The specific active therapies are divided into: 1) antibiotics; 2) steroids, topically, intralesional and orally; 3) anti-inflammatory agents such as steroids, natural antioxidants, retinoids, antimalarials, antihistamines; 4) metabolic agents to control local lipid metabolism; 5) immunologic modulating agents such as cyclosporine, mycophenolate mofetil, tacrolimus/pimecrolimus; 6) new biologic agents which interfere with inflammation on a molecular basis. Hair growth stimulation is accomplished by reduction of inflammation and use of topical minoxidil.

Therapies for end-stage "burned out" scarring alopecia include surgical intervention, such as scalp reduction and hair transplants. Camouflage procedures and prosthesis are continuously helpful.

In summary, the scarring alopecic disorders overlap in their clinical and pathological presentation. Inflammation is common in the acute stage and scarring in the later end stage. With the inflammatory destruction of the hair follicle and oil gland, the hair loss is permanent. All efforts in therapy should emphasize the saving of the hair follicle and oil gland so that regeneration can occur. CARF and the North American Hair Research Society are actively developing a strategy to define, evaluate and treat this complex group of disorders. Understanding the mechanism of induction of these disorders is essential to developing more effective therapies. Continued research is underway and needed.