XL Hair® a new medical approach for alopecia areata.

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Abstract: Alopecia areata is a non-scarring hair loss disease that affects 1-2% of human population. For such a prevalent disease it is surprising that its etiology is not fully understood and treatment still poses a challenge with little therapeutic options that commonly have many side effects. XL Hair® formula contains growth factors, macro and micro-nutrients and matrix remodeling actives that prolong the anagen phase of hair growth. It has already been proved effective on other types of non-cicatricial hair loss like alopecia androgenetica. In this case study, an AA patient is treated with once a week intradermal injections of XL Hair® formula achieving astonishing results within the first 6 weeks of treatment (hair regrowth achieved after 3 weeks). The side effects reported were swelling and ecchymosis that lasted for 24-48h after the procedure. This encouraging result strengthens the evidence that XL Hair® is a promising new therapy for all types of non-cicatricial hairloss.

Introduction:

Alopecia Areata (AA) is a non-scarring hair loss disease with prevalence of 0.1-0.2% (calculated lifetime risk of 2%) depending on ethnic and world region. It affects both sexes with some studies showing slightly higher prevalence on men (1.4:1 ratio). Most patients (60%) are younger than 30 years old and earlier onset of the disease is associated with poorer prognosis. It is characterized as hair loss and thinning in a well-circumscribed skin region most times located on scalp and beard and it can evolve to total scalp hair loss (alopecia areata totalis) or even total body hair loss (alopecia areata universalis).

The diagnostic may be achieved by trichoscopy, hair pull test or trichogram. Trichogram is being replaced by trichoscopy, which is a more modern, less painful and not invasive method that depends on the experience of the operator.

Even though the etiology of AA is still unknown, most specialists believe that it is an autoimmune disease caused by the breakdown of the immune privilege of the hair follicle and invasion of T lymphocytes which results in shortening of the anagen phase of hair growth and acute hair loss. Like most autoimmune diseases, AA has a strong genetic component and familial cases have poorer prognosis, faster progression, more frequent relapses and greater resistance to therapy.

Treatment of AA is far more challenging than it’s diagnostics with few, and many times ineffective, drugs available. There is no known curative therapy to date and currently treatment options relies on corticosteroids that are taken either by injections on the affected site, oral pills (in pulse doses) or topical formulations (creams, gels, ointments, etc), immunosuppressive drugs like ciclosporin or anti-inflammatory drugs like sulfasalazine. However, all those treatments have limited success rate with often unsatisfactory results. Hair regrowth can be seen in 60-67% of the cases using intradermal corticosteroids and in 30% of the cases treated orally with the same class of drugs. Relapses occur frequently once treatment is discontinued and can affect up of 25% of the successfully treated patients.

It is, therefore, crucial to explore different treatment options for such a high prevalence disease with so little treatment options. This article presents a case study of a patient treated with XL Hair® formulation which is composed of growth factors, antioxidants, aminosacids, DNA, trace elements, vitamins, matrix reorganization compounds and micro nutrients. The final target of the actives is to repair and to stimulate hair growth, increase the thickness of hair by improving skin nutrition and skin defenses against internal & external stress and damage factors.

Treatment:

The treatment was accomplished by once a week intradermal injections of the XL Hair® formula in the affected area. The injections contained hyaluronic acid 3.0 mg/ml associated in XL Hair® with active bio revitalization solution (BS, 52, 38 mg/ml) that helps to improve the transport function of the actives from BS. The complex actives of BS are: growth factors GF (Rh-Polipeptide-1, Copper peptide), deoxyribonucleic acid, amino acids (Alanine, Folic Acid, Leucine, Valine, Tyrosine, Glycine, Histidine, Isoleucine, Lysine, Methionine, Phenylalanine, Proline, Serine, Threonine and etc),trace elements (Ca, Fe, K, Mg, Mn, Na, P, Se and etc),vitamins (Vit A,PP, B1, B12, B6 and etc),terpenes (Quercetin),fatty acids (Oleic Acid, Linoleic Acid), flavonoids (Rutin, Kaempferol), antioxidants (Quercetin, Citric Acid, Ginkgolides A-B-C-M), NAD, NADP.

Fibroblast growth factors (FGFs) and their receptors control a wide range of biological functions,
regulating cellular proliferation, survival, migration and differentiation. The treatment also delivers copper peptide to the base of follicles, which helps strengthen hair by stimulating hair follicles to produce a strong hair shaft, help blood circulation in the scalp, and revitalize hair follicles. Another group known as nutritional supplementation including vitamins, minerals, and/or antioxidants may help in hair growth and health. Vitamins are considered “micronutrients” and occur in only very small amounts within cells, but are critically important as coenzymes. Amino acids have several functions: the energy storage function (as it can be used on Krebs cycle), the endocrine integration function (hormones), the informative function (membrane receptors, intracellular signals). Trace elements have an influence on the binding, transport and release of oxygen, donate or accept electrons in reaction of reduction or oxidation, compensate cells nutrition and play the structural role to important biological molecules.

The biggest group of biorevitalization solution of XL Hair® is antioxidants. The mechanisms by which these antioxidants act at the molecular and cellular level include roles in gene expression and regulation, apoptosis, and signal transduction. Antioxidants are involved in fundamental metabolic and homeostatic processes and help repairing damaged biomolecules and defense antioxidant enzymes, which are mostly intracellular⁴⁶.

Results:
The patient had a complaint of a small baldness spot that appeared 12 months before treatment near the occipital area, this lesion was confirmed as AA by trichoscopy. Initial results were accomplished after only three weeks of treatment with visible hair regrowth and after six weeks the bald patch was no longer visible (Figures 1A-C). Similar results were achieved in other non-cicatricial alopecia patients as presented on the previous case series with successful regrowth in 78% of the female group and 63% on the male one and overall satisfaction rate of 60%⁴. The only side effects reported were swelling and ecchymosis on the treated area that vanished 24-48h after the procedure. Since it is a single case study, relapse ratio cannot be defined and should be analyzed in further research.

Conclusions:
Alopecia areata is a non-cicatricial hairloss disease. In those types of baldness, the hair follicle is not damaged and what causes the disease is an imbalance in function that may have several etiologies. XL Hair® formula is so effective because it has growth factors, macro and micro-nutrients that extends the anagen phase of hair growth cycle and hyaluronic acid that promotes matrix reorganization. Therefore, it neutralizes the functional imbalance and recovers hair follicle function resulting in hair regrowth. Furthermore, XL Hair® have showed considerable less side effects than conventional therapy which encourage it’s use for longer periods preventing relapse. In conclusion, this case study shows that AA can be successfully treated by XL Hair® formula with minimal side effects and therefore puts it in advantage in comparison to standard therapy options.

References: